RNI – MPENG/2011/46472 **ISSN-2249-9512**

Journal of Management Value & Ethics

(A quarterly Publication of GMA)

GWALIOR MANAGEMENT ACADEMY

C-17 Kailash Nager, Near New High Court, Gwalior-M.P. 474006 (INDIA)
Phone No. 0751-2230233,9425121133

C O N T E N T S

Publisher/Printer/Owner/Editor-in-Chief :
Dr. Prabhakar Singh Bhadouria,

Gwalior Management Academy
Regd. Office: C-17 Kailash Nagar Near New High Court Gwalior M.P. INDIA-474006,
E-mail : jmveindia@yahoo.com, jmveindia22@gmail.com
Website: www.jmveindia.com

Annual subscription Rs.2000.00 (India) $ 170 & euro 150 (foreign Airmail)

Printed at:
Sai offset Throat palace, Lashkar Gwalior (M.P.)

Graphics & Designed:
Shivani Computer Graphics, Gwalior (M.P.)
Mob. 9826480017

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ASSESSMENT OF THE QUALITY OF THE EDUCATIONAL PROCESS AS A FACTOR INCREASING THE COMPETITIVENESS OF THE UNIVERSITY

Davlatov Sukhrob Sayitjonovich[1]

ABSTRACT

The article shows that the quality of educational services is the basis of the competitiveness of the university, and the factors that determine the quality of higher education are considered. The article reveals the need to take into account the opinions of students and their participation in resolving issues of internal quality assurance in order to improve the quality of the educational process and, as a result, strengthen the competitive position of the university. The author considers the specific features of the management of educational services and develops the main directions for increasing the competitiveness of the university, taking into account the key trends in the development of the educational services market.

Keywords: *education, educational process, stakeholders, competitiveness, student's quality standard, quality, effectiveness.*

INTRODUCTION.

In modern economic conditions, higher education institutions seeking to increase competitiveness in the market must ensure a high level of demand for educational services, which primarily depends on the degree of satisfaction with the requirements and expectations of all interested parties, that is, the so-called stakeholders. These subjects include, first of all, applicants, students, potential employers represented by enterprises and organizations of various forms of ownership, as well as society as a whole.

An important role is played by the status of the university, as a rule, regional universities are significantly inferior to educational institutions located in the capital. Diplomas issued by well-known universities in the country act as a kind of "guarantor" of the knowledge and competencies of the graduate for the employer. In this regard, the issues of increasing the competitiveness of a regional university through education quality management are of the greatest importance.

The competitiveness of a university depends on many factors, which can be grouped as follows:

- Human resources;
- Financial resources;
- Informational resources;
- Social and cultural base;
- Characteristics of training programs;
- Research and publishing activities of the university;
- Interaction of the university with scientific and industrial organizations;

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- International activities of the university;
- University reputation.

All factors are interconnected and underestimation of one affects the others. Producing several types of products (educational services, scientific, technical and educational products), the main goal of the university is education. Therefore, it is the quality of the educational services provided by the university that ultimately determines the place of the university in this market. A university that provides high quality education can receive additional income and increase its competitiveness.

The core of the university, which determines the quality of education, is the personnel potential, the quality of educational services depends on the level of its professionalism, possession of modern methods and teaching aids.

The curricula of specialties developed by the university have a significant impact on the quality of education. In the conditions of growing competition in the market of educational services, curricula of specialties provide universities with a serious competitive advantage.

At the level of a higher educational institution, marketing is the basis for developing a development strategy, an ideology of behavior in the market, a market research tool, a method for developing new educational programs and services, a way to organize sales and promotion to the market, and the implementation of pricing policy.

Due to the importance of the quality of education, each educational institution is designed to solve the following set of tasks:

1) planning based on the analysis of existing achievements, problems and forecast of future requirements of the desired level of quality;
2) ensuring the functioning of the university, which in turn ensures the achievement of a given level of quality of education;
3) ensuring quality improvement, which means constant monitoring of requirements for educational outcomes;
4) assessment of the level of quality of education based on the methods developed and implemented in the management.

The existing numerous concepts of the quality of education in higher education can be grouped into six areas:

1. formally legitimate approach - the stage to which the actual result of the university's activities corresponds to the planned one;
2. subject-sectoral approach - the stage of compliance with the standards of the profession, which are formulated by a group of experts from a given educational institution;
3. commercial or economic approach - the stage to which the goals of the university are achieved by enrolling students at the lowest cost;
4. an approach focused on the consumer of educational services - the stage of satisfaction of the needs and expectations of students;
5. labor market approach – the stage of satisfaction of employers' requirements;
6. approach focused on the development of the organization - the stage of fulfillment of tasks and the achievement of its own goals by an educational institution.

Each of the above directions differs in the idea of the mission of the educational institution and characterizes the social groups involved in the educational process.

Literature review.

A theoretical and practical study of aspects of the university's activities allowed us to conclude that the competitiveness of the university in the educational services market is determined by two components: firstly, the quality of educational services; secondly, the economic efficiency of activities (with the same quality of services, the competitiveness of the university where this quality is achieved and maintained with less resources is higher).

In other words, to receive a truly high-quality education, the quality of requirements, the quality of conditions, the quality of educational processes and the quality of the results of the university's activities must be ensured.

Speaking about the quality of higher education, they often mean the quality of the results of the educational activity of the university, and everything else is considered a necessary condition for obtaining these results. At the same time, depending on the end user, the result of the educational activity of the university can be considered the educational services provided if the consumer is a person, or the specialists produced if the consumer is an employer, the state. The listed parties are interested in the quality of higher education, but their ultimate goals are different, although interrelated.

The first group of researchers in their interpretation of the quality of education is focused on meeting the expectations and needs of the individual and society [3]. At the same time, the quality of education is determined by the totality of performance indicators and the state of the educational process (the content of education, forms and methods of training, material and technical base, personnel, etc.).

The second group is based on the formed level of knowledge, skills, and socially significant personality qualities [10]. The parameters of the quality of education are socio-pedagogical characteristics (goals, technologies, conditions, personal development).

The third group focuses on the compliance of the set of properties of the educational process and its result with the requirements of the standard, social norms of society, personality [11].

The fourth group considers as criteria the compliance of the result with the goals of education predicted for the zone of potential personal development [13]. The quality of education is considered as a set of characteristics of the graduate's education.

The fifth group highlights the ability of an educational institution to meet the established and projected needs. The quality of education is considered here as a property that determines the ability of an educational institution to meet the needs of consumers of different levels.

The analysis of approaches to the definition of "quality of education" allows us to identify the grounds for their systematization (Table 1).

Table 1. Different approaches to determining the quality of education

Approach	Footing
Intuitive-empirical	Human experience and intuition
Formal-reporting	The level of academic achievement of students (the percentage of those who succeed in "4" and "5")
Psychological	The level of development of cognitive processes and the degree of manifestation of mental neoplasms of personality
Pedagogical	The level of education and training
Procedural	Assessment of the state of the educational process
Resultant	Evaluation of the result of pedagogical activity of an educational institution
Comprehensive	External expertise (material base, personnel, programs, forms and methods of work, etc.)
Multiparametric	Evaluation of the activities of educational institutions based on intra-system parameters
Methodological	Correlation of the result with operationally set goals
Integrated	Introduction of categories of an integrated nature (competence, literacy, education)
Personality-oriented	Personal development of the student
Social	The degree of satisfaction of individual and public consumers
Qualimetric	Measurement of indicators by parameters

Source: Compiled by the author

With all the diversity of the above definitions of the quality of education and approaches to its assessment, each of them has one common position: the quality of education and its constituent elements are compared with certain basic attitudes, norms, standards that serve as a kind of benchmarks

Thus, to receive a truly high-quality education, must be ensured the quality of requirements and the quality conditions or resources. While observing these two aspects of quality, the quality of educational processes (scientific and educational activities, educational technologies, etc.) directly providing training of specialists plays an important role. And finally, another element of the quality of education is the quality of the results of the university's activities (current and final results of students' education, characteristics of graduates' career growth, etc.).

The activity of economic entities operating in the educational sphere is a process of providing educational services, which, in particular, D. Shevchenko defines as "the process of obtaining a certain set

of knowledge and practical ways of applying them, capable of satisfying the needs of an individual in his professional status and growth" [16].

Note that this definition characterizes the service from the point of view of its recipient. From the position of the university providing this service, its essence will consist in providing the specified set of knowledge and ways of their application.

At the same time, any disadvantages and advantages of universities in the educational services market act as competitive disadvantages and advantages that require the use of evaluation criteria to determine the degree of their influence on the level of competitiveness of a particular university.

From the point of view of I.B. Romanova, competitiveness is a property of a higher educational institution that determines the share of the relevant market of educational services belonging to this university and the ability to prevent the redistribution of the market in favor of other subjects [15].

According to R.A. Fatkhutdinov, the competitiveness of the university is its ability [9]:

1) to train specialists who can withstand the competitive struggle in the labor market;

2) develop competitive innovations in this field;

3) conduct an effective reproductive policy in all areas of its activities.

In the broadest sense, quality has become the everyday human needs for the present and future development of a whole human society. Starting from the fact that quality is present in everyday life, there was a need for his comprehensive study and definition. Authors who have written about quality have given numerous definitions of quality. The quality of services is defined in the simplest way as a company‘s ability to satisfy or exceed customer expectations. Deming defines his philosophy of quality in 14 points, whose aim was to change the old way of doing business as well as to become oriented towards quality, an increase of productivity, and lowering the cost. Crosby defines quality as an adjustment to demands while Juran defines it as a convenience for use. A consultant at McKinsey Company provides an interesting definition of quality and states that a unique definition does not exist, but that quality changes throughout life, from one generation to another and depends on numerous aspects of human activity. Quality certainly is a feeling that something is better than something else. The International Organization for Standardization in the ISO 9000:2000 standard defines quality as a level up to which the sum of characteristics requires demands.

According to certain authors, the perceived quality of service is defined as an attitude that is taken when we compare expectations and perceptions of the performance of the service received, while the perceived quality of service in higher education is defined as the difference between what students expect to get and their own perception of the real gain, as well as students‘ assessment related to the level of performance of services offered by the HEIs compared to their real expectations.

Quality of service at higher education institutions mostly depends on the expectations of its students and their perception of the performance of the service received. From the point of view of HEIs, it is highly important to coordinate the level of the service received with the expected service, that is, to manage their students‘ expectations efficiently.

Research methodology

Thus, the optimization of the assessment of the quality of education and economic efficiency should be considered as components of the competitiveness of the university.

The tasks facing the theory of assessing the quality of the educational process at the university are to, deeply examining the management processes, identify objective patterns, understand the mechanism of management, determine cause-and-effect relationships that affect the final result of the functioning and development of the university.

It should be emphasized that the set of indicators of the quality of the educational process is only an indicator of its functioning and development and in itself does not determine the content and direction of control actions.

The basis for the development of the methodology for assessing the quality of the educational process of the university was the development of scientists of the Herzen State Pedagogical University.[4]

In accordance with their recommendations, within the framework of this study, the consideration of the educational process is based on the representation of this process as a system, the functioning of which is described by qualimetric and economic models. The peculiarity is that in the context of this study qualimetry is used for economic evaluation of both the quality of the entire educational process as a whole and the quality of the main subprocesses, namely education and upbringing, which form the competitiveness of the educational institution and its graduates.

Determination of numerical basic values of indicators of the level of quality of education, necessary to substantiate the ways of development of the educational process in a multi-level educational complex, is carried out by methods of qualimetry.

Currently, the methods of qualimetry are not sufficiently developed in economic studies of educational processes, which hinders their use not only for quality management of education, but also when using the results of quality management to increase the competitiveness of educational institutions and their complexes.

The use of the qualimetric approach in assessing the quality of the educational process allows us to solve the methodological problem of standardization of research and the dimensions of the presentation of the studied indicators, which consists in the fact that the economic indicators of the educational process are expressed in value units, and the qualimetric indicators characterizing the quality of the educational process are usually expressed in dimensionless form.

Within the framework of the proposed methodology for assessing the quality of the educational process of the university:

1) a system of indicators is presented for the analytical assessment of the quality of the educational process;

2) The sequence is determined of the evaluation of the quality of the educational process and the level of its competitiveness;

3) recommendations on the formulation of the final decision are given.

For the practical application of the reductive design model, a system of indicators for analytical quality assessment has been developed (Table 2).

The system of indicators for assessing the quality of the educational process makes it possible to assess the quality of compliance of the educational process of the university with the requirements of the state educational standard.

Table 2. Indicators of the quality of the educational process

Indicators	Calculation formula
Assessment of compliance of the content of training and educational programs with the requirements of the SES HE (State Educational Standard of Higher Education)	
1. The indicator of compliance with the specialty of the SES HE (k)	$K = \frac{N_o}{N_n}$ where N_o is the number of disciplines according to the curriculum; N_n – the number of subjects taught, provided by the SES HE
2. The indicator of compliance with the educational load of the SES HE (h)	$h = \frac{H_p}{H_{ses}}$ where H_p is the workload planned in the work curriculum; H_{ses} – is the workload provided by the SES HE in this specialty
Assessment of the conditions for the implementation of the educational process	
3. The indicator of the provision of students with textbooks and teaching materials in a separate academic discipline (I_{pt})	$I_{pt} = \frac{N_t}{n_i}$ where N_t is the available number of textbooks and teaching materials for a particular discipline; n_i – the number of students in the *i*-th discipline
4. The indicator of the provision of students with textbooks and teaching materials in general in the educational process (I_{ptgen})	$I_{ptgen} = \frac{\sum_{i=1}^{N_0} I_{pt}}{N_n}$
5. The indicator of material and technical support of practical and laboratory classes in a separate discipline (I_{mt})	$I_{mt} = \frac{N_{mt}}{n_i}$ where N_{mt} is the available number of computers and other equipment for conducting practical classes in a separate academic discipline
6. The indicator of material and technical support of practical and laboratory classes in general in the educational process (I_{mtgen})	$I_{mtgen} = \frac{\sum_{i=1}^{N_0} I_{mt}}{N_n}$
7. The indicator of teacher qualification (I_q)	$I_q = \frac{N_{ad}}{N_t}$ where N_{ad} is the number of teachers who have an academic title or an academic degree;

	N_t – the number of teachers in the university
8. Indicator of methodical and scientific activity of teachers (I_{sa})	$I_{sa} = \frac{N_p}{N_t}$ where N_p – is the number of methodological materials and publications;
9. Indicator of consolidation of knowledge (I_c)	$I_c = \frac{T_{pr}}{T_{lec}}$ where T_{pr} is the number of hours of practical and laboratory classes; T_{lec} – number of lectures
Assessment of the composition of the contingent	
10. Student absenteeism rate (I_{abs})	$I_{abs} = \frac{\sum_{i=1}^{N0} N_i T_i}{n}$ where N_i is the number of students who missed classes; T_i – the number of classes missed by the *i*-th student; n – the number of students studying
11. The indicator of discipline (I_d)	$I_d = \frac{N_d}{n}$ where N_d – is the number of offenses (warning, reprimand, expulsion) of all students
12. GPA indicator of learning assessments (I_{gpa})	$I_{gpa} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2}{n}$ where n_5, n_4, n_3, n_2 - the number of students who received grades "5", "4", "3", "2"
13. Performance indicator (I_p)	$I_p = \frac{n_5 + n_4 + n_3}{n}$
14. Quality performance indicator (I_{qp})	$I_{qp} = \frac{n_5 + n_4}{n}$
15. Indicator of social activity of students (I_{sa})	$I_{sa} = \frac{n_{sa}}{n}$ where n_{sa} is the number of students who participated in public events

Source: Compiled by the author

The scientific purpose of the systematization of indicators is to standardize the use of qualimetric and economic indicators to create a real model of competitiveness.

The system of indicators is divided into three groups: 1) assessment of compliance of the content of training and educational programs with the requirements of the SES HE; 2) assessment of the conditions for the implementation of the educational process; 3) assessment of the composition of the contingent.

Indicators of the quality of the educational process, characterizing the degree of compliance of the content of the educational process with the requirements of the SES HE (State Educational Standard of Higher Education), as well as the normative documents of the educational institution, determine the economic, social and production components of the directive set indicators of the educational process. In their totality, the indicators describe the impact of the organization and economy of the educational process on its quality.

These indicators characterize the system of presentation of educational services by an educational institution, as well as the extent to which students use the opportunities of the existing educational process.

The considered system of assessing the quality of the educational process can be used in assessing and shaping the competitiveness of the university. When analyzing qualimetric indicators, it is possible to determine the degree of fulfillment by students and teachers of the requirements imposed by regulatory documents for the educational process, as well as to assess the quality of the existing system of providing educational services for the implementation of the motivations of participants in the educational process.

The process of assessing the level of competitiveness of the quality of the educational process can be presented in the form of the following stages:

1) the calculation of individual indicators of the quality of the educational process (see Table 2) is based on the actual data of the university's activities;

2) calculation of a comprehensive indicator of the quality of the educational process. The complex indicator reflects the level of competitiveness of the educational process of the university.

To calculate the complex indicator of the competitiveness of the quality of the educational process (I_{comp}), it is recommended to apply the widespread method of "presenting a complex indicator of the competitiveness of an organization and products by the sum of the type"[2]:

$$I_{comp} = \sum_{i=1}^{n} I_i \quad (1)$$

where I_i is unit indicators (coefficients) of the competitiveness of the university.

3) calculation of reference values of individual indicators of the quality of the educational process.

For the indicators of the groups ¯Assessment of the compliance of the content of training and educational programs with the requirements of the State Educational Standards of Higher Education‖ and ¯Assessment of the conditions for the implementation of the educational process‖, the standard values established by the requirements of the SES HE can act as reference values.

For the indicators of the group "Assessment of the composition of the contingent" it is recommended to calculate the maximum values of the indicators that reflect the high level of intellectual activity and social discipline of students;

4) calculation of the reference complex indicator of the quality of the educational process.

The basis of the formula for calculating the complex indicator of the quality of the educational process is the reference values of individual indicators;

5) comparison of complex factual and reference indicators of the quality of the educational process.

Comparing the values of individual actual indicators with reference values, it is possible to identify the strengths and weaknesses of the process of providing educational services. At the same time, the indicators of the groups " Assessment of the compliance of the content of training and educational programs with the requirements of the State Educational Standards of Higher Education" and "Assessment of the conditions for the implementation of the educational process" provide information about the internal resources of the university‘s.

Conclusion

The comparison of complex factual and reference indicators gives an idea of the level of compliance of the competitiveness of the educational process with the reference requirements.

Ultimately, the system of indicators of the quality of the educational process can be used both to assess the process itself and the quality of training graduates of an educational institution.

The ability to identify problematic areas of activity, a quantitative assessment of the quality of the educational process using the presented system of indicators will allow forming a system of measures to manage the competitiveness of the university.

Understanding the factors affecting the sustainable competitive advantage is a crucial factor for any organization.

However, prior research has not investigated this from the perspective of an HEI. Thus, the objective of this research was to identify the factors affecting the Sustainable competitive advantage in HEI.

Key outcomes of this research are, maintaining rankings/indexing, maintaining good relationships with industries, student participation in competitions, and accreditation with by reputable institutions. Those are some of the vital factors of an HEI with regard to maintaining a sustainable competitive advantage.

The factors that we identified in this paper have a significant impact to the HEI since they can achieve a sustainable competitive advantage, by following the identified factors. Further, this gives valuable insights for the HEI management and marketing department to make decisions. In future research directions, it is necessary to test these factors using large-scale surveys and structural modeling procedures. Further, this method can relate to other service industries in the process of gaining sustainable competitive advantage

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A REVIEW OF HUMAN ACTIVITY RECOGNITION METHODS USING HAND-CRAFTED APPROACHES APPLIED FOR FEATURE EXTRACTION

Apeksha Jadon[1]

ABSTRACT

Various types of research have been carried out in the field of computer vision on image and video data in last two and half decade. Object detection, object localization, Human activity recognition (HAR), Human activity localization, and video summarization are some of examples of such computer vision tasks. HAR is one of these extremely essential task and natural choice due to the availability of low-cost activity capturing devices and its applicability in various real-life scenarios. The examples of real-life applicability of HAR are automatic video surveillance, eldercare, video summarization, sports analysis, and healthcare. This work is aimed at providing review of the different HAR systems which has been designed by researchers with the help of hand-crafted approaches for extraction of features from RGB images or videos.

Introduction

Human Activity Recognition (HAR) has become an extremely essential task and natural choice due to the availability of low-cost activity capturing devices and applicability in various real-life scenarios. The examples of real-life applicability of HAR are automatic video surveillance, eldercare, video summarization, sports analysis, and healthcare. The Figure 2 shows the example of application of HAR in real-life scenarios. In response to such a requirement, researchers across the globe taken up HAR as an important research problem. In turn, this attraction resulted in the introduction of quite a few approaches based on different types of input modalities and the publication of a large number of articles. Human activities are divided into four categories based on complexity arising due involvement of body parts of a person, numbers of persons, and objects: gesture, action, interaction, and group activity. The example of different forms of HA are shown in Figure 1.

(a) Gestures

(b)Interaction

(c) Actions

(d)Group Activity

Figure 1 : Various forms of human activities [1,2,3,4]

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The four major phases involved in HAR are capturing human activity signals, preprocessing, Feature extraction, and model training. There are various types of devices that can be applied to capture human activities. These devices can be grouped in to two categories: sensor-based and vision-based. The examples of sensor-based devices are accelerometer, gyroscope, and magnetometer, etc. While Vision-based devices includes RGB camera, RGB-D camera(Kinect), and thermal Infrared camera. The operations performed during preprocessing phase depends on the devices utilized for capturing the human activities but in general it involved denoising, segmentation, normalization, data filtering. Feature extraction process create the representation of human activity present in input in such a way that human activity classifier can not only be able to distinguish between activities of different categories but also handle the intra-class variations effectively. Model training process requires a classification algorithm which is to be trained through features extracted from the input. The researchers have applied various methods for feature extraction and classification phases in HAR. The researchers proposed various taxonomies for categorizing HAR methods based on approaches utilized to extract features from preprocessed input[5,6,7,8,9,10,11,12,13,14]. According to taxonomy presented by [10] HAR methods can be grouped into three categories: hand-crafted approaches, deep learning approaches, hybrid approaches. In this article, hand-crafted approaches based HAR methods have been reviewed.

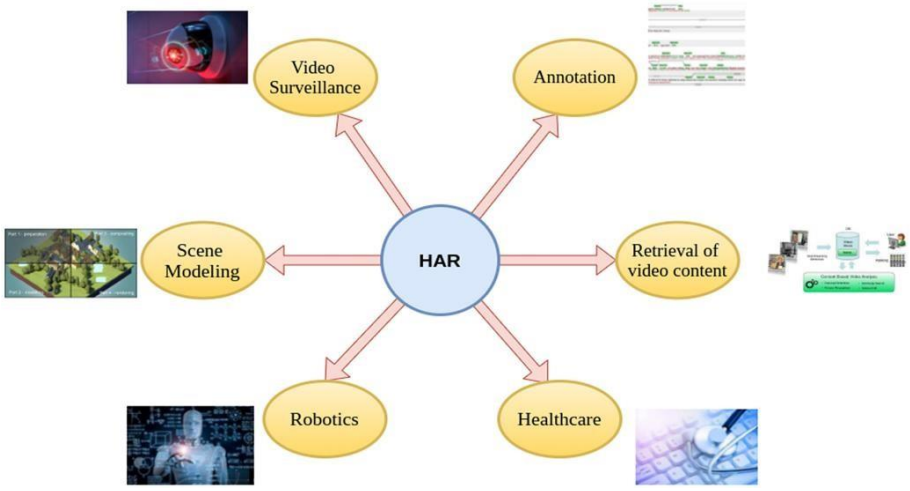

Figure 2: Different applications areas of Vision based HAR[15]

Hand-crafted approaches for HAR

In general, the task of human activity recognition consists of four main phases when it is performed using non-learning-based approaches: feature detectors, feature extraction, feature encoding, and classification [16] as shown in Figure 3. A pipeline involving feature extraction and encoding is applied for creating the representation of video based on which classifiers predict human activity taking place in a given image/video. Moreover, some preprocessing is also required before applying feature extraction and feature encoding, like video frames sampling, resizing each video frame, normalizing brightness, background subtraction/features detection, etc.

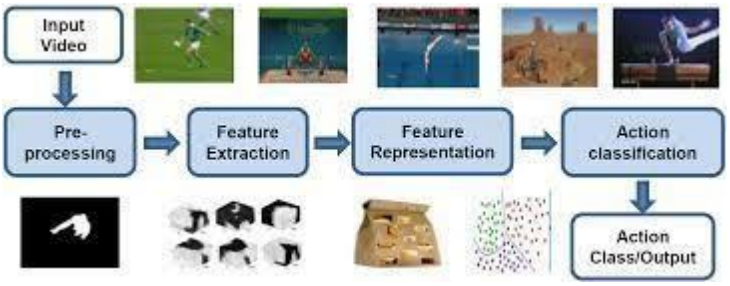

Figure 3 : A typical Hand-crafted approach based HAR[16]

Hand-engineered approaches use some hard-coded methods for creating the representation of video. During the feature extraction phase, the hand-engineered methods for extracting features need to take out spatial and temporal information present in the video. The machine learning algorithm requires a fixed length vector of information extracted by feature descriptor from the input video. Feature encoding or descriptor encoding methods are utilized for carrying out this task. There are various methods introduced for feature encodings, such as histogram encoding or Bag of visual words (BoVW), fisher encoding, and VLAD.

There are several surveys in which authors suggested classifications of hand-engineered techniques for human activity recognition. Aggarwal and Rayoo [13] suggested an approach-based taxonomy for methodologies of HAR. Figure 4 presents an overview of the taxonomy in hierarchical-structured form.

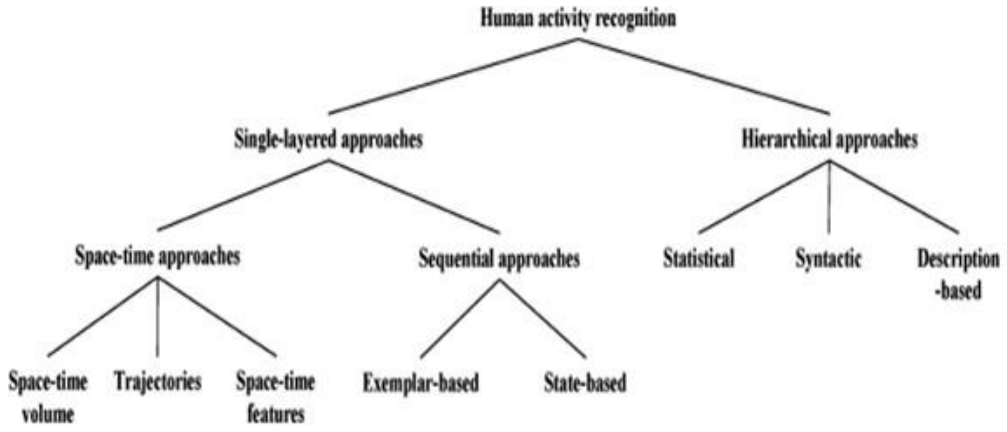

Figure 4: Hierarchical approach based taxonomy [13]

It illustrates an overview of the taxonomy divided into two broader sub-categories, the ¯single layer‖ approaches and the ¯hierarchical‖ approaches, each of which has several layers of categorization. Sargano et. al [17] also surveyed hand-crafted and learning-based methods for creating representation and recognizing human actions in the video. They divided hand-crafted-based approaches for feature extraction and representation into three categories: space-time-based, appearance-based, and other approaches. Figure 5 shows the block diagram of this categorization.

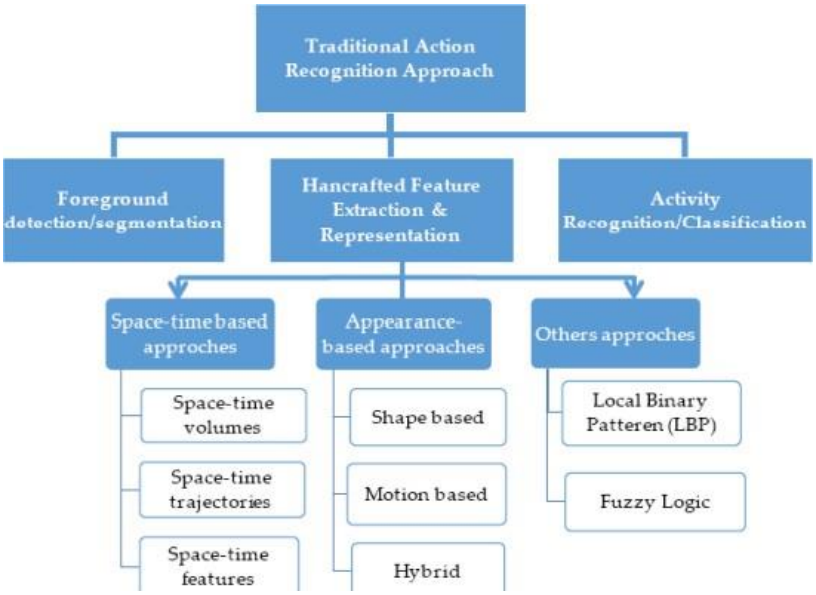

Figure 5: Hand-crafted action recognition approaches [17]

Space-time-based approaches for feature extraction can be grouped into two categories: local features and global features-based approaches [18]. Local features-based methods divide the image/frames into parts (group of pixels), extract features from each section separately, and then merge them. Contrarily, global features-based approaches consider the whole image/frame as a single group of pixels and extract the features. In the context of the video, the same approach is extended over the frames. Examples of local features-based approaches include Cuboid descriptor, ESURF, and 3D-SIFT and global features include HOG/HOF, HOG3D, and MBH.

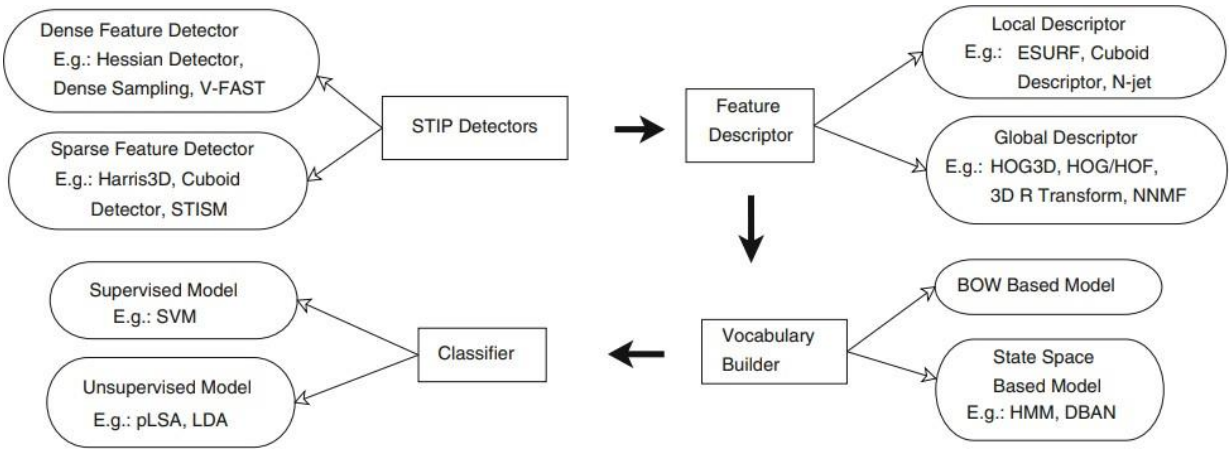

Figure 6: Phases of STIP based approaches for human action recognition [18]

Various local space-time feature-based descriptors have been successfully applied for extracting Spatio-temporal features from video for action recognition. The basic idea behind the Spatio-temporal interest point

approach is to encode information present in the video at a particular space and time. On other hand, trajectories keep track of spatial points over frames of video to capture motion information.

Laptev [47] presented the temporal extension of spatial interest points approaches named Space-time Interest Points(STIP). Kläser et. al[19] extended the image-level feature descriptor Histogram of Oriented Gradients (HOG) to video level by adding temporal features: Histogram of 3D oriented Spatio-temporal gradients (HOG-3D). Laptev et. al [20] integrated HOG with Histogram of Optical Flow(HOF) to include temporal information present in the video. Yeffet and Wolf [21] proposed the Local Ternary Patterns(LTP) as an extension of Local Binary Patterns (LBP) for incorporating the temporal aspect of the video. Similarly, Scovanner et. al extended [22] image level SIFT feature to 3Dimensional SIFT for the Spatio-temporal domain. Willems et. al[23] introduced the extended SURF to the Spatio-temporal domain by calculating weighted sums of equally sampled responses according to Spatio-temporal Haar wavelets.

Researchers have presented various methods for capturing motion information along with spatial one from video through trajectories-based approaches, which track spatial points detected using different techniques. For example, Messing et. al[24] presented a study in which they keep track of Harris3D interest points, and Sun et. al[25] matched SIFT descriptors between two adjacent frames. Abdul-Azim[26] presented an approach as a modification of the trajectory-based approache for recognizing human action shown in Figure 6. This approach detects space-time interest points using Cuboid detectors designed by Dollar et. al [27] which can detect fewer interest points than other methods such as Harris3D and 3D Hessian. Furthermore, Trajectories are generated by matching and tracking SIFT features between consecutive frames. Such an approach describes space-time interest points and enhances trajectories by linking and exploring procedures. Four feature descriptors that complement each other are applied for extracting features such as trajectory shape descriptor, HOG, HOF, and MBH. Finally, BoVW-based feature encoding is performed to create the representation of video and classify them using the SVM classifier. The authors evaluated the proposed pipeline using three benchmark data sets, namely KTH, Weizmann, and UCF sport, where they obtained 95.36%, 97.77%, and 89.97% recognition accuracy.

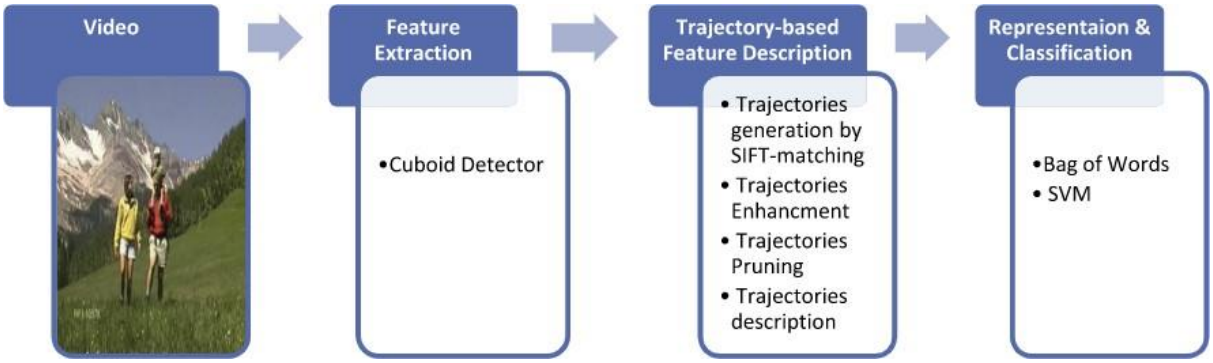

Figure 7: STIP-Trajectories based Pipeline for human action recognition [26]

Wang et. al[28] proposed an approach for creating the representation of human action video that can capture motion information by combining dense sampling with feature tracking called dense trajectories. This approach was designed to capture motion caused by human action and suppress the background and/or camera motion. Figure 8 shows the diagram for extracting trajectories and their description using three descriptors HOG, HOF, and MBH.

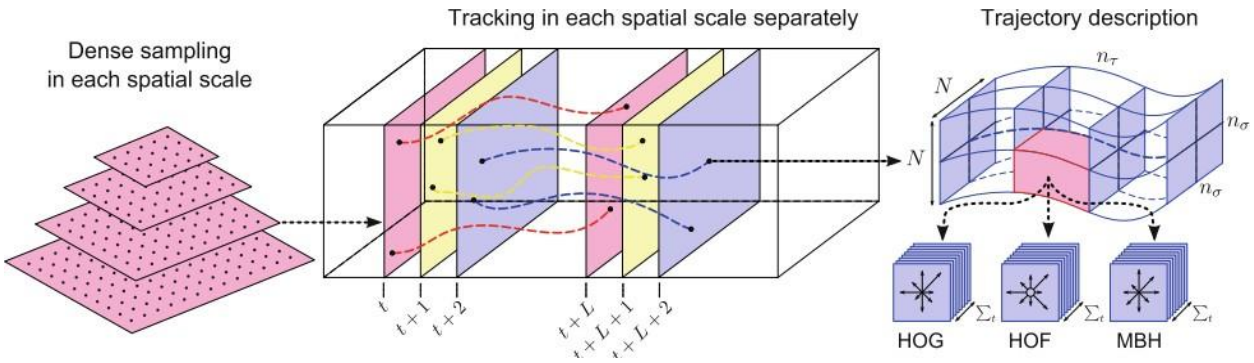

Figure 8: Dense trajectories based detection of region of interest [28]

Wang et. al [29] presented an improvement of dense trajectories by estimating camera motion using feature points matching between adjacent frames. The authors also apply a human detector for removing matches that are inconsistent with human motion.

Li et. al [30] Proposed a new variant of dense trajectories in the pipeline of human action recognition named improved salient dense trajectories. They tracked STIP at each spatial scale in the detected motion salient region. The authors evaluated the proposed method on KTH, UCF sports, HMDB51, and UCF50, where they achieved competitive results.

In paper [31], a recognition system is proposed for isolated dynamic signs of Turkish sign language. The authors utilized improved dense trajectory-based features and Fisher vector-based super vector encoding for video-level sign representation.

In another work, Özdemir et. al [32] introduced a computationally efficient method for isolated signs that is a fast alternative to improved dense trajectories. The results mentioned in the paper indicate that the proposed improvement can achieve the accuracy possible using IDT but requires ten times less time.

Haiam et. al [33] presented an improvement of trajectory-based representation of video for action recognition where trajectories are tracked using detected STIP and matching them using SIFT with adjacent frames. The proposed method is evaluated on popular datasets such as KTH, Weizmann, and UCF sports. The reported accuracy on these datasets is 95.36%, 97.77%, and 89.97%, respectively.

Yi and Lin [34] presented an approach for extracting salient trajectories by taking both saliencies, namely appearance, and motion. Similarly, Atmosukarto et. al [35] worked on extracting trajectories and then applied Fisher Kernel to produce video representation.

Atmosukar et. al [36] suggested an approach that prepares the representation of video by clustering groups of trajectory. Trajectory groups are formed based on the spatial threshold. Two Trajectories of distance below a threshold are kept in one group and calculate the mean of each trajectory group. Three descriptors (HOG, HOF, and HoMB) are employed to describe each group's mean trajectory. They also demonstrated that the proposed framework achieves comparable results on benchmark datasets such as UCF sport50 and TVHI without utilizing time-consuming methods like sliding images.

An extension of the super vector-based feature encoding method VLAD is proposed [37], which embeds the Spatio-temporal position of features with VLAD for creating a better representation of video. Before performing feature encoding, Improved dense trajectories are generated from video for extracting features

using feature descriptors, namely HOG, HOF, and MBH. The authors evaluated the pipeline on three benchmark datasets such as HMDB51, UCF50, and UCF101, which achieved comparable results.

Bo Lin and Bin Fang [38] proposed a new framework for HAR that utilized a modified form of HOG and VLAD for extracting features and feature encoding, respectively. The modified HOG was named SPHOG because it extracts features by creating a histogram of gradient changes between consecutive video frames along with the individual frame. Further, the author also proposed a modified form of VLAD for feature encoding termed HOD-VLAD which computes weights histogram of distances and thereby complements distribution information of local descriptor. In [39] author proposed a new approach for feature extraction method called Spatio-temporal HOG that is based on scattering transform coefficient. They also presented a variant of VLAD for feature encoding, which is based on a gaussian kernel.

Duta et. al [40] proposed a new approach to feature extraction and encoding for the pipeline of human action recognition. They introduced a new computationally efficient feature descriptor, Histogram of Motion Gradients(HMG), that can extract motion information from video without calculating optical flow. For encoding, the framework applies a new variant of VLAD, which applies shape information.

To make the representation of human action video discriminative Murtaza et. al[41] proposed the modification of VLAD, which extracts class-specific clusters and learns their discriminative power by removing the effects of common codewords from codewords of different action classes.

Luqman et. al [42] proposed a framework for recognition of Arabic sign language in which they applied Modified Fourier Transform for extracting features from each frame of video and trained three state HMM classifiers for recognizing signs. They also compared the performance of the framework by using different feature extraction methods, namely MFT, LBP, HOG, and HOG-HOF. The experiment results show that the framework achieves the highest accuracy of 99.1% with MFT features on a self-created dataset which is better than other feature extraction methods.

In this paper [43], word level signer-dependent Arabic sign language recognition system is proposed that extracts the appearance-based features using LBP from sampled frames of the video, and temporal information is learned by applying left-right HMM. Since the system recognizes signs of 23 words, it uses 23 HMM.

Arabic SLR system is designed and implemented in [44] that extract appearance-based spatial features from hand and head region taken from each frame and motion information between adjacent by applying the LBP-TOP approach. LBP features capture appearance information while three orthogonal planes are used motion information. The proposed pipeline is evaluated on signer dependent database having 23 signs and where they achieved 99.5% accuracy.

Lim et. al [45] proposed a representation of isolated signs video that provides scale-invariance, local translation invariance, and sign length invariance for signer-independent recognition of sign language. This method detects the hand and then computes the optical flow for sign video only around the hand region. The hand's optical flow patches are divided into M non-overlapping blocks. The histogram for each block is calculated.

Rather than applying a space-time interest point detection approach for determining the region of interest in video frame sequence, Abdulmunem et. al [46] proposed a pipeline that applies a saliency-guided

feature extraction approach for human action recognition as shown in Figure 9. In this approach, the first step is to detect the region of interest by detecting objects that may involve in an action.

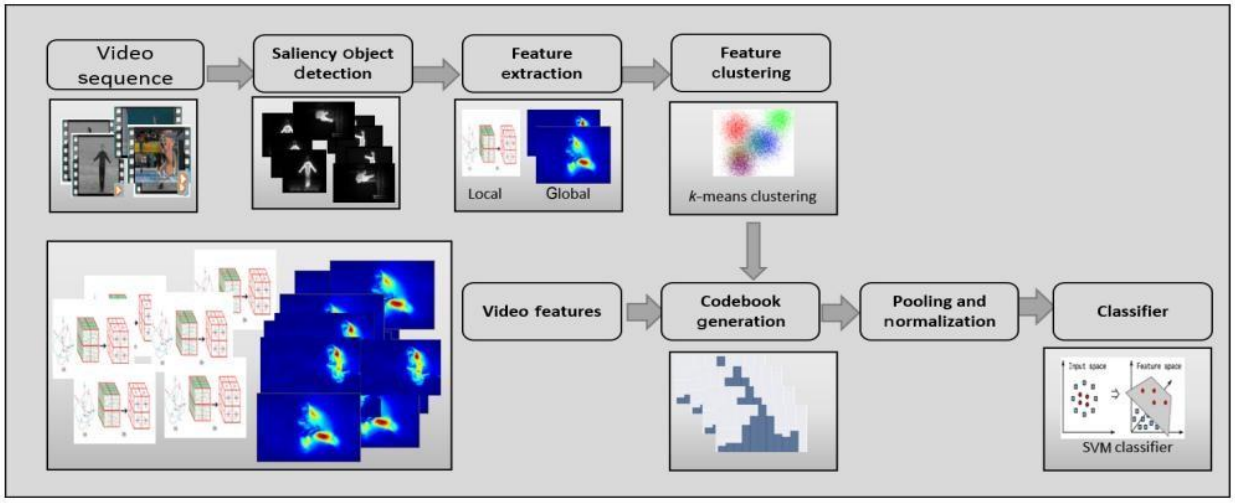

Figure 9: pipeline that uses saliency guided local and global descriptors [46]

Secondly, local and global descriptors are applied for feature extraction from the detected region. HOOF and 3D-SIFT are global and local descriptors, respectively that are utilized in this pipeline. Finally, the BoVW approach is employed for generating feature vectors and multi-class classifier SVM for recognizing human action. The proposed pipeline is evaluated using two benchmark data sets (KTH and UCF sport), and they obtained 97.9% and 90.9% recognition accuracy. Figure 2.8 shows the pipeline that uses saliency-guided local and global descriptors.

Conclusion

This review outlines the various methods which has been proposed in last two and half decades for recognition of human activities in images or video with the help of traditional or manual methods for creating the representation which are termed hand-crafted approaches. The major strength of these methods lies in getting the input from domain experts for extraction features and requires less data samples in training machine learning models for classification. However, these approaches have not been able to generalize well. On other hand deep learning methods requires huge amount of data for automatic extraction of features and training the classifier.

In order to design a HAR system in presence of less amount of hybridization of hand-crafted and deep learning approaches is extremely good option.

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SYMBOLIC INTERACTIONISM AND IT'S EFFECTS ON CONSUMER BEHAVIOR

Dr.Praveen Srivastava[1], Dr.Kanupriya[2], Dr.Amit Sinha[3]

ABSTRACT

Many products are purchased for their symbolic significance to important reference groups. The concept of symbolic interactionism is discussed and considered within the context of consumer behavior. Marketers can enhance symbolic relevance through careful attention to the various elements of marketing strategy under their control. Suggestions and implications for target market definition and marketing mix variables are provided. Sociological theory deals with the phenomenon of symbolic interactionism. The purpose of this paper is to examine the concept of symbolic interactionism, outline its relevance for consumer behavior, and suggest strategic marketing implications. There is a definite need for marketers to consider symbolic interactionism aspects when formulating strategy. Modern interpretations of symbolic interactionism are derived mainly from the works of George Herbert Mead. In addition, the historical underpinnings of symbolic interactionism can be found in Charles Horton Cooley's theory of society, John Dewey's concept of habit, and W.I. Thomas' definition of the situation. The concept of symbolic interactionism is based on the premise that individuals interact with society at large and with reference groups to determine how behavior should be structured. Individuals are assumed to relate to objects or events based on their symbolic meaning given by society. Symbolic purchasing behavior is more likely to be exhibited when the consumer lacks knowledge about how to perform a certain required role. When such knowledge is lacking, a consumer will use the symbols embedded in products to define one's role. Periods of consumer role transition exemplify these knowledge-deficient situations. For example, a new college student may purchase certain items and brands of clothing quite different from ones purchased in the past merely because the student notices these items and brands being worn by other students or groups of students in order to "fit in" in the new environment.

The concept of symbolic interactionism is based on the premise that individuals interact with society at large and with reference groups to determine how behavior should be structured. Individuals are assumed to relate to objects or events based on their symbolic meaning given by society. This type of purchasing products and brands act as social tools in that they serve to communicate symbolically between the individual and his significant referents. For example, blue jeans symbolize informality in society, yet different groups have different brands as symbols. Advertising and other marketing communications can effectively serve as vehicles for this process of symbolic meaning transfer. The effects of symbolic interactionism on consumer behavior have been addressed in the marketing literature since the mid-1950ssuch work to date; one article presents a thorough coverage of these effects. A number of propositions were presented, and were summarized. The symbolic interactionism perspective holds that consumers are often strongly influenced by their interaction with society or significant reference groups. After the consumer chooses to identify with a particular group, he must determine exactly what certain products mean to group members. If the consumer finds that symbolism is important, it will tend to behave in the manner perceived as being

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favorable in the eyes of the relevant group referents. In this process of symbolic meaning transfer, the group is assumed to publicly convey the symbols attached to products and then demonstrate the relative importance of these symbols to present and prospective group members. The group then observes the behavior of these real or apparitional group members and applies rewards or sanctions based on the level of adoption of the product symbolism. As an example of this process, consider the person who desires to be admitted to a particular country club. This aspiring member may notice that most current members drive domestic luxury automobiles. Because the aspiring member perceives the purchase of an American luxury auto as being vital for group membership, he may purchase one so that important group referents can see that he shares their symbolic values and will accept him as a group member. Marketing Strategy Implications It is important that a company's product be positioned in the marketplace as offering unique and meaningful benefits. The symbolic meaning associated with the product is an important input to product image. When social groups attach symbolic meaning to a product, companies need to understand its nature so that they can reinforce or alter it to their advantage. Companies can take a more proactive stance by attempting to develop favorable symbolic images for their goods and services. The primary means by which a company can influence the symbolic image its product acquires is through a carefully planned and implemented a marketing program. Symbolic interactionism has implications both for a company's market segmentation practices and for the formulation of strategy concerning all four variables of the marketing mix and characteristic of consumers. Both of these may be explained as follows-

Consumer Characteristics The following consumer characteristics appear to the adoption of symbolic purchasing behavior:

(1) Because of a lack of role knowledge or a lack of confidence. The consumer here may reason that they are supposed to acquire and then consume certain products in the new situation because important referents are assumed to have behaved in a similar fashion in the past. For example, the recent college graduate who assumes an entry-level management position, not knowing how to act in this new role, may rely on cues from the new surroundings and purchase certain brands, styles, and colors of suits, shirts, ties and shoes in order to be accepted by relevant referents.

(2) Consumers who place high levels of importance on social group membership and advancement. As the level of importance increases, the consumer will be more likely to allow the stated or perceived symbolic definitions held by relevant referents to influence behavior. They see the sharing of a common symbolic meaning as one basis on which they will be judged by others and will strive to demonstrate such agreement to those they seek to impress by visibly consuming the appropriate symbol. Consumers who possess these characteristics are exemplified in the updated Values and Lifestyles (VALS2) typology by the Striver, Achiever and Actualizer categories.

(3) Consumers aspiring to gain membership in a particular social group. As with the previous consumer characteristic, the consumer assumes that the possession of certain product symbols is a prerequisite for their successful role performance, here defined as that of acceptance by the desired social group. These aspiration ally-driven consumers are exemplified by the Strivers lifestyle category in the VALS2 paradigm. Consumers characterized by one or more of these attributes are likely to purchase and consumer products based on symbolic meaning. The use of a lifestyle-based approach such as the VALS2 typology mentioned above is one method of identifying these consumers.

(4) Certain group characteristics will also influence the extent of symbolic purchasing behavior exhibited. When the consumer feels a strong sense of belonging to the reference group, purchasing based on

symbolic meaning is more likely. The presence of any of the following group characteristics is likely to contribute to a stronger sense of belonging for the consumer: exclusive groups, distinctive groups, homogeneous groups, frequently interacting groups, and formal groups. The first three characteristics are the most relevant for segmentation purposes because such characteristics are likely to result in a strong sense of belonging for the group member and thus likely to influence purchasing behavior. These three group characteristics are manifested in groups defined by education, income, race, occupation and age. For example, within the same geographic area, highly educated, young, white university professors and poorly-educated, young, white factory workers could both form highly-exclusive, distinctive, and homogeneous groups whose members rely heavily on the purchasing habits and symbolic product meanings held by other group members when they behave in the marketplace. While the purchasing habits of members of these groups may appear to be quite dissimilar, they are alike in that they are highly affected by symbolic interactionism. The latter two characteristics also influence the sense of belonging for the group member. The more frequently a group interacts, the more opportunities exist for members to observe and evaluate each other's purchasing behavior. The family or a student's classmates exemplify this type of group. The more formal a group is, the stronger will be the norms pressuring the individual to conform. For example, highly-formal groups, such as managerial employees within an organization, exhibit strong norms concerning certain specific consumer segments, defined on the basis of selected demographic and psychographic variables, seem to exhibit the above-outlined consumer and group characteristics, and therefore should be likely to engage in symbolic purchasing behavior.

Marketing Mix Implications Society or relevant reference groups ultimately define the symbolic meaning of the product, but marketers can help shape and reinforce these definitions through careful manipulation of marketing mix variables. It should be the goal of this process to send out evidence fostering the creation of a consistent and favorable symbolic image of the product. Successful management of product symbolism requires that strategies for all four mix variables (product, promotion, price, distribution) be planned with the goal of consistency in mind. If one variable is not consistent with the others, the symbolic image could be obscured and adversely altered. Although each mix variable will be addressed separately, the need for coordination in actual strategy formulation cannot be overemphasized.

1- Product- An initial element in formulating product strategy based on symbolic aspects entails consideration of the types of products likely to be purchased for symbolic reasons. Because symbolic purchasing behavior is likely to involve complex decision making, it can be reasoned that the following types of products would likely be purchased partly for their symbolic value: (1) High priced products (e.g., boats, designer fashions, luxury automobiles). (2) Products associated with performance risks (e.g., sporting equipment, nutritional supplements, and sports cars). (3) Complex products (e.g., home entertainment systems, boat motors, portable CD players). (4) Specialty goods (e.g., gourmet foods, fine jewelry, formal wear). (5) Products associated with one's ego (e.g., cologne, alcoholic beverages, clothing).1 The purchase of a high-performance sports car, such as a Porsche or Ferrari, serves as an example of all of the above product-related characteristics affecting purchasing behavior. However, it is not necessary for a product to exhibit all of these attributes to be purchased for its symbolic value; one or two of these traits is often sufficient. For example, Air Jordan basketball shoes, while being associated with performance risks and, in many cases, associated with one's ego, are not high-priced in absolute terms, are certainly not complex, and are not a specialty good because many substitutes exist and they are available in a wide range of store types and locations. In addition to these five product characteristics, the special social nature of symbolic consumption merits the inclusion of other product types: products closely tied to social roles, and publicly-

consumed products, especially ones which are expressive in nature. The first type of product would be especially likely to be purchased for symbolic reasons if the consumer has little or no experience with the product category in question or with the demands of the role. As for publicly-consumed and expressive products, the ease with which the product can be observed by others would tend to increase a consumer's sensitivity to promotion and advertising in particular, should play a major role in the transferable of symbolic meaning by associating the actual consumer good or service with the symbolic representation of the product. The task of advertising and other promotional efforts in the process of symbolic meaning transfer is fourfold. **First**, promotion should project to the audience the actual symbols that are to be associated with the product. **Second**, the relevant referents upholding the product symbolism should be conveyed. **Third**, promotional efforts should communicate which particular societal segments are to find this symbolic transferable pertinent to their needs. **Fourth**, the benefits received by accepting the proposed symbolism should be delineated. The "The Night Belongs to Michelob" campaign for Michelob beer serves as an example of this process in action. This campaign, most notably the television portion, features a variety of separate commercials all based on the main theme and featuring nightclub atmospheres with well-known musical stars such as Frank Sinatra, Eric Clapton, Phil Collins, and Steve Winwood. It is always made clear, especially in the Sinatra commercial, which the purpose of the campaign is to portray Michelob as a status symbol and as a beer for trendy, young, attractive socialites. In the Sinatra commercial, people of this type are milling around an elegant nightclub drinking Michelob, where, it was implied, that Sinatra was performing. The message is that if you want to be accepted by people similar to those in the commercial, drink Michelob beer and be seen doing so. Advertising following the steps outlined in the above process is quite common. It is especially prevalent in specialty print media because of the exclusivity and homogeneity of the groups who subscribe to and read them. Regardless of the specific subject matter of these narrowly-targeted media, advertisers are apparently taking advantage of the fact that readers are prone to high levels of symbolic purchasing behavior. Both actual and symbolic features of the product should be used collectively to define overall product benefits, thereby serving to add substance to the abstract symbolism proposed and, at the same time, providing associative meaning to actual physical product features. As an example of this, a recent Toyota Camry print ad features both a picture of a successful looking businessman, a picture of the car, and a written description of several performance features of the car. The copy integrates the performance features with the symbolic benefits by comparing situations encountered on the road with situations encountered in the corporate boardroom and by stressing the word power and its connotations in both settings. Normally the main benefit conveyed by promotional efforts should be the increased likelihood of social acceptance through the use of the product in the prescribed manner. Depiction of such a scenario is best done using a slice-of-life format. Such a format also serves to communicate to the audience that it is normal and legitimate to be concerned about being socially accepted.

2- Pricing Although promotional tactics and product considerations will often serve as the primary vehicles for the transfer of symbolic meaning, pricing strategy plays a major supportive role. The main goal of pricing should be to maintain and reinforce promotional efforts of symbolic meaning transfer. The nature of the symbolic image of the product should serve to warrant a relatively high price. A high relative price should connote a higher level of quality and enhanced perceived role performance capabilities to consumers engaged in symbolic purchasing behavior, especially in situations where the consumer lacks role knowledge and product experience. In turn, this price-quality relationship reinforces the image of a symbolically defined product by giving it prestige status in the eyes of the consumer, who is, after all, supposedly looking for something to achieve a sense of belonging through product purchase and consumption.

3- Promotion- Promotion, and advertising in particular, should play a major role in the transferable of symbolic meaning by associating the actual consumer good or service with the symbolic representation of the product. The task of advertising and other promotional efforts in the process of symbolic meaning transfer is fourfold. First, promotion should project to the audience the actual symbols that are to be associated with the product. Second, the relevant referents upholding the product symbolism should be conveyed. Third, promotional efforts should communicate which particular societal segments are to find this symbolic transferal pertinent to their needs. Fourth, the benefits received by accepting the proposed symbolism should be delineated.

4- Distribution- Distribution, like pricing, can serve to reinforce the symbolic image put forth by the promotional campaign. Through implementation of a selective, or even an exclusive distribution strategy, the high-quality unique image of a symbolically-defined good can be further enhanced. Selective distribution requires the careful examination and choice of the number and type of outlets through which the product will be offered. This distribution option would be most effective for symbolically defined goods which are not expensive in absolute terms, but are still at the upper end of the price range in their product category, such as trendy or stylish clothing or respected brand-name jewelry. Because such types of products may be purchased relatively frequently, selective distribution offers the advantage of providing enough outlets so that the product will always be readily available to the consumer when needed. An exclusive distribution strategy may be warranted to reinforce the symbolic nature of such high-priced specialty goods as exotic foreign sports cars or designer label formal wear. In these cases, the exclusivity connoted by the product only being obtainable at one location within the geographical area adds to the symbolic mystique of these prestige products, provided that the image of the exclusive distributor is complementary. For example, the fact that Rolls Royce dealerships are located only in single locations in selected major metropolitan areas adds to the overall symbolic image of the product. It is important to note that the use of a selective or exclusive distribution strategy should not necessarily be limited to high-priced specialty goods. The perceived or real degree of exclusivity offered by these two strategies can also be used to manage the symbolism of other, less-unique products. A competitive advantage could be established by taking a product in a more or less commodity type of product category with few real product differences and symbolically differentiating it based on its unique method of distribution and availability which, in turn, would symbolize higher relative quality. This type of strategy has been implemented by several marketers of pet food, such as Science Diet whose product is available only through veterinary offices and kennels. This selective distribution strategy is reinforced by promotional efforts that stress the product's superior nutritional value, in addition to its nontraditional place of availability to differentiate it from ordinary pet food. Important to all of these methods of symbolic meaning enhancement through distribution strategy is the symbol retail image fit. Specifically, the image of the chosen retail outlet must complement the symbolic image of the product. Marketers should be aware that other products that the retailer carries will often affect the image of their product. As an example of this awareness, colognes and perfumes such as Aramis, Yves Saint Laurent and Elizabeth Taylor's Passion are available only in fine department and clothing stores and not available at mass merchandise chain stores where other products with dissimilar images are sold. The marketers of these prestige products are concerned that by being available at a location that has a less than optimal image may damage or weaken the symbolic image enjoyed by their products and make them seem less appropriate to the target consumer.

Summary and Conclusions

The fact that people interact with other societal members and groups and behave towards objects based on these interactions have relevance e for all facets of marketing strategy. Careful attention to symbolic detail can facilitate and enhance the effectiveness of one's marketing effort. The importance of symbolic purchasing is clearly It is important to remember that symbolic purchasing occurs frequently in all walks of life, regardless of income or social status. It must be noted that symbolic interactionism affects the purchase of both goods and service product offerings. It could even be argued that because services are harder to differentiate than are goods because of their inherent intangibility, symbolic meanings play a more important role in the purchase of services as opposed to the purchase of physical goods. These symbolic meanings could well help to add perceived tangibility and substance to the service offering, thus serving to differentiate it from the competition. For example, "gold" credit cards hold distinctly different symbolic meanings in our society, as opposed to ordinary credit cards. There is a need to consider and cultivate the symbolic meanings associated with both new and existing services. More detailed examination of the effects of symbolic interactionism on the purchase of service products is needed and should be the topic of future research. The following points summarize the major ideas offered in this article: 1. Product symbolism affects the conception an individual has of him, his role performance, and is particularly likely to be important when a consumer lacks role knowledge. 2. As particular reference groups tend to have identifiable characteristics and unique forms of symbolic purchasing behavior, market segmentation in terms of such group characteristics as degree of exclusivity and formality is a useful means of pinpointing appropriate segments. In addition, the use of consumer characteristic s that relate to greater symbolic c purchasing tendencies, such as one's placing importance on social advancement or being in a period of role transition, should enhance the value of segmentation and targeting. Children, teenagers, young adults and upwardly mobile individuals typify general segments that possess these characteristics. 3. A company can enhance symbolic purchasing behavior of its product through careful attention to providing a favorable symbolic image using all elements of the marketing mix in a consistent, congruent fashion. 4. Regarding product strategy, it is important to keep in mind that certain types of products are more likely to be purchase d for symbolic value–expensive, complex specialty goods that possess a degree of social or performance risk. Publicly-consumed, expressive products and ones tied to social roles also tend to be purchased for symbolic reasons. New product development efforts can be directed to offering groups of products that provide a symbolic whole. Attention should be directed to the visible product attributes that provide the desired symbolism and, above all, to ensuring product quality. 5. Promotions designed to effect symbolic meaning transferable should project the actual symbols that are to be associated with the product, the relevant referents upholding the symbolism, the target segments to which the message is directed and the benefits of accepting the proposed symbolism. Both actual and symbolic features of the product should be used collectively to define the product benefits, and the appeal should be mildly ambiguous to minimize e negative reactions of the audience. A celebrity endorser can be an effective means of communicating the desired symbolism, provide d the endorse r is closely associated with the roles in which the product would be used.

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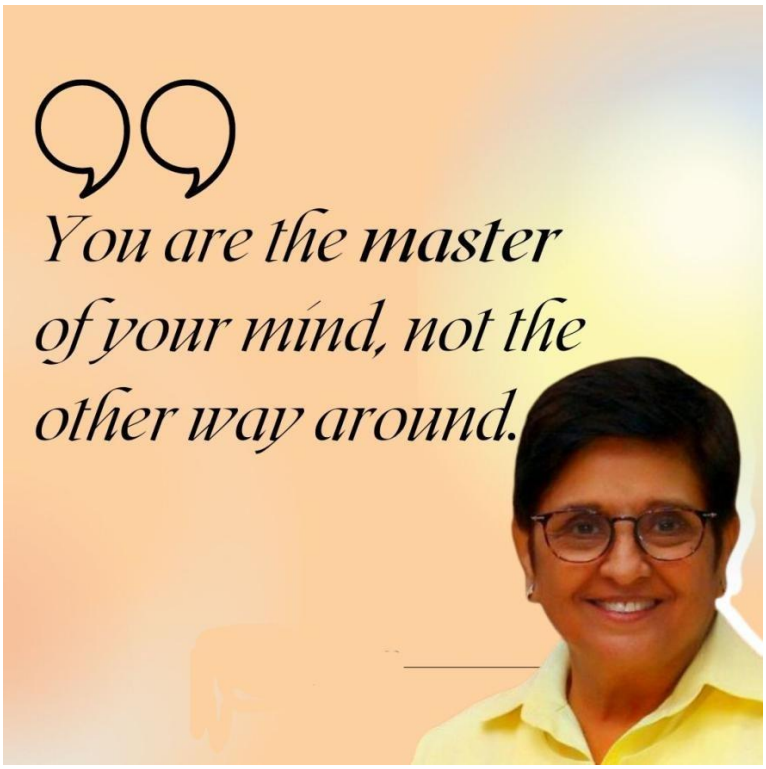

IMPROVING THE METHODOLOGY OF DISTRIBUTION OF OPERATING COSTS BY TYPE OF TRANSPORT IN THE FORMATION OF PASSENGER RATES FOR RAILWAY TRANSPORT

Kadirova Sharofat Amonovna[1]

ABSTRACT

The article describes the methodology for distributing the costs associated with passenger transportation in railway transport. It is proposed to distribute the costs of JSC "O'zbekiston temir yo'llari" attributable to passenger transportation by type of message and on this basis the calculation of the total cost of transportation

Key words: types of communication, reporting, costing, methodology, passenger traffic, meters, cost

At all stages of the functioning of railway transport, the problem of improving economic calculations, and in particular the calculation of the cost of transportation, has been and is very relevant.

In modern economic conditions, the scope of using the cost as the basis for the price of transportation is significantly expanding, including in passenger traffic by type of message.

In accordance with the basic requirement of a market economy, which is that each type of activity ensures the profitability of work on the railway transport of the Republic of O'zbekistan, including the structural division of the company "O'zbekiston temir yo'llari" JSC "O'ztemiryo'lovchi", the search for reserves to save money and reduce the amount of unprofitability of railway passenger traffic.

One of such areas in this area may be the determination of the profitability of rail passenger traffic by type of communication and the search for reserves to ensure it. For this, first of all, a methodology for distributing the costs of JSC "O'zbekistontemir yo'llari" attributed to passenger transportation by type of message and on this basis the calculation of the total cost of transportation is needed.

Determining the cost of transportation by messages is of great practical importance. This is necessary, first of all, for the correct setting of tariffs for the transportation of passengers, for a reasonable formulation of the issue of compensation for losses from the transportation of passengers in suburban traffic, the introduction of self-financing for individual trains and their lease.

However, the railway company and regional railway junctions do not calculate the cost by type of communication. The existing accounting and statistical reports do not provide for the allocation of expenses by type of passenger traffic.

Therefore, to determine the cost of passenger transportation by messages, a special methodology for costing calculations should be developed.

The issues of distribution of costs and determination of the cost of transportation by types of railway passenger communications are the least studied in the economy of the industry. Only a few authors in their works partially touched on these problems. In the book of M.N. Belenky, in relation to the procedure for

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planning and accounting in force in the 60s of the last century, a simplified method for calculating the cost of passenger transportation in direct, local and suburban communications was proposed.

Over the past period, there have been significant changes in the organization and structure of the management of passenger transportation and railway transport in general, as well as in the industry Nomenclature of expenses, in the forms of the report on the financial activities of railway transport, in the classification of railway passenger communications, in the content of statistical reporting forms, etc. d.

All this, of course, requires a critical reflection on the proposals of the author of the above-mentioned work in relation to the current conditions for the functioning of the railway transport of the Republic of Uzbekistan.

In the work of O.F. Miroshnichenko, published in 2002, on the basis of her research, some proposals were made to improve and develop the methodology for calculating the costs of Russian railway transport for passenger transportation, including the calculation of costs in suburban traffic.

In order to determine the costs by types of passenger communications (interstate, intrastate and suburban), it is first necessary to calculate the costs of Uzbekistan Temir Yollari JSC for rail passenger transportation in general.

The costs associated with passenger transportation can be conditionally divided into two components:

1. Passenger transportation expenses reflected in the statements of O‘ztemiryo‘lovchi JSC;

2. Expenses of other households and subdivisions of JSC "O‘zbekiston temir yo‘llari" for ensuring the transportation of passengers, which are reflected in the reports of the relevant structural divisions of the company without separating these expenses from the total amount of expenses.

The expenses of O‘ztemiryo‘lovchi JSC are accepted according to the data of its report on financial activities of form No. 69-zhel (fin) and are fully attributed to passenger transportation: in terms of production costs in line 160, and in terms of period expenses - in lines 2180 - 2181.

The costs of other facilities of the railway company: traffic, locomotive, track, signaling and communications, power supply, recovery trains, as well as the costs of subdivisions of general road subordination in the part attributable to passenger transportation, must be determined using special calculations. For these purposes, the "Methodology for the distribution of costs by regional railway junctions by type of traffic" given in the "Regulation on the procedure for the formation and use of prices and tariffs in enterprises and divisions" of the company "O‘zbekiston temir yo‘llari" can be used.

At present, each regional railway junction, as well as subdivisions of general road subordination, distribute their expenses for freight and passenger transportation on a quarterly basis on an accrual basis. These accounting data calculations are submitted to the Finance Department of O‘TY JSC, where they are summarized item by item and the total amount of expenses associated with passenger transportation is determined.

Having determined the total amount of expenses of O‘TY JSC related to passenger transportation, it is necessary to proceed to the second stage of calculations - their distribution by type of message.

From the point of view of costing by type of message, all passenger transportation costs can be divided into:

- costs that can be directly attributed to a certain type of message, the so-called direct costs;
- expenses that are reflected in the plan and report without division by type of message, i.e. indirect costs.

To the first group of costs, i.e. direct costs in this type of calculation include only the costs of the motor-car depot, which should be fully attributed to the transportation of passengers in suburban traffic.

All other costs are classified as indirect costs.

The distribution of most of the indirect costs by type of message should be made in proportion to the measures of work with which they are associated. The remaining indirect costs by type of communication should be distributed in proportion to the previously allocated total amount of basic costs or wages.

The actual values of the implementation of meters, in proportion to which indirect costs are distributed, are taken according to the data reflected in the statistical and other reporting forms for the company (CO-1, CO-2, CO-4 with the division of reporting data by type of message).

The proposed procedure for the distribution of costs by types of passenger services is given in Table No. 1

The procedure for the distribution of costs by types of passenger transportation messages

Table-1

Line number of the "Report of financial activity of railway transport" form 69-zhel (fin)	Article number of the Sectoral nomenclature of expenses	Name of farms, works and expenses	The procedure for allocating costs or the name of meters, in proportion to which they are distributed	The total amount of expenses and the total value of the meter		Refers to the carriage in the message					
						suburban		domestic		interstate	
				Meter value	total expenses, тыс.сум	Meter value	Total expenses, thousand soums	Meter value	Total expenses, thousand soums	Meter value	Total expenses, thousand soums
1	2	3	4	5	6	7	8	9	10	11	12
		Passenger economy									
010	1	Ticket selling	Brought sent passengers								
020	2	Reception and baggage claim	Wag-km baggage cars								
030	3	Shunting work at passenger stations	Reduced wag-km of passenger cars (without electric trains)								
040	5	Reception and departure of trains at passenger stations	Train-km in passenger traffic, incl. electric trains								
050	7,8	Current repair and maintenance of buildings, structures, equipment and inventory in the passenger sector	Brought sent passengers								
060	151	Outfitting of passenger cars	Car-km of passenger cars by types of traffic, incl. electric trains								
070	156	Maintenance and current repair of passenger cars	Wag-km of passenger cars (without electric trains)								
080	165	Maintenance of wagons in passenger trains	Listed opening hours as reported								
090	168	Depot repair of passenger cars	Wag-km of passenger cars (without electric trains)								
100	173	Depreciation of passenger cars, except for luggage	Вар-часы vag watch								
110	162	Allocations to the reserve for the creation of a repair	vag watch								

		fund for passenger cars, except for baggage cars									
140		Basic expenses common to all sectors of the economy	In proportion to the total of previously allocated costs								
160		In proportion to the total of previously allocated costs	In proportion to the total of previously allocated costs								
		Economy of motion									
260	22	Shunting work at other stations	Vag-km without electric trains								
⋮	⋮										
350		Total for passenger and traffic economy	-								
		Locomotive economy									
370	41	The work of electric locomotives in passenger traffic	Locomotive-km linear run								
⋮	⋮										
890		Total for the locomotive industry	-								
		Household way									
1190	181	Current Path Content and Permanent Devices	Gross ton-km, including electric trains								
⋮											
1440		Basic expenses common to all sectors of the economy	In proportion to the total of previously allocated costs								
1460		Total housekeeping signaling and communication	-								
		Electrification and power supply facilities									
1470	229	Maintenance and repair of power lines by power supply areas	Train-km including electric trains								
⋮											
1510	233	Maintenance and repair of outdoor lighting devices of stations, crossings ---	Ton-km gross								

1560		Total for electrification and power supply	-								
1630…		**Recovery trains**									
1710		**Road Administration and General Road Organizations**									
1720		**Total production costs of UTY JSC**									
2181		Expenses of the period of the company in the part attributed to passenger transportation	In proportion to the total of previously allocated costs								
		TOTAL passenger transportation costs									

The proposed version of the methodology for the distribution of costs by types of railway passenger traffic requires approbation in practice, which will allow, based on the calculations performed, to identify its shortcomings and make appropriate changes and additions.

It has been established that information on the costs of passenger transportation, reflected in the "Report on the financial activities of railway transport" form No. 69 - zhel (fin), needs to be verified and clarified. A review of materials submitted by regional railway junctions and subdivisions of road subordination on the distribution of costs for freight and passenger transportation showed that there are deviations from the established methodology, which allows distortion of actual costs by type of transportation.

This, in turn, requires a deeper analysis of the reporting materials of all divisions of O‘zbekistan temir yo‘llari JSC in terms of attributing expenses to passenger transportation. It is also required to carry out additional research in the direction of establishing the closest relationship between individual groups of operating costs and certain costs of measuring the operation of the rolling stock.

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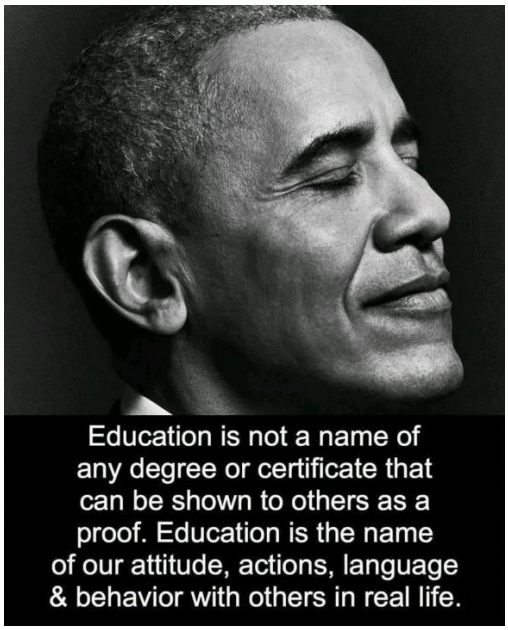

DIGITAL FINANCIAL SERVICES IN THE REMOTE BANKING SYSTEM

Xusanov Kaxramon Nishonovich[1]

INTRODUCTION

At present, one of the main issues is to ensure the provision of services by banks to their customers under the conditions of growing competition among commercial banks. At the moment, the implementation of innovations in banks in the provision of deposit services in one of the most relevant issues of today. Modernization of the economy of our country' implementation of the program of structural changes and measures for the development of the banking system in using modern methods of ensuring its development.

Today in our country it is important to improve the quality of financial services provided by commercial banks to to ensure their popularity, to develop financial services and in ensuring this, the issue of introducing new types of banking services using them is of great importance.

In particular, in the "strategy for reforming the banking system of the Republic of Uzbekistan for 2020 - 2025"approved by the president on may 12, 2020, priority tasks were set, such as the widespread introduction of modern information and communication technologies, automation of business ja regions of commercial banks and the creation of necessary conditions for the expansion of remote banking services. In the process of corporate transformation of commercial banks in the field of introduction of modern information and communication technologies, it is planned to carry out the following measures:

- Expand the number and coverage of contactless payments, including remote banking services;
- Scoring, remote identification and extensive use of credit conveyor system;
- Strengthen the information security of banking and systems;
- Wide introduction of new concepts and technologies in the banking sector (fintek, digital banking).

These steps are aimed at the development of the digital economy in our country, ensuring the rapid growth of the economy of Uzbekistan, digitizing banking services to accelerate the country's integration into the world economy and the free market along with economically developed countries.

MATERIALS AND METHODS

A.Bastaria from foreign scientists on the development of the digital industry, in particular, the expansion and improvement of digital banking services. A.Eliyanab, A.Syabarrudinch, Z.Ariefd, A.P.Emor [1], W.Wado, P.Blaskiewicz, D.Stygar, N.Kuzmas [2], from local scientists N.X.Jomaev [3], N.Sharipova [4], N.R.[5] And [5].[6], A.Qasimov [7], Z.Mamadiyarov [8] carried out scientific research work.

Famous Uzbek economist scientist, professor N.X.Jumaev said that " in the digital economy, with the help of IT, a reduction in cost is achieved, as a result of which optimization and an increase in efficiency are achieved. In the digital economy, modern scientific approaches and innovations will be important and priority. It states that industries with high scientific capacity thrive in this.

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Economist scientist According to alikoriev, the bank provides remote banking services based on client and Internet systems from any location according to traditional banking methods of customer service, the client has the advantage of using his account and making transactions, using the service seven days a week, 24 hours a day, transactions can be completed and confirmed immediately.

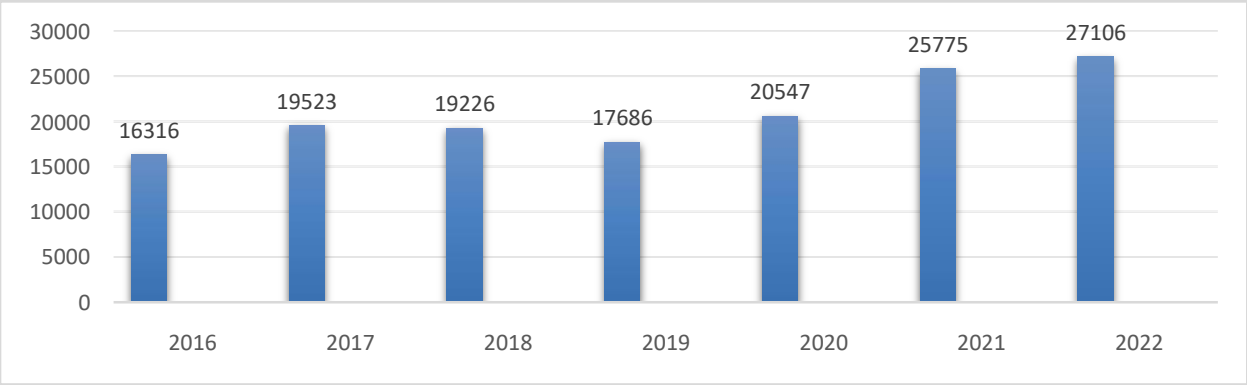
Researcher Z.T.Mamadiyorov believes that remote banking services are understood to be carried out remotely using the capabilities of modern banking technologies, and not face to face with customers in the bank, the services that banks provide to their customers. Our research shows that the development of remote banking services in the banking system is due, firstly, to changes in people's lives, the introduction of new information technologies, and secondly, to the automation of banking operations.

The importance of the development of the digital economy in financial services by A.A.Azlarova is theoretically justified. In particular, the legal foundations and practical processes of accelerating the transformation processes of banks have been studied in Uzbekistan.

Today, traditional types of banking services are being replaced by types of digital banking services. Because as long as banks do not improve their types of services, they may be deprived of the opportunity to dramatically increase their income and the number of customers. The development of the financial services industry is accelerating. FinTech trends, which we discussed above, appeared in response to customer demand. They actually help providers to increase their access to financial information, increase transparency, fast transaction processing, provide remote services, reliable identification methods, and provide better quality services that allow better application of the customer's life cycle.

RESULTS AND DISCUSSIONS

Today, the main goal is to further improve the quality of services provided to customers by commercial banks of the Republic, to increase the range of new banking services. In achieving these goals, the processes of modern modernization and digital transformation of banks are being carried out rapidly. All banks in the Republic provide their digital services through banking mobile applications and banking sites, Internet banking, Messages banking and other means.



1-fig. The number of bank cards issued in circulation, as of January 1, a thousand pieces.

Изоҳ: The total number of Cards was reduced during 2017 due to the withdrawal of DUET cards from circulation

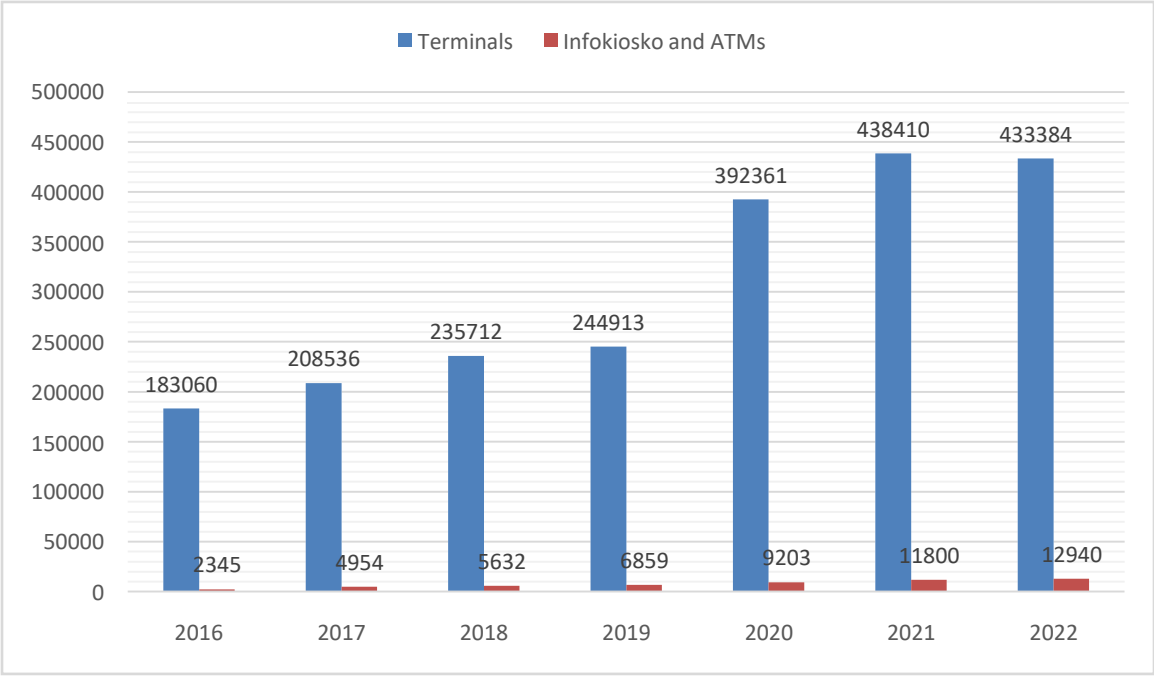
Today, in order to expand the system of non-cash settlements by the banks of the Republic, 27.1 million dollars are provided. bank cards were issued in circulation, through which 111.1 trillion to 2022 state.

transactions close to the sum were carried out on April 11, 2020, the license of the operator of the payment system "Uzcard" was provided by the central bank to LLC single nationwide prosessing Center.

In accordance with the decree of the president of the Republic of Uzbekistan dated September 19, 2018 no PQ-Z945 "on measures for the development of the National Payment System", the National Interbank processing center was established and the payment system "Humo" was launched from the 1st quarter of 2019.

The license of the operator of the payment system "Humo" was issued by the central bank on April 11, 2020 to LLC National Interbank prosessing Center.

The main kismi trading payment terminals of the operations held with bank cards ' ATMs and kiosks were carried out. Currently, the number of terminals installed and serving akholi in total is more than 433 thousand, and the number of infokiosks is more than 12.9 thousand.



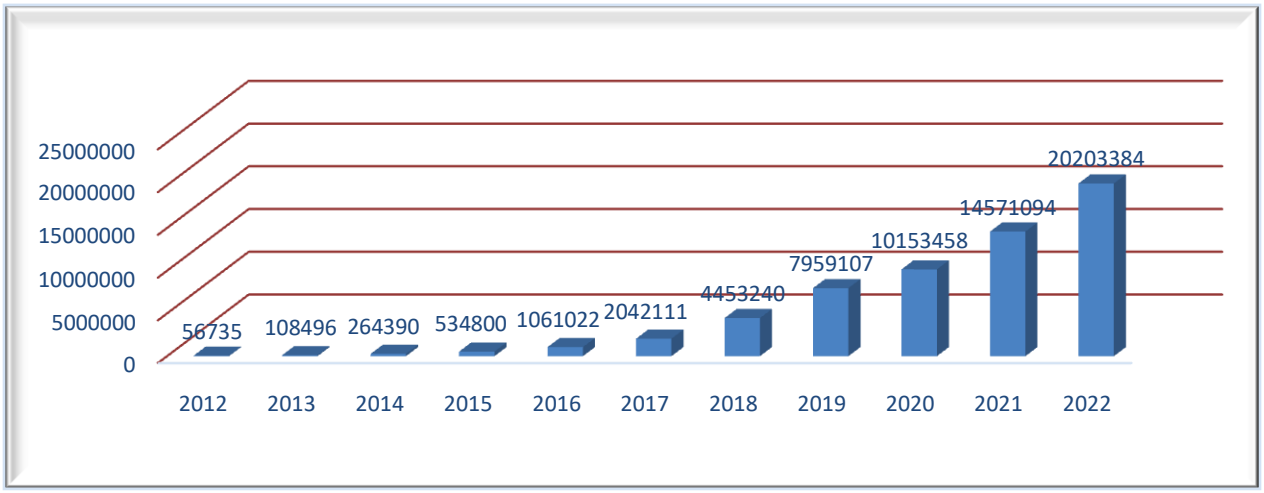
2-fig. Number of installed settlement terminals, and ATMs, as of January 1

With the development of modern payment technologies and remote banking services, the number of remote nakd non-cash payments in one cell increases. In particular, it is now becoming popular to make payments on mobile phones. In this regard, 3.7 million were issued by banks. holders of bank cards already use mobile payment systems . Such payment systems are introduced by commercial banks in partnership with independent or nobank commercial organizations, providing services to users. Among them, mobile payment systems of Click, Payme, M-bank, Partner Bank, TIF National Bank, Agrobank ATB, Asaka ATB, Microcreditbank ATB can be shown in the cell of widely abandoned systems.

Mutual settlements of commercial banks on retail payments, including payments made by means of bank cards, are carried out by the central bank's clearing system orkali . This system allows you to work in conjunction with retail payment systems, as well as to carry out payments with the billing systems of information and service organizations of the Treasury of the Ministry of Finance. Mobile payment systems

services provided mainly for services of mobile operators, Internet providers (nobank retail payment systems) consists in the transfer of payments.

Payment of utility bills, taxes and mandatory payments to the head while the clearing system transfer is a burden. Currently, a plan has been developed for the further development of online banking technologies by commercial banks, including systems for the provision of mobile banking services in Real time, creating and implementing mobile payment programs for individuals in order to completely reduce the cards of all banks..



3-graph. Transactions carried out through the central bank's settlement clearing system.

In terms of the development of non-cash payments, in 2022, the possibility of receiving contactless payments by banks using technologies such as QR code and NFC using mobile payment applications was created. The use of these in the markets, the tourist fair, especially in transport, will serve as convenient for the population.

As a result of the research carried out, a rating of mobile applications created by commercial banks to provide remote services to individuals was developed, and the top 10 banks were reflected in the table below.

Rating of mobile applications of commercial banks created for remote service to individuals

№	Program name	Bank name	Number of people who downloaded the program	Number of rated at Play market	Average put price
1	National	NationalBank	500000+	10352	3.9
2	PartnerMobile	Partnerbank	100000+	2733	3.7
3	InfinBank	Infinbank	100000+	2249	3.9

4	IpalRoadMobile	SilkRoadbank	100000+	1881	4.0
5	MortgageBank	MortgageBank	100000+	1645	4.5
6	AgrobankMobileNew	Agrobank	100000+	1523	3.8
7	En PSB Mobile	IndustrialConstructionBank	100000+	1415	3.6
8	Orange	Kapitalbank	50000+	4722	4.6
9	ContactMobile	Aloqabank	50000+	1126	3.9
10	MKB Mobile	Microcreditbank	50000+	470	3.3

From the data of the table, it can be seen that mobile applications are 7 banks - partner banks with a number of downloads over 100,000 through the Play Market, Infinbank, Silk Road bank, Mortgage bank, Agrobank, Industrial Enterprise Bank mobile application. The most rated mobile applications through the Play market are orange, National, Partner Mobile, InfinBank, Ipal road Mobile.

CONCLUSION

It should be noted that the program of the decree of the president of the Republic of Uzbekistan dated January 9, 2018 "on measures to radically improve the activities of the Central Bank of the Republic of Uzbekistan"in practice has been set as the main task for the further development of the payment system, including the use of remote banking services This is evidenced by the fact that in recent years the use of such modern technologies in the banking and financial system of the Republic of Uzbekistan has created some convenience and innovations in the field.

Also, special attention should be paid to the implementation of new innovative services in banks. Because, according to the results of the research, the fact that remote banking services in banks are quite lame in terms of offering their customers, on the one hand, leads bank customers to stay without the use of such services, and on the other hand, it limits the possibilities of reducing the scope of work in the bank itself. Improving the conditions regarding the use of remote services in places also serves as an important tool in solving the issue. Improving the quality of communication channels can free the population from excessive fuss, in addition to increasing the possibility of consumers using new innovations. For example, when paying for utilities, there is an increased opportunity to stand in long queues, go to a bank or to offices specializing in accepting this type of payment, and pay for services while staying at home rather than paying for funds.

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NEW TRENDS OF EMPLOYMENT AND ECONOMIC GROWTH DRIVEN INDUSTRIAL UPGRADING IN UZBEKISTAN

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ABSTRACT

This paper researched employment reallocation in Uzbekistan and its sectors over the last decade and a medium-term forecast has been developed. Moreover, the thesis investigates the determinants and patterns of specialisation and solo-self employment in IT sectors of countries that are similar in terms of their technology, relative factor endowments and preferences. In the current economic and social global context, highly productive employment to achieve inclusive and sustainable development has been studied.

Keywords: *Employment Reallocation, Inclusive Economic Growth, Digital Economy, Labor Skills, Employment Engagements, Solo-self Employment, Productive Employment.*

Introduction

The coverage of youth with higher education, the quality of education, an increase of the employment in R&D have a direct impact on creating new jobs and increasing labor productivity in certain priority industries. Also, the size of the employed youth and women without discrimination has a strong impact on economic and social policies, as they are the main taxpayers, leading to consumption and online labor market.

Adapting to climate change, efficient use of labor resources in the early stages of demographic dividend return will ensure inclusive economic growth. Digital transformation, the process of globalization and technological evolutions impact the relations of the labor market as well as appearing digital labor platforms. It is reshaping the national economy and creating a new structural structure of employment. Such interactions require an approach that creates an economic, social, and ecologically synergistic effect on the object of study.

It is known that in the conditions of formation of an innovative economy in the Republic of Uzbekistan, the adaptation of the workforce to new jobs, new professions, leads to two types of parallel changes. First, large-scale types of labor are automated or there is no need to implement these types of labor at all. Second, under the influence of demographic factors, the introduction of new technologies, a new task, the combination of new types of labor will increase the volume of production of new types of goods and services. However, the adaptation of the older workforce to such a process will lead to some changes in the labor market during the period of their professional development, their involvement in various courses.

In the context of the transition to an innovative economy, government purchases, investment and human capital affect economic growth. Skills, based on the increase of knowledge, human capital has an effective impact on economic development. Innovative and technological developments increase the demand for

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labor classification of low and medium skilled workers. Consequences of the structural and frictional unemployment impacts labor market and increasing importance Work 4.0.

Expanding opportunities for the self-employed to eliminate unemployment will have a positive effect on quantitative GDP growth. An increase in the share of self-employment will expand entrepreneurial activity. The inclusion of self-employed people in the structure of entrepreneurs can lead to the view of all entrepreneurs engaged in entrepreneurial activities as sole-self employment in bussiness activities. It's clear that all the approaches mentioned above change in the sectoral structure of the economy, the automation of production and the introduction of innovations, the adaptation of production to climate change require modern scientific approaches.

The aim of the study is to develop scientific proposals for effective employment, taking into account changes in cross-sectoral employment, based on the assessment and analysis of the impact of innovative economic growth factors on productive employment.

Study site. It is known that economic growth in a given period is observed in the growth of the economy in terms of total output, GDP or GDP, in terms of its quantity and quality. The employment rate is assessed taking into account demographic characteristics. It is also used to measure the degree to which economic growth is achieved on the basis of intensive and extensive growth.

In extensive economic growth, the level of employment is more important than the quality of its labor. Intensive economic growth is assessed by the quality of labor resources, the coverage of the population with education, R&D, the scale of information technology and innovation. Therefore, in order to ensure intensive economic growth, it is important to increase the level of education coverage and the quality of labor resources. Today, this process is transformed to improve the quality of human capital. Its synergistic effect occurs in the medium term in middle-aged labor resources and in the long-term in younger ones.

Uzbekistan has set national goals and objectives in the field of sustainable development until 2030, the 8th goal of which is to promote effective and sustainable economic growth through effective employment and decent employment for men and women. Task 8.3 provides for the provision of decent employment to the population, especially young people and the disabled, through the implementation of active and passive measures in the labor market, protection of private property, support of small and large businesses and private entrepreneurship and removal of barriers to rapid development. A peer to peer creation of favorable conditions aimed at expanding effective employment. This indicates the relevance of the topic of this article.

The relationship between employment rates and economic growth has been studied in different economic models. Kapos (2005) and Dopke (2001) have identified the outcome link between economic growth and employment rates across different countries at different times, emphasizing that economic growth creates new jobs [1]. This, in turn, suggests that economic growth can be affected differently through the labor market.

According to the theory Shmed (2008), the role of extensive and intensive economic growth models in the creation of new jobs is crucial [2]. Therefore, an increase in aggregate demand for labor results in economic growth, i.e., an increase in the volume of production resources or the efficiency of the use of factors, or a combination of both. Kapsos, S (2005)[3] studied the relationship between economic growth and employment rates in different countries and assessed employment elasticity, developed a forecast on the employment situation in these countries. Moreover, Herman,E. (2011)[4], It identified the impact of employment on economic growth and income in EU countries between 2000 and 2010. According to him,

although the elasticity of employment in economic growth in the EU is low, this figure varies from country to country.

The digital economy provides for the rapid economic growth of developing countries, as well as increases labor and capital productivity and facilitates their entry into the world market. In emerging markets, the digital economy is growing by 15-25 percent per year (WEF 2015)[5]. In the digital economy, the salaries of the employed population are higher than the average wage, and digital start-up projects in developing countries are generating new and unique local markets; inefficient, corrupt markets and the formation of a digital platform for the regulation of Labor institutionstiradi (Lehdonvirta 2016)[6].

The digital economy model is a driver of economic growth and a force that has a profound impact on labor activity and business. Almost 1 percent of labor resources in developing countries, around 4 percent in countries such as Europe, North America, Australia, Canada, South Korea, New Zealand, Singapore, Israel, 2.5 percent of the world's labor force is shifted to the digital sector (IT/ICT) (OECD 2014, World Bank 2016) [7]. It should be noted that entrepreneurial activity is of particular importance in reducing the unemployment rate. The more cases of increasing unemployment rate in the society are observed, the more the demand for reducing unemployment also increases. One of the important areas of increasing employment in this process is self-employment. An increase in self-employed leads to a decrease in unemployment. This is called Schumpeter effect [8]. At the time of unemployment increase, unemployment can be considered as a result of the act of reduction the incentive of people to self-employment, and the tendency to increase as a result of the act of "refugee effect".

The tax-budgetary system of the country, in turn, affects both self-employed and those who carry out entrepreneurial activities. In addition, the level of education coverage of the population has an intensive impact on the self-employment of the population, the formation of entrepreneurial abilities and economic growth. The potential of an entrepreneur with a high level of awareness to develop a firm's activities will be high. A highly qualified entrepreneur will be able to comprehensively assess the analysis of the market situation and forecast market demand, changes in the conjuncture.

Improving the employment structure in Uzbekistan can be achieved by increasing the share of employment in the world market of competitive, high value-added products in the processing and services, high-tech industries [9]. The scope of the employment structure is determined by the number and structure of jobs, which, in turn, reflects the state of market conditions and capital consumption. In a market economy, the labor market unites all the able-bodied population. Effective employment is one of the forms of employment with high socio-economic efficiency. Modern theoretical views on this include Global Sustainable Development Report [10], reports from European Commissions [11], Lewney et al.[12], Gutierrez, Orecchia, Paci, & Serneels [13], Manning & Purnagunawan [14], Etsuro Shioji [15], Aneel Karnani [16], Abdurahmanov K.H., Zokirova N.K., Abdurahman. G.K.[17], Tolametova Z.A.[18], Tagaev B.E.[19] (table 1).

Attention should be paid to the environmental component of sustainable development and re-industrialization on the basis of subsidizing traditional agriculture with high employment. Measuring and regulating the level of effective employment is one of the most effective ways to achieve sustainable social and ecological development of the region. "Sustainable development requires that all needs be met and that everyone's aspirations for a better life be met." Ensuring effective employment in the region will increase the structural quality of the labor force, its competitiveness as a commodity, its interest in life, and will help to improve the socio-economic and environmental situation.

In our opinion, taking into account climate change in the Republic, it is necessary to take measures to change the structure of the production sector, the formation of effective employment. This includes accelerating structural changes in the economy, taking into account sectoral productivity, increasing investment and innovation activity in the regions, agricultural clustering, development of diversified farms, support the creation of innovative diffusion based on new forms of production, increase the dependence of wages on labor performance, improve the skills of poor workers and the unemployed, develop mechanisms to encourage the labor of economically inactive population, youth, women, able-bodied pensioners and the disabled, labor market regulation by considering demographic, structural, macroeconomic mechanism.

Table 1. Modern scientific approaches to primary directions of employment

Authors and organizations	Scientific approach and views
Global Sustainable Development Report 2019	Transforming production in the face of climate change will reduce the threat of globalization of labor markets, technological change, resource scarcity and demographic change.
European Commission, 2019b; ILO, 2008	In the process of transition to a green economy, employment will increase in the following areas: construction, electrical engineering, copper mining, renewable energy, biomass, transport and services
Lewney et al., 2019	The transition to a green economy will have a positive impact on GDP and employment growth. In the EU, this is projected to increase GDP and employment by 2030 by 1.1% and 0.5%, respectively, compared to the usual starting point.
Gutierrez, Orecchia, Paci, &Serneels (2007)	Ensuring productive-intensive economic growth in agriculture and increasing effective employment in the secondary sector will reduce poverty. It will be stimulated by increasing jobs in the first sector and increasing productivity in the second sector.
Victor Pirmana &Purnagunawan (2013)	Negative employment resilience in agriculture is a positive signal, representing the shift of workers from low-productivity jobs in the primary sector to jobs in other sectors of the economy.
Etsuro Shioji (2015)	If the demand for the products of a certain sector increases, the price of goods and services produced in that sector will increase and wages will increase. As a result, employment in this sector will increase. If for some reason the price does not change, the employment change will not occur even if the flexible labor is high.
Aneel Karnani (2011)	Reducing employment-based poverty requires three main tasks: creating new jobs; increase the candidate's ability to work; increase labor market efficiency
Abduraxmanov K.X., Zokirova N.K.,Abduraxmanova G.K.(2016)	In modern conditions, effective and decent work plays an important role in the structure of the most important indicators of the labor market and employment. The new quality of immanent labor (creative, productive, information-intensive, democratic, convenient) has transformed the worker into a new type of employee with product, technological, managerial, organizational, social innovations and motivations of relevant values and labor behavior at all levels of the economic system.
Tolametova Z.A. (2021)	Employment in labor plays a key role in solving social problems in society, increasing economic labor productivity and living standards. Employment plays an important role in ensuring the stability of the country in improving professional skills.
Tagaev B.E.(2021)	Registration of economic units and registration of informal employment serve to ensure decent and effective employment

The usage of the term ―inclusive‖ in the characterization of growth episodes can be traced back at least to the turn of the century when Kakwani and Pernia (2000) that mentioned at the research of Faisal Munir and and Sami Ullah, employed it to highlight the contents of pro-poor growth as that one enables the poor to

actively participate in it and benefit from the growth tendency. Inclusive growth involved both poverty and inequality reduction [20]. According to Ali (2007) the key elements in inclusive growth are employment and productivity, development in human capabilities and social safety nets and the targeted intervention [21]. World Bank (2009) stated that inclusive growth can be achieved by focusing on expanding the regional scope of economic growth, expanding access to assets and thriving markets and expanding equity in the opportunities for next generation [22].

In our view, inclusive economic growth is a generator of increasing employment in productive and decent work and distributes opportunities equally to all segments of society. Inclusive development links human development in proportion to household incomes, health expenditures, education and recreation, taking into account environmental sustainability (i.e. climate change, environmental pollution, energy shortages) and natural disasters.Labor productivity has a positive impact on inclusive and sustainable development. Labor productivity is high in the types of employment in areas with high service and science capacity. Inclusive development was rapidly influenced by the size of the working poors.

Inefficient employment requires the transfer of employees to productive employment [23]. Working poors should benefit significantly from the income generated by labor productivity. The typical model of inclusive growth for the economy can be constructed as follows.It is necessary to pay attention to the environmental component of sustainable development and re-industrialize traditional agriculture on the basis of subsidies, where the population is employed highly.

The new growth model, which places man and his standard of living at the center of national economic policy and international economic integration, requires inclusive growth in the context of the Fourth Industrial Revolution. Economic Growth should provide basic socio economic amenities in the form of food for all, health for all, education for all, electricity for all, access to all weather-good roads and safe drinking water. Government should achieve administrative efficiency and should guarantee gender equity so that the trickle-down effect of the growth will actually materialise. Employment outcome is an important outcome of inclusiveness. Inclusive growth can substantially reduce the income inequality both vertical and horizontal. All these will enhance the quality of human capabilities. The application of the results of these studies in the conditions of Uzbekistan and the assessment of its impact on economic growth are of great scientific importance.

Methods.

The study used methods such as induction, deduction, quantitative and qualitative analysis, comparison and statistical analysis.

Result and discussions.

It is known that in developed countries, more than 50 percent of the gross domestic product is created from the "knowledge economy" account, that is, innovation and highly qualified personnel. Transformation from traditional economic growth factors that provide economic growth to innovative economic growth factors is emerging. Factors of traditional economic growth – Investment, mineral raw material, Land-Water Resources, labor resources; Means of innovative economic growth - quality of human capital, transition to the new technological mode, digital economy, International integration. While 70 per cent of economic growth corresponds to traditional economic growth, the remaining 30 per cent is driven by the evasion of innovative economic growth factors. In the future, it is expected that this will be the opposite of the account [24].

The development of an innovative economy will lead to an improvement in working conditions in the labor market. The following are the 3 main indicators of employment in labor: income adequacy (income level and income inequality); labor market security (job loss risk and income support); working conditions (job requirements and conditions) and quality of jobs. Knowledge and information remain an important factor in an innovative economy, also. The importance of artificial intelligence and the involvement of robotics in the processing of big data, the implementation of the results of scientific development will increase. The competitiveness of labor resources in the labor market begins to be compared with their high skills and experience, as well as their ability to work in high-capacity technologies, digital and employability skills.

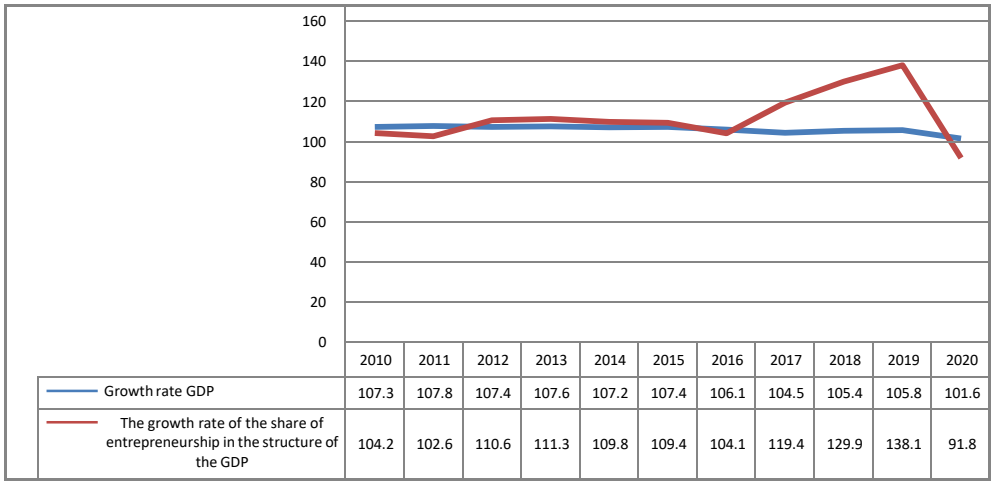
In 2010-2020, the economic growth of Uzbekistan was directly influenced by the growth3of the digital economy, investments, human capital and the growth rate of exports. Of the factors affecting, the dependence of the growth rate of exports on the growth rate of GDP is high compared to the remaining factors. One of the main reasons for this is the contribution of entrepreneurial activity in the structure of exports. The export geography of goods and services is expanding due to the effective results of the activities of small business and private entrepreneurship products export preparation centers. In particular, the pragmatic foreign policy between the countries of Central Asia and South Asia is further improving foreign trade relations (table 2).

Table 2.
In 2010-2020 years, the volume of GDP, the amount of capital invested and the costs allocated to education, Internet costs, the growth rate of exports, %

Year	GDP	Investment to capital	Expender to education	Return from the net	Export
2010	107,3	104,2	107,4	163,6	110,6
2011	107,8	102,6	100,3	133,3	115,3
2012	107,4	110,6	102,1	119,4	90,5
2013	107,6	111,3	100,0	125,6	105,3
2014	107,2	109,8	99,7	129,6	94,6
2015	107,4	109,4	98,5	112,9	92,3
2016	106,1	104,1	100,9	107,6	96,7
2017	104,5	119,4	95,9	125,9	103,8
2018	105,4	129,9	79,9	107,0	111,4
2019	105,8	138,1	109,7	113,5	124,8
2020	101,6	91,8	102,5	94,2	86,6

Traditional economic growth factors the effect of innovative economic growth factors on economic growth is not significant. In the future, as a result of the implementation of the strategic goals and programs set in the country, their level of tolerance increases. The development of human capital in our republic is constantly being paid attention by the state. Only in 2020 year in the structure of the state budget expenditures amounted to 50.4 percent of the social expenditure, in which the expenditure on education is

22.9 percent of the total budget expenditure. Self-employment and entrepreneurial activity had an impact on economic growth in 2010-2020 years (figure 1).



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Growth rate GDP	107.3	107.8	107.4	107.6	107.2	107.4	106.1	104.5	105.4	105.8	101.6
The growth rate of the share of entrepreneurship in the structure of the GDP	104.2	102.6	110.6	111.3	109.8	109.4	104.1	119.4	129.9	138.1	91.8

Figure 1. The impact of entrepreneurial activity and unemployment on the growth rate of GDP in 2010-2020 years

Qualification, based on the increase in knowledge, human capital has a beneficial effect on economic development. The introduction of opportunities for self-employed people to end unemployment has a positive effect. The increase in the share of self-employment increases entrepreneurial activity. The level of education coverage of the population has an intensive impact on the self-employment of the population, the formation of entrepreneurial abilities and economic growth. The potential of an entrepreneur with a high level of awareness to develop a firm's activities will be high.

According to statistics, in 2022 the permanent population of the Republic of Uzbekistan will be 35,271.3 thousand people. Between 1991 and 2020, the number of permanent residents increased 1.64 times, or an average of 103.2 percent annually. Labor resources increased to 104.5% on average annually.

As a result of measures taken to improve the reproductive health of the population, the population growth rate and longevity have increased. Between 1990 and 2017, economic growth outpaced demographic growth. This will increase the real income of the population, having a positive impact on living standards and quality of life. As a result of the impact of the COVID-19 pandemic on the economy, economic growth in 2019-2020 has lagged behind demographic growth.

In 1991, the number of able-bodied people in the population was 49.2%, and by 2020 its share reached 62.7%. It can be found that the wave of the share of adults of working age in the labor force is returning every eight years. In particular, the share of young labor recourses in the total labor force increased from 7.6% in 1991 to 8.1% in 2013, while in the last decade it was 8.1%. The share of urban population in the total population was 50.5%, rural population - 49.5%. In terms of age structure, 30.3% of the permanent population is under the age of working age, 59.5% is of working age and 10.2% is older than working age.

According to international standards, Uzbekistan is a country with a young population. In 2020, the average age of the population was 28.6 years (28.0 years for men; 29.2 years for women). As a result of high birth rates over the past years, the share of able-bodied young people has been growing positively in terms of their impact on demographic and economic growth. At the same time, in 2020 the average life

expectancy of the population was 74 years and 6 months (in 1990-2020 it increased by 7 years and 6 months). Uzbekistan has a stable population and a steady growth rate.

In the Republic of Uzbekistan in 2020, 81.1% of employment in the economy worked in the non-governmental sector, 18.9% in the public sector [25]. In 2015-2020, Uzbekistan averaged 26.9% in agriculture, forestry and fisheries, and 13.5% in industry. The share of the employment in agriculture decreased from 27.6% to 26.9% (-1%) in 2015-2020, and the share of the employed population in the service sector also decreased, but the share of employment in emerging services increased. In the analysis of industrial employment in 2015-2020, mining and quarrying by 6%, electricity, gas, steam and air conditioning supply by 4.6% (employment in metal ore mining decreased by a maximum of 6%), water supply; sewerage, waste collection and recycling decreased by 0.2%. The employment rate in the manufacturing industry increased by 10.8% (the highest in the production of textiles, clothing, leather and related products - by 4.2%).

The nature of innovative market economy corresponds to the innovative type of employment, which characterizes the system of effective employment. Innovative employment should be considered as the ability of an individual, the human resource potential of a firm, and the total economically active population of a country to adapt as much as possible to the new needs of the economy caused by technological changes.

The structure of innovative employment involves the redistribution of employment from low productive to high-productive industries, the active formation of employment in the field of services, leisure, information services, greening of environmental management, etc., in contrast to employment in material production, which is characteristic of the industrial economy.

Employment in modern production in its structure should increasingly take on the form of a pyramid, where those employed in direct production tend to steadily decline. In 2020, the industrial sector (agriculture, mining and manufacturing, construction, etc.) employed 45.3% of the total number of people employed in the economy, and in the post – industrial sector (financial activities, education, research and development, services, etc.) - 21.5% in Uzbekistan. Demand constraints from the labor market remain the main factor of changes in the professional composition of the economically active and employed population in the context of real shifts in the structure of production.

According to the results of the analysis, the socio-economic processes in the country are changing rapidly. At the same time, employment and its attitude to earnings are changing radically, the importance of the expected permanent income in the composition of the factors influencing the balance of supply and demand in the labor market and the motivation for additional income is growing. In addition to the fact that the main source of income of labor resources in the workplace is wages, there is a growing activity in various virtual services, e-commerce operations on the way to earn extra income. In particular, such activity can be seen in the inflow of bit coin, crypto currency transactions, the formation of revenues through transactions in electronic online pockets.

The level of employment in the most productive sectors of the economy has increased. In particular, in 2015-2020, productivity increased by 43.9% in agriculture, 148.6% in industry and 69.9% in services, while employment in agriculture decreased by 2.8%, and changes in employment in industry and services showed positive increase to 2.3 and 2.9, respectively. The growth of labor productivity had a positive impact on the growth of labor productivity.

At the same time, it should be noted that the growth of the financial sector, small businesses, and telecommunications industries corresponds to the trends of innovative employment in Uzbekistan. In Uzbekistan, a wide range of work is being carried out on the introduction of modern organizational and legal norms of employment, preparation of unemployed for the profession, retraining and professional development of workers, reduction of the unemployment rate in the regions, illegal labor migration and reduction of informal employment.

Trends models of employment, productivity and economic growth in the national economy of the country, ie the number of jobs over the years, the level of productivity, how changes in economic growth and the number of jobs in the forecast period, increase or decrease in productivity are analyzed (figure 2).

Forecasts for 2026 on all sectors of the economy, productivity and economic growth are presented. According to the analysis, in 2010-2015, employment in industrial production decreased at a rate of 0.30 points per year, and in 2015-2020 increased at a rate of 0.20 points. In the process of development, the elasticity of income to agricultural products decreases to a high degree and reduces the share of agriculture in GDP. As for the industry, the growing trends in demand for products in this industry are completely different. In the first stage of income growth, the income elasticity coefficient increases. At the upper stage, it is observed that the demand for these products is met. As a result, the share of industry in GDP is declining.

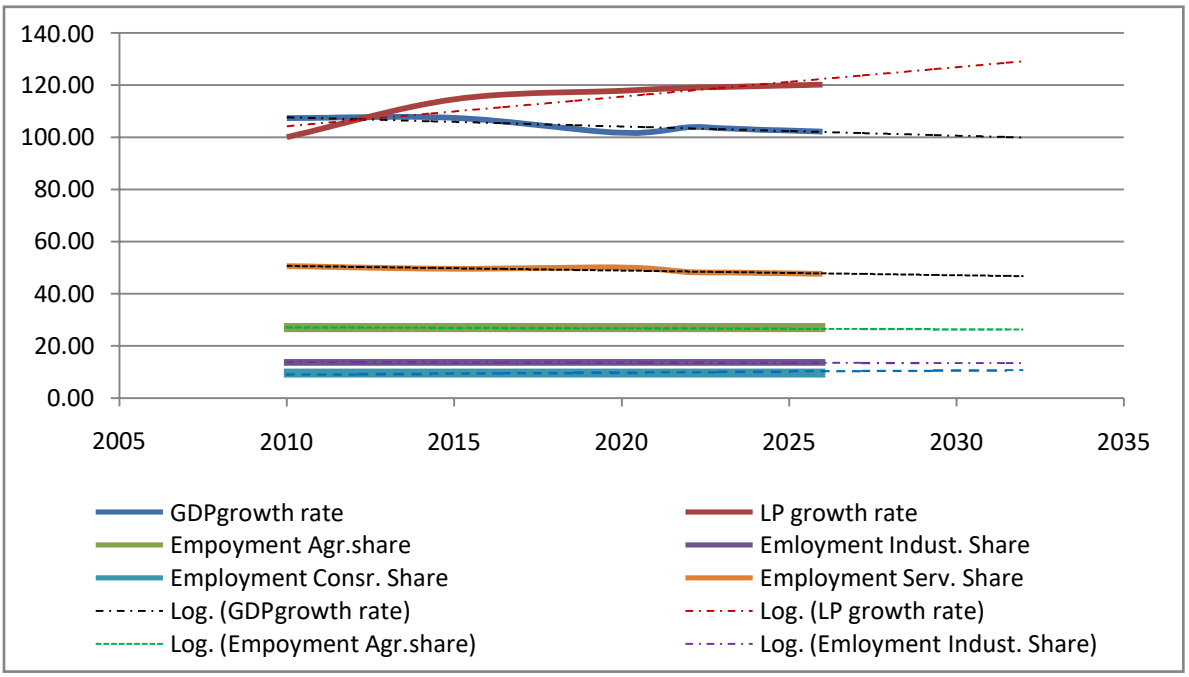


Figure 2. Changes and forecast of employment, productivity and economic growth in the sectors of the national economy

In the construction sector, the rate increased by a stable 0.50 points in these two periods. It can be seen that the intensity of the expansion has increased somewhat. This in turn has increased productivity and influenced changes in the employment structure in agriculture. Under the influence of the COVID-19-20

pandemic, economic growth has slowed. Productivity and the introduction of innovations in production, there is a shift of employment from one sector to another. In the process of formation of an innovative economy, the transition from manufacturing to electrified production systems, computerization, automation of output with the help of conventional weaving machines and new era devices will lead to increased economic development.

Conclusions.

During the study period, economic growth was strongly influenced by the growth rate of exports. In the coming period, the impact of innovative factors on economic growth will increase, that is, the impact of non-economic factors on economic growth will expand. At the same time, an increase in the quality of human capital leads to an increase in productive employment. As a result, the country will achieve sustainable and comprehensive economic growth based on increasing effective employment and decent employment for men and women.

At all stages of economic development, the coefficient of elasticity of demand for services and income increases. Increased demand in this area is driving the rapid development of this sector. Considering the changes in these three sectors, the following conclusions can be drawn:

- One of the main indicators of economic development is the sectoral structure of employment;
- In the process of economic development, the demand for services will increase. In our view, the increase in labor productivity in industry and services will allow for the redistribution of labor in favor of the service sector;
- The "Gravity Center" of economic activity will move from the first sector to the third and driver that one is digital transformation as well as innovation;
- Economic development changes the economic structure and contributes to improving the living-standards together.

In the modern labor market, the demand for labor force with medium and high qualifications is growing. In this process, there is a growing need for higher education graduates to develop employability skills. Cognitive thinking, skills and efficiency, learning career development, practice, knowledge of know-how, general skills and emotional intelligence, self-confidence and self-assessment are key factors in employability skills.

The transformation of rural areas into urban areas, changes in rural lifestyles and improved infrastructure in rural areas have affected demographic trends and employment. GDP growth per capita is directly related to indicators such as productivity, level of economic activity of labor resources, education, skills, health of the working age population.

As a result of the impact of the above innovative economic growth factors on GDP growth, the following should be done to promote employment of labor resources and ensure sustainable inclusive economic growth in the context of changes in the economy's cross-sectoral employment:

- Further expansion of labor productivity in the types of employment in areas with high service and science capacity. Labor productivity has a positive impact on inclusive and sustainable development. The increase in productivity is directly related to the change in cross-sectoral employment in Uzbekistan. A 1% change in employment leads to a 0.58% increase in productivity.

A 1% increase in productivity in agriculture will change the employment structure in the sectors by a total of 0.32%. In industry and services, it affects employment changes by 0.14% and 0.04%, respectively. The level of employment in the productive sector of the economy has increased over the observed years.

- Use of the achievements of the 4th industrial evolution in reducing the share of jobs in socially unprotected and precarious employment. The weight of poor workers had a rapid impact on inclusive development. Inefficient employment requires the transfer of employees to productive employment. Poor workers should benefit significantly from the income generated in return for labor productivity.
- It is necessary to pay attention to the environmental component of sustainable development and re-industrialization on the basis of subsidizing traditional agriculture with high employment and attracting financial market assets.

Acknowledgements.

The Faculty of Economics of the National University of Uzbekistan named after Mirzo Ulugbek conducted this study in order to scientifically determine the changes in the structure of employment in the economy and the priority sectors in promoting employment and economic growth. The research team would like to thank all the expert participants for their active participation in the process of improving the research methodology, collecting and analyzing statistical data. The research team is especially grateful to the international group of experts, partner organizations, international research institutes.

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STUDY ABOUT BLENDED LEARNING – NEW SOLUTION TO AN OLD PLATFORM

Dr. Seema Kushwaha [1]

ABSTRACT

Blended learning is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods.

It requires the physical presence of both teacher and students, with some elements of student control over time, place, path, or pace. While students still attend "brick- and- mortar‖ schools with a teacher present, face- to - face classroom practices are combined with computer- mediated activities regarding content and delivery. Blended learning is also used in professional development and training settings. Blended learning allows students to learn at their own Pace and their own ability level. By including a virtual environment, learning is not limited to a physical classroom. Learning can happen in long periods, in bits and pieces, from home, from a coffee shop, or during a lunch break, depending on what works words for your schedule.

Blended learning allows increased flexibility, as it enables anytime anywhere learning. It eliminates the need to attend class, which allows a further geographical reach.

This favours students who can't attend class at set time every day or week.

This can include learners with young children, full- time jobs physical disabilities, or who live in different cities. The main purpose of this paper is to study and analyze the available literature based on the Blended learning and to understand how it has been studied and evaluated by different authors who are working in this area. Current literature focuses on Blended Learning- Its importance and Concept. This paper focuses on the current situation of Blended learning it‘s further.

Data has to be collected from multiple sources of evidence. In addition to books, journals, and websites, and newspapers. It explores the main issues in adoption of Blended Learning techniques and practices.

Blended learning is not just a trend, and we‘re starting to see technology integrated in really intentional ways.

Keywords*: Blended Learning, Education, Internet, Technology, Teacher and Students.*

Introduction:

Blended learning is defined as a formal education program that's made up of in person classroom time as well as individual study online using e-learning software. It is a type of multichannel method that incorporates tutor-led activities, image, video, digital tasks and face-to-face discussion.

There are many teachers out there who have been encouraged or told to involve more technology in their classrooms by principals or heads. Some are well versed and adapt very well to the challenge, while others struggle to find the value and benefits of interacting technology. The practice itself is often referred to

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as Blended learning, and this post will cover the basics. If you are completely new to the topic, read on to find out how it could make a difference in your classroom.

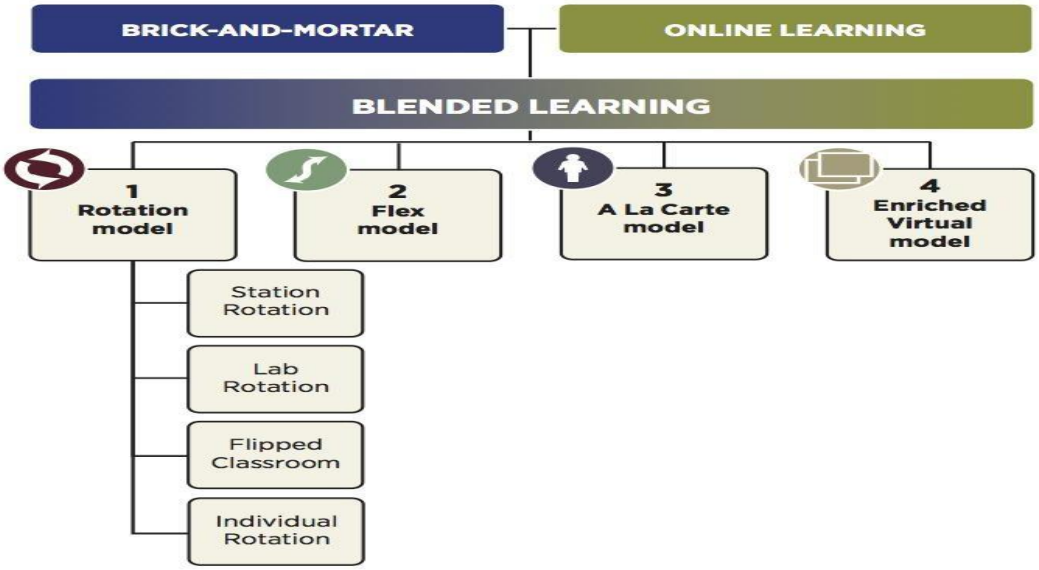
What exactly is blended? First and foremost, blended learning is simply the integration of technology in to the curriculum. Whether students are utilizing digital media to gather information or computers to complete assignments, the actual combination of technology and the curriculum is the hallmark of blended learning.

Its includes:

- Delivery methods through which students learn from a digital source.
- The use of online classroom and discussions.
- Identifying gaps in knowledge by using automatically corrected assignments.

2. Blended Learning Models

There are various blended learning models that teachers (and schools) can implement. Each model has specific ways to target teaching and learning. Each also incorporates the blended learning arc and allows for students to have some agency over time (when), space (where they learn), pace (speed and rate of learning), and path (way in which they learn).



Rotation model

Students rotate on a fixed or teacher-led schedule to encounter learning experiences with at least one being online.

There are four different ways to implement rotations:

- **Station rotation** – All students cycle through each rotation.
- **Lab rotation** – Students rotate to a computer lab for online learning.
- **Flipped classroom** – Primary content delivery is online followed by teacher-guided work and practice in-person.

- **Individual rotation** – Students have an individualized playlist they rotate or work through with at least one component online.

Flex model

Primary instruction is online delivery with in-person enrichment through small group instruction, group projects, and individual tutoring as needed.

A la carte model

Courses and instruction entirely online (completed on-campus or off-site) that also accompany other experiences offered within a learning center or school.

Enriched virtual model

Students are required to have in-person learning sessions with their teacher and then complete their remaining coursework remotely with the same teacher assessing work.

Source:

3. Objective of this study

The objective of the present study is to review the following:

- The importance of Blended Learning
- Analyze the Concept, Need Challenges and Trends of Blended Learning

4. Research Methodology.

The study has been done mainly on the basis of secondary data and information available from books and published works and reports.

5. The importance of blended learning

The term "blended learning" means that students learn both from traditional activities in the classroom and from technology-based programs and instruction.

Blended learning also improves other factors for the teacher including:

- More engaged students
- Better information feedback on work
- Team teaching
- Extended time with students
- More leadership roles
- Focus on deeper learning
- Motivate hard-to-reach kids
- New options to teach at home
- More earning power
- Individualized professional development Plans

Improved teaching conditions

Blended learning tears down the traditional bricks and mortar approach to teaching, which can improve conditions such as:

- Reduced Isolation
- More opportunities for collaboration
- Meaning for professional development
- Better Student data
- Improved Time efficiency
- Role-differentiation.

6. Main characteristics of Blended Learning

The main features of blended learning are

- **Student have the option of the two modes-**student in blended learning can select either the traditional mode of classroom teaching where they can get personal interaction with teacher and their classmates or they can choose ICT supported teaching learning. This largely depends on the nature of content and objectives being targeted. Sometime course designer or teachers themselves decide on the mode appropriate for topic begins deal with.
- **Teachers are well versed with both the modes-** it is an important feature of the blended learning that teachers are very dynamic techno Savvy and fully trained to work efficiently in both the formats-traditional classroom format and ICT supported formats. They will be well equipped in using traditional methods and other modern technologies.
- **Student constructs knowledge rather than just consuming it--**
  Blended learning also includes constructivism. Student constructs their own
  Knowledge rather than depending on others to design teaching-learning Strategies for them.
- **Make teaching learning process child-centered-** Blended learning is designed to provide maximum gain to students and thus reach the goal of child centered education.
- **It provides multicultural and multidimensional approach to teaching learning process-**Blended learning approach provides student opportunity to communicate and share their views and feeling with the students all over the world thus it make teaching learning process multicultural and variety of experience bring with it the interdisciplinary and multidimensional factor also.
- **It has a human touch-** due to Physical presence of teacher via traditional approach students get that human touch which is very necessary for balanced student's emotional quotient and very necessarily up to secondary level.
- **Student get wide exposure and new perspectives of the course content-**due to variety of experiences students get wide exposure and their content knowledge is enriched, they get to se various new dimensions of the content gain practical useful knowledge.
- **Diverse role of teacher**
- **Physical development is possible with in school campus.**
- **All round development of personality is targeted.**
- **Students get face-to-face interaction as well they interact in virtual space.**
- **Students get full experience in using new technology.**
- **Students get training in different life skills.**

7. Concept of blended learning-Generally, three main delivery modes exist: face- -to-face flexible and distance learning. Importantly learning technology applies to all three modes; technology can be used to:

- **Enrich traditional face-to-face teaching**
- **Enhance existing flexible form of the delivery**

- **Increase the level of engagement and social presence of students studying at a distance**

In each delivery mode, technology can be used to blend the best of conventional teaching with online forms of learning. Learning technology is not a single entity and it can be used for multiple purposes. With this point in mind, we describes the concept of branded learning

Blended learning is an educational context in which learning is delivered both online and face-to-face.

8. Advantages of blended learning

- Provides personalized training experiences.
- Round-the-clock access to training resources.
- Track employee performance and skill development.
- Reduction in training costs.
- Better communication and collaboration learning
- Students gain advantage of online learning without losing social interaction element and human touch of traditional teaching.
- It to provide more scope for communication for both teacher and students. Students and teachers become more technical and they gained enhanced digital fluency.
- Students get more strengthened professionalism as they developed qualities like self motivation, self responsibility discipline.
- Individualized Learning Personalized learning Support
- Independent and collaborative learning increase in student engagement
- Accommodates Several learning style

9. Disadvantages of blended learning

- Learners must have basic technology knowledge or a willingness to learn.
- High technology setup and maintenance costs.
- Wastage of offered resources.
- Technological dependence.

10. Implementation of blended learning

- Conduct a proper needs analysis concerning the institution deliverables and support mechanism prior designing a blended course
- Carefully select a blended learning model that is most suitable for the institution
- Provide continuous training for faculty staff including instructors and administrative staff on necessary skills needed to conduct the program and to continuously enhance the effectiveness of delivery
- Encourage instructors to work collaboratively with each other by setting up a networking system for them to share ideas and/or best practices
- Create a support system for instructors, students and also for dealing with technological fault in order to promote smooth delivery of the program
- Pedagogy for online and face-to-face learning Generating ideas Brainstorming
- Concept mapping/mind mapping
- Creative Presentation Exposure to the real world Case study

- Cooperative learning strategies.
- Project based learning
- Delivering online lecture
- Collaborative Project
- Student assessment and feedback.
- Technology infrastructure for implementation Approaches for blended learning
- Face to face video lecture
- Internet based learning
- Project based learning
- Remote learning Satellite-based TV channel
- Online assessment

11. Assessment and Evaluation

Summative Evaluation Strategies

- Open Book Examination Group Examination
- Spoken/Speaking Examination
- On demand Examination

Formative Evaluation Strategies

- E-porfolio
- Creative Product
- Classroom/online Quizzes Artificial Intelligence Tool

12. Conclusion

- Blended learning is the combination of times and modes of learning, integrates the best aspects of face-to-face and online interactions for each discipline, using appropriate ICT.
- Examples of blended learning include authentic learning contexts, problem solving, and project based learning tasks.
- Designing optimal learning spaces, virtual and physical, will be a key success factor for blended learning
- Blended learning Environment promise to be an important part of the future of the both higher education and corporate training. Over the past decade, with the increased availability of technology and network access, the use of Blended Learning Environments has steadily.
- It provides students with time flexibility and improves learning outcomes.
- The blended learning offers the open way for many students who can get through the physical and cultural barriers in the education.
- By learning to use technology in the classroom, both teachers and students will develop skills essential for the 21st century.
- But more than that student will learn the critical thinking and workplace skills; they will need to be successful in their futures.
- Education is no longer just about learning and memorizing facts and figures; it's about collaborating with others. Solving complex problems, developing different forms of communication and leadership skills, and improving motivation and productivity.

- Despite initial hurdles and challenges, the future looks promising for blended learning adoption in the developing country, like India. In fact, if the current growth rates continue, India might soon pass Western countries in blended learning adoption.
- The challenges for implementation of blended learning in higher. Institutions id time commitment. Thus, estimates that planning and developing a blended learning course for large numbers usually takes two to three times the amount of time required to develop a similar course in a traditional format.

"Blended learning is not just a trend, and was starting to see technology integrated in really intentional ways".

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KEY TRENDS IN THE FORMATION AND DEVELOPMENT OF THE INVESTMENT POTENTIAL OF CHEMICAL INDUSTRY ENTERPRISES OF THE REPUBLIC OF UZBEKISTAN

Tillayeva Barno Ramizitdinovna[1]

ABSTRACT

The article identifies the main factors influencing the increase in the efficiency of investments in the chemical industry, and analyzes analysis of the current state of the chemical industry, as well as calculates the forecast indicators of the efficiency of investments based on exponential and degree functions.

Key words: *investment potential, modeling, correlation, regression, indicator, factors, forecasting, econometric assessment, economic and mathematical methods, financial and economic processes*.

In the context of the globalized economy and limited financial resources for most countries, the urgent task is to increase investment potential and the effective use of investments. The Report on World Investment by UNCTAD (United Nations Conference on Trade and Development for 2019) [1] determined that "investment potential is a key tool for sustainable economic development and a factor in the innovation activity of industrial enterprises." In this regard, the development of domestic investment potential is one of the most important tasks today.

Special attention is paid to scientific research on the issues of effective development of investment potential in the world, optimal use of available opportunities, improvement of investment mechanisms and development of market demand based on them. At the same time, priority research is being conducted in such areas as attracting foreign direct investment in the industrial sectors of the economy, developing domestic investment potential, and expanding opportunities for investors in the effective use of investments.

At the new stage of development in the Republic of Uzbekistan, comprehensive reforms are being carried out to develop production, including industrial enterprises, based on modern technical and technological trends, to create a favorable investment environment and increase its attractiveness.[2,3] "In order to create a solid foundation for the long-term sustainable development of all areas of the chemical industry, it is necessary to accelerate the process of transformation of the industry based on the best international practices." [4] In this regard, the most relevant research is in such areas as optimal determination of the growth of the investment potential of production and their interdependence, protection of the domestic market and strategies for the development of investment potential in exports, effective use of opportunities not included in production.

The process of forming investment potential is directly related to resources, that is, to sources of investment. In turn, the availability of investment potential is an important condition for their appearance. The creation of a favorable investment environment, the development of priorities and directions of investment policy should ultimately lead to an investment decision for each individual enterprise.

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In our opinion, if there is economic growth in the country, the volume of investments being developed, this is an indicator of the effectiveness of the country's investment policy, the creation of a favorable investment environment and active investment potential.

Research shows that there are two approaches to assessing investment potential: a local approach based on generally accepted methods of analyzing investment projects; and an integrated approach based on a set of indicators characterizing the processes of management and development of investment activity in a general (integral) form. The system includes groups of input and output indicators: investments, volume indicators, investment project parameters, production efficiency indicators, financial results and sustainability. In this system of interrelated relationships, the chain of financial indicators (or block) is a priority. The development of the investment potential of enterprises requires an integrated approach taking into account the peculiarities of production, the availability of factors of production, consumer demand for the products of enterprises, etc.

In the context of the formation of the digital economy, the investment potential at the level of the national economy is expanding financially, materially, innovatively and intellectually as a result of the rapid development of activities in international financial markets, investment goods markets, intellectual and scientific and technical products markets, international labor markets. In the conditions of globalization of the world economy, Uzbekistan's aspirations to join the UN, the expansion of investment potential due to changes in the international component will receive new opportunities and will become an important task in the mechanism of its formation.[5] In our opinion, it is important not only to increase the investment potential, but also to fully use it and turn it into real investments. These issues are of urgent importance at the macro level today, and, according to data, in 2018-2019, on average, only 70% of Uzbekistan's investment potential was used.[6]

Research shows that the balance of processes and factors that ensure investment in the development of the investment potential of the chemical industry, as well as the effective development of these processes requires diversity due to the characteristics of the industry. The investment potential in the chemical industry also characterizes the resource capabilities of the investment process, which is formed as a multidimensional system. The use of internal and external potential requires the investment attractiveness of the enterprise, industry and country, as well as the improvement of the investment environment.

In our opinion, to date, the following tasks can be identified in the field of increasing the investment potential of chemical industry enterprises of the Republic of Uzbekistan, which require the greatest attention and successful solutions:

- In-depth analysis of the main directions of improving the efficiency of the formation and development of the investment potential of Uzkimyosanoat JSC and its member enterprises;
- Identification of the main problems of the formation of the investment potential of chemical industry enterprises;
- Improving the efficiency of investment activities and the development of the investment potential of industrial enterprises, including the enterprises of JSC "Uzkimyosanoat";
- Identification and analysis of the main factors forming the investment potential of chemical industry enterprises;
- Improvement of indicators for their assessment based on the factors forming the investment potential;

- Development of promising directions in the field of increasing the innovative potential of chemical industry enterprises;
- Development of an optimal strategy scenario for the development of the investment potential of the chemical industry based on the analysis of foreign experience;

Today, the chemical and petrochemical industry in our country is one of the priority sectors of the national economy, which includes enterprises producing mineral fertilizers, inorganic substances and chemicals for energy, gold mining and chemical industries, organic chemistry, artificial fibers and polymer materials, chemical plant protection products and soda ash. The products of these enterprises account for a significant share (8.9%) in the structure of the country's industrial production, which is managed by Uzkimyosanoat JSC as a holding structure.[7]

To date, Uzkimyosanoat JSC effectively uses not only domestic, but also foreign investments. We will conditionally divide the attraction and effective use of investments in Uzkimyosanoat JSC and its enterprises:

1. Analysis of the state of internal investment of Uzkimyosanoat JSC and its enterprises and organizations;

2. Analysis of the role and current state of investment potential in the effective use of foreign investments by enterprises and organizations of Uzkimyosanoat JSC (Fig. 2).

The analysis shows that the participation of Uzkimyosanoat JSC in the management of its joint-stock companies is carried out at the expense of blocks of shares transferred to the authorized capital of the company. Uzkimyosanoat JSC has elected representatives to the supervisory boards of enterprises through which it manages and coordinates the activities of its subsidiaries and affiliates, through their representation on the supervisory boards and decision-making, the interests of the company as a shareholder, as well as general meetings of shareholders by participating defends the interests of the state.

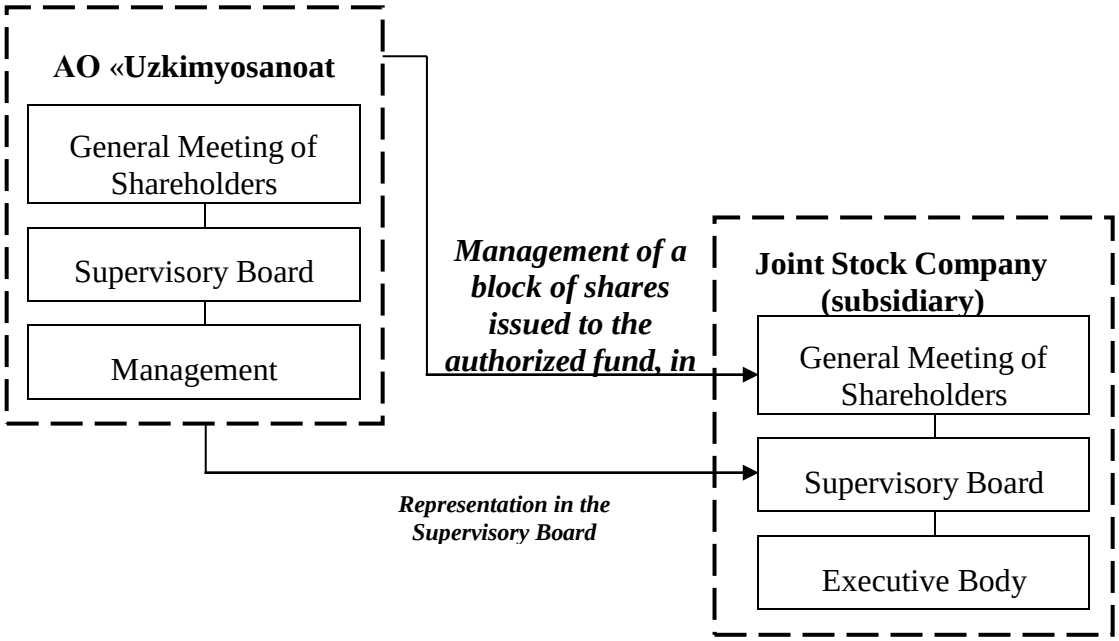

Fig.1. Management structure of Uzkimyosanoat JSC[8]

In accordance with the Decree of the President of the Republic of Uzbekistan dated April 3, 2019 No. PP-4265 "On measures to further reform and increase the investment attractiveness of the chemical industry", 43 investment projects worth $ 3.1 billion were implemented under the program, the volume of industrial production increased by 2.4 times, exports by 2.7 times, the share of localized products increased to 42.5% and the production of 43 new types of products has begun, more than 3.2 thousand new jobs have been created.

In order to regulate the export-import activities of the industry, to ensure transparency of foreign trade processes, and most importantly, to increase sales and expand the geography of chemical products in foreign markets, to ensure further competitiveness and attractiveness, a limited liability company "Uzkimyoimpex" was created [9].

Nevertheless, despite the fact that many financial indicators of Uzkimyosanoat over the past five years have been positive. In particular, until 2015, the revenue from the sales of products by chemical enterprises increased by an average of 113.1% per year.

The relevance of using available reserves and opportunities in conditions of exceeding investment restrictions related to both external and internal factors increases taking into account the efficiency of using each component of the investment potential of the industry. In accordance with this, firstly, it is necessary to improve the scientific and methodological support of the economic efficiency of investment analysis, based on their characteristics and the overall investment strategy of the industry, it is necessary to develop tools for their assessment at the macro and micro levels. Secondly, it is vital to calculate not only the current and final results of the investment potential of chemical enterprises, but also the parameters of forecasts for the future.

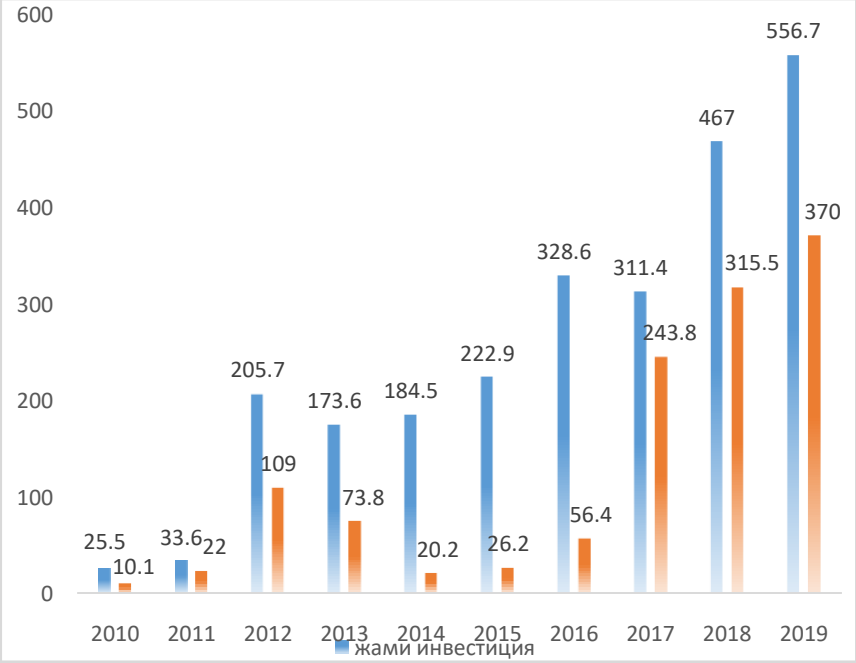

Fig.2. Dynamics of investment development by chemical industry Enterprises[9]

In our opinion, an important way of increasing investment activity should be the sales of a block of shares of enterprises currently owned by the state. But it should be borne in mind that a certain strategy should be developed for this, which will ensure the level of liquidity and the growth of stock prices. In our opinion, in order to increase the investment potential in the future, Uzkimyosanoat JSC should be prepared for the sales of shares of each company. It is necessary to use the experience of German privatization in this situation. In this experiment, the state re-equips the enterprise, introduces new technological processes and only after that sells the enterprise at a high price. Given that the state has a significant stake in the enterprises of Uzkimyosanoat JSC and JSC as a whole, it should finance the preparation of enterprises for sale and ensure that these funds are returned to the budget after the sales of shares.

We believe that when determining the investment value of a chemical industry project, it is necessary to analyze regional risks. The investment attractiveness for the enterprises of Uzkimyosanoat JSC is determined not only by its proximity to natural resources, but also by the development of economic infrastructure, the existing legislative framework and communications system.

Consequently, the increase in the investment potential of the chemical industry of Uzbekistan and the improvement of the mechanisms for the development of the industry should be achieved in the near future by solving the following key tasks:

- Modernization and technical and technological re-equipment of the production of synthetic ammonia, caustic soda, diacetyl cellulose, chemical fibers at enterprises by attracting foreign investment in the chemical industry;
- Re-equipment of chemical industry enterprises for the production of nitrogen, phosphorus, potash fertilizers based on the use of software and innovative technologies with the achievement of cheaper raw materials by 3-5%;
- Rraining and retraining of human resources based on the formation of a new generation of engineering, technical and managerial personnel capable of providing innovative development of the chemical industry in the digital economy;
- Creating conditions for increasing the investment attractiveness of enterprises and ensuring the inflow of private investment in the chemical industry, etc.

Currently, in the context of globalization, all industries in the country, including chemical, are supported by the state. It is obvious that the formation and development of knowledge-intensive and high-tech industries, which determine the pace of expansion and spread of new technological structures to other sectors of the economy, is a particularly important and priority direction in connection with the creation of opportunities for new resource- and energy-saving goods.

Despite the fact that to date certain steps have been taken to formulate a strategy for the development of the chemical industry, we note that at this stage it is advisable to develop a systematic strategy for the modernization of the local chemical industry, its development on the basis of an effective investment strategy based on the formed State Concept. In this regard, we believe that the following proposals will improve the investment policy in the chemical industry of the Republic:

- Development of a long-term State program strategy for the formation and development of the investment potential of the chemical industry to strengthen the impact of investment processes on the growth and export-oriented process of the national economy;

- Preparation of an aggregated classification of investment potential for approval by Uzkimyosanoat JSC, including monitoring and forecasting of investment processes;
- Review and approval of methodological materials on the aggregated analysis of the dynamics and structure of investment potential;
- Analysis of regional and sectoral generation of investment potential;
- Comprehensive assessment of the effectiveness of the mechanism of formation of investment potential;
- Identification of the reasons for the decrease in the efficiency of investment in the industry and submission to the Government of the Republic of Uzbekistan for consideration and preparation of a program of measures to extend the terms of reimbursement of expenses and their elimination.

In our opinion, the development of investment potential is a single system and is directly related to the investment policy of the enterprise, industry and country. Therefore, when considering this process, it is necessary to choose a certain model and the optimal scenario of the investment strategy for the development of the chemical industry.

In order to overcome the existing problems and ensure the sustainable development of the network and the formation of investment potential in the chemical industry, we believe that it is advisable to implement the following:

- Implementation of financial and organizational measures to support the demand for chemical industry products;
- Creation of optimal financial and organizational conditions for increasing the volume of exports of chemical industry products;
- Ensuring the production of globally competitive products in the chemical industry through the implementation of innovative developments and increased investment in R&D;
- Increasing the level of localization of production in the chemical industry;
- Improving the system of training highly qualified personnel for the chemical industry.

Thus, the scenario of sustainable development of the enterprises of Uzkimyosanoat JSC consists in the development of a set of long-term state programs for the formation of investment potential in the context of chemical industry enterprises based on the mechanism for developing the investment potential of the chemical industry, improving the structure of self-regulation of investment processes and their state regulation, launching an innovative mechanism for generating investment potential.

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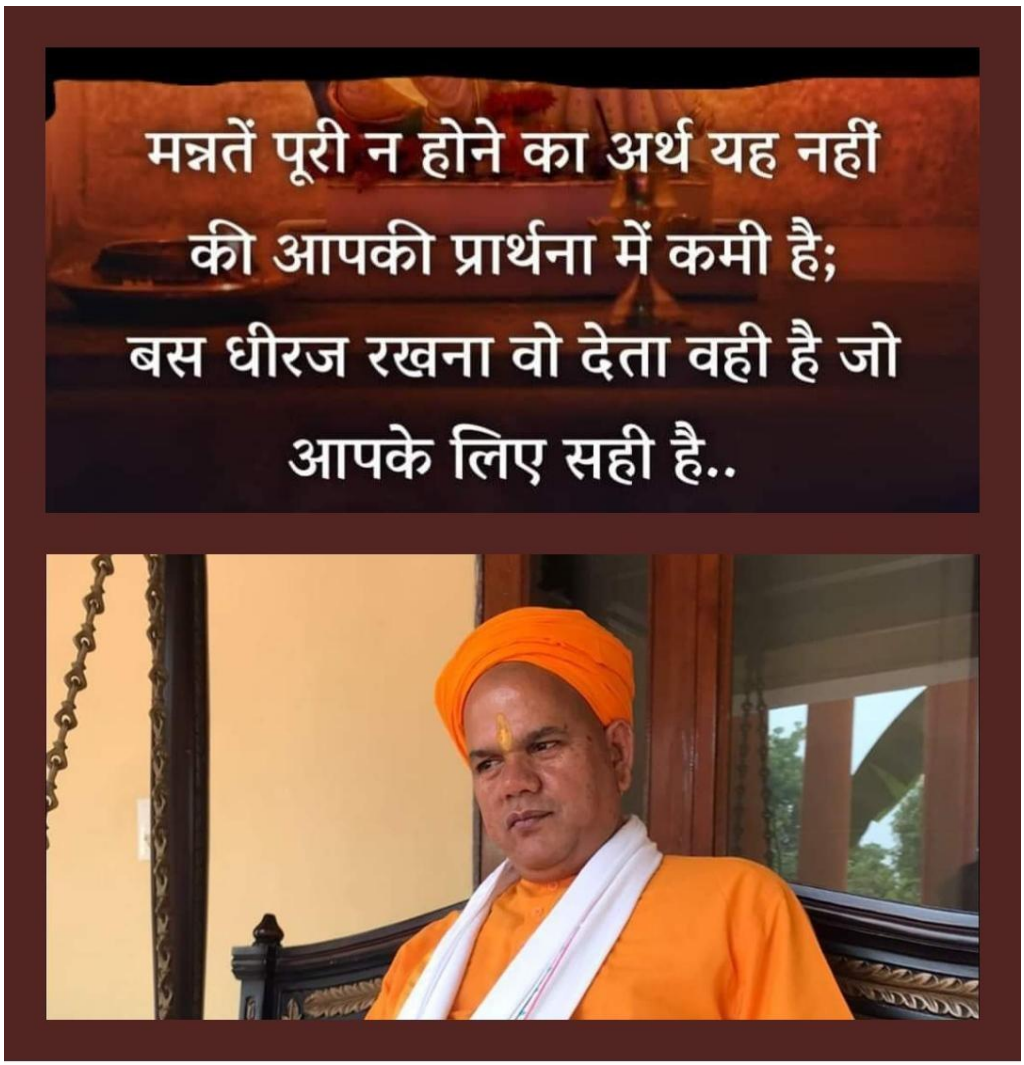

ANALYSIS OF THE DIFFERENTIATION OF THE REGIONS OF THE ANDIJAN REGION BY THE LEVEL OF DEVELOPMENT OF SMALL BUSINESSES

Dadaboeva Marg'uba Mamasolievna[1]

ABSTRACT

Small business has a positive effect on the development of the economy of the whole country, and also helps to solve many socio-economic problems. The article analyzes the structural changes in the dynamics of small business indicators in the regions of Andijan region in 2015-2021, the classification of constituent entities of Andijan region according to the indicators of small business development in 2015 and 2021. The conducted research made it possible to evaluate the changes in small business development indicators in Andijan regions.

Key words: *small business, small business entities, investments in fixed capital, turnover of small business, Ryabtsev index, Salai index, Gatev index.*

1. The internal structure of the main indicators of the activities of small businesses in the Andijan region is very unstable. Since it tends to change over time, there is a need to study structural changes.

2. The results of the study can serve as the basis for the development of public policy in the field of small business support in the region in order to reduce the differences in the main indicators of the development of this sector of the economy of the Andijan region.

INTRODUCTION

Socio-economic instability in the development of the country sets the task for the authorities to look for options that will help reduce the impact of negative factors. One of the issues of diversification of the economy is the creation of foundations for the activities of small businesses and the improvement of conditions. In the conditions of the rapid development of Science and technology, the transition to new technologies in advanced industries, small entrepreneurship has found its place. In 2008, the global financial and economic crisis conditions, the coronavirus pandemic and other shocks made their own adjustments to the development of this industry. Of particular importance in this regard is the study of opportunities for the development of this sphere in the regions of our country. The period from 2015 to 2021 was selected for the study. Small business developed along with the world economy, in connection with this situation, scientists described this area differently depending on the characteristics of a particular period. The study of the interpretation of small business from the point of view of the history of economic teachings A.Smith, M.Weber, R.Cantillon, P.Drucker, A.In the work of Marshall and other foreign scientists, it was Kelty [1]. Researchers from the CIS countries also paid attention to some features of small business. In Particular, P.A.Babashkina [2], A.N.[3], In the works of Sorokin [4] and others, small business is considered from the point of view of the activities of an economic entity. E.A. D.E.Dolgix, T.A.Pershinas [5], L.V.Zalatov [6], L.V.Portnova, F.V.Ulankav, A.V. Guznesavas [7], M.M.Makhmudova [8], M.X.AbidavD.Yu.Godyasky [9], S.V.Terebova [10], M. E. Jurakhanov [13], and a number of other researchers ' works examined trends and prospects for the development of small business. L.P.Bakumenko and O.A.Petukhavas [11] A. Salai, K. Gatev, V. M. They analyzed the quantitative criteria for measuring the differences in the structure of investments in their fixed capital using the Ryabtsev index. Also in their works, attempts were made to

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create a system of indicators characterizing the sphere of small business. The Universal, regional and sectoral problems of the development of small business and private entrepreneurship in our country.S.Gulomov, M.Sharifkhojaev, Immortal,A.Abdullaev, M.Qasimova, T.Do'stjanov, Z.Khudoyberdiev, G.Widely covered in the scientific work of Muftaydinov and other scientists [12].

Insufficient attention is paid to the issues of studying the territorial capabilities of the development of small businesses using the methods of economic and statistical analysis. This problem determined the purpose of the work, that is, the development of small business using economic and statistical methods provides an opportunity to analyze the stratification of the territories of the Andijan region.

Methodology. The article used indicators of the development of small business activities, indexes Ryabtsev, Salai, Gatev.

In practice, along with methods for assessing structural changes, integral indicators and indexes of structural shifts are widely used. The most common of them (Table 1):

K. Gatev index;

A.Salai index;

V.M.Ryabtsev index.

1-Table Indices for assessing changes in the structure of the components of the studied object

Name	Calculation formula	Feature
K. Гатев	$I_G = \sqrt{\frac{\sum_{i=1}^{n}(V_i(t_1) - V_i(t_0))^2}{\sum_{i=1}^{n}(V_i(t_1)^2 + V_i(t_0)^2)}}$	The square separates structures with an equal sum of deviations. Applied to measure structural changes.
A.Салаи	$I_S = \sqrt{\frac{(\sum_{i=1}^{n}(\frac{V_i(t_1) - V_i(t_0)}{V_i(t_1) + V_i(t_0)})^2}{n}}$	First introduced in the study of differences in the structure of the use of the time budget in different groups of the population.
В.М.Рябцев	$I_R = \sqrt{\frac{\sum_{i=1}^{n}(V_i(t_1) - V_i(t_0))^2}{\sum_{i=1}^{n}(V_i(t_1) + V_i(t_0))^2}}$	Slightly different from the Gatev index, it accepts smaller values compared to it

In our opinion, A.Salai, K.Gatev The integral coefficients of structural differences formulated by V.M.Ryabtsev have better analytical properties than the linear and quadratic coefficients of absolute structure shifts, as well as the quadratic coefficients of relative structure shifts, since their values will be from 0 to 1. The closer to 0, the smaller the differences between the features; the closer to 1, the more noticeable the differences between the features in the structure.

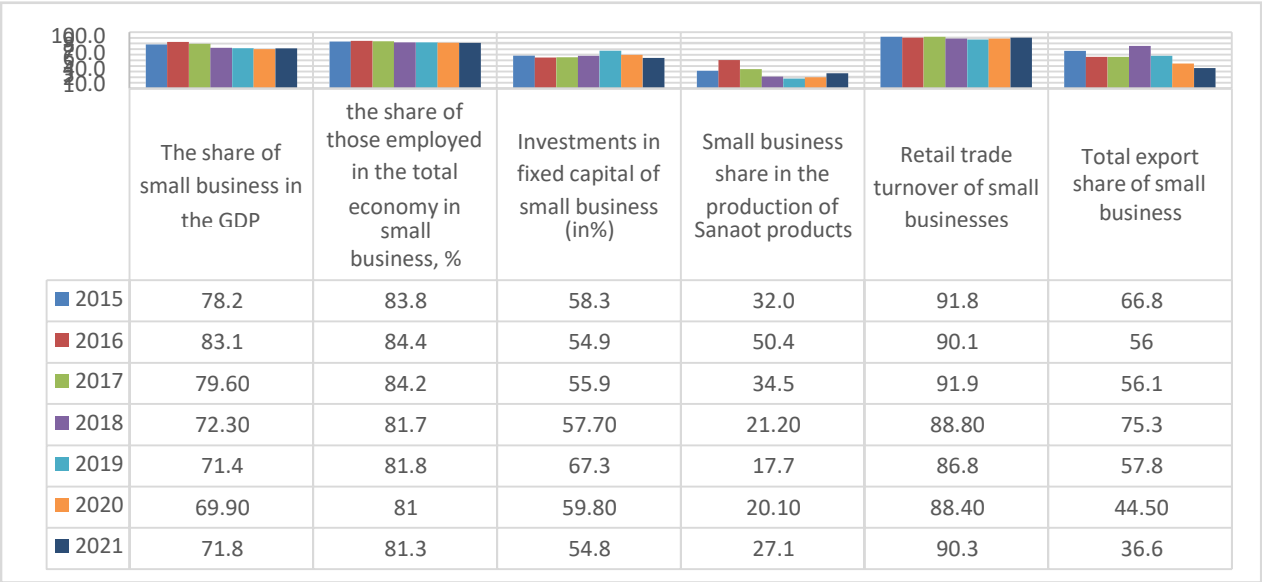
Table 2 The importance of structural differences according to the Ryabtsev index evaluation scale

Index value range	Features of the measure of structural differences
0,000 – 0,030	The structural difference is practically unchanged
0,031 – 0,070	Very low level of structural difference
0,071 – 0,150	Low level of structural difference
0,151 – 0,3	Significant degree of structural difference
0,301 – 0,5	Significant significant level of structural difference
0,501 – 0,7	A very important level of structural differences
0,701 – 0,9	Structures of the opposite type
0,901 and higher	Completeoppositionofstructures

In this article, along with general scientific methods - methods of analysis and systematization, methods for studying structural changes, cluster analysis, as well as methods for presenting information through tables were used. Empirical basis for analysis stat.uz, and.the official data of the stat site were used.

RESULTS AND DISCUSSIONS

- The internal structure of the main indicators of the activities of small business entities of the Republic of Uzbekistan is very unstable. Since it tends to change over time, there is a need to study structural changes. The study of structural changes in 2015-2021 differentiation of the regions of the Andijan region was carried out according to the following indicators:
- Small business share in the GDP, %;
- The share of those employed in the total economy in small business, %;
- Investments in the fixed capital of small businesses (in%);
- Small business share in the production of sanaot products, %;
- Retail trade turnover of small businesses;
- Total export share of small business,%.



	The share of small business in the GDP	the share of those employed in the total economy in small business, %	Investments in fixed capital of small business (in%)	Small business share in the production of Sanaot products	Retail trade turnover of small businesses	Total export share of small business
2015	78.2	83.8	58.3	32.0	91.8	66.8
2016	83.1	84.4	54.9	50.4	90.1	56
2017	79.60	84.2	55.9	34.5	91.9	56.1
2018	72.30	81.7	57.70	21.20	88.80	75.3
2019	71.4	81.8	67.3	17.7	86.8	57.8
2020	69.90	81	59.80	20.10	88.40	44.50
2021	71.8	81.3	54.8	27.1	90.3	36.6

1-fig. 2015-2021 dynamics of key indicators of small business and private entrepreneurship in the years

1-figas you can see, the share of small businesses in the GDP was the highest in 2016 (83.1%). In 2020, however, it decreased relatively (69.9 %). The reason for the decline in the share of small businesses in the GDP in 2020 was some restrictions in the conditions of the pandemic. We can see that the share of those employed in the total economy in small business will decrease compared to 2015. The small business share in industrial production was 32% in 2015 due to the high percentage of industrial products produced by large enterprises in the region compared to industrial products produced by small businesses, which was 27.1% in 2021.

The most common generalizing indicators of structural changes to characterize the importance of structural changes in the indicators of the development of small businesses in the Andijan region - K. Gatev's integral coefficient, Salai's index of structural shifts, and M.The Ryabtsev criterion was used, the calculation of their values was carried out (Table 1).

Table 3 Indicators of structural changes in the distribution of indicators for the development of small businesses, %

Indicators	I_G	I_S	I_R
The share of small business in the GDP	0,04	0,02	0,03
The share of those employed in the total economy in small business	0,01	0,01	0,01
Share of investments in fixed capital of small business	0,07	0,04	0,05
Small business share in the production of Sanaot products	0,27	0,16	0,19
Share of retail trade turnover of small	0,02	0,01	0,01

businesses			
Total export share of small business	0,16	0,1	0,11

Based on the results of the analysis of the structure and structural changes in the dynamics of indicators of small business, there are structural shifts in all the indicators under analysis, which during the research period changed on average to 1-27% in the region.

Thus, when we calculated the Gatev coefficient for the analyzed indicators in the Andijan region, the largest percentage of changes was due to the distribution in the production of sanaot products by the share of small businesses and the total export share of small businesses, which amounted to 27% and 16%, respectively. The lowest value corresponded to the share of those employed in the total economy in small business.

Salai index values indicate that the share of small businesses in the production of sanaot products and the share of small businesses in total exports in the Andijan region will vary by 16% and 10%, respectively, compared to 2015 in 2021. The share of small business in the GDP, the share of employed in the total economy in small business, the share of investments in the fixed capital of small business, the value of the Salai index for the shares of retail trade turnover of small businesses is small, compared to 2015 in 2021, respectively 2%, 1%, 4%, 1% ga Far done.

V.The results of the calculations of the Ryabtsev Index make it possible to note that in the production of sanaot products can be recognized as shifts in the distribution of the territories of the Andijan region by the share of small businesses, while other indicators have low differences (Table 4).

Table-4 Structural and dynamic analysis of the distribution of indicators for the development of small businesses

Indicators	The value of the V.Ryabtsev index	Features of the degree of differences in structures
The share of small business in the GDP	0,03	The structural difference is practically unchanged
The share of those employed in the total economy in small business	0,01	The structural difference is practically unchanged
Share of investments in fixed capital of small business	0,05	Very low level of structural difference
Small business share in the production of Sanaot products	0,19	Significant degree of structural difference
Share of retail trade turnover of small businesses	0,01	The structural difference is practically unchanged
Share of small business in total exports	0,11	Low level of structural difference

As can be seen from Table 4, a significant level of structural difference in the Andijan region is the share of small business in the production of industrial products, and we can see that the share of small business in the production of industrial products has changed by 19% compared to 2015 of 2021. The low level of structural difference corresponded to the share of small businesses in total exports, and the share of small businesses in total exports changed by 11% compared to 2015. The share of small business in the GDP, the share of employed in the total economy in small business, the share of investments in the fixed capital of small business, and the share of retail turnover of small businesses have very low levels of differences.

CONCLUSION

According to the results of the study, we can conclude that the distribution of the territories of the Andijan region in terms of small business development indicators in 2021 compared to 2015 is characterized by its unevenness. Calculation of coefficients of structural changes in the distribution of the regions of the Andijan region by indicators of Small Business Development made it possible to identify significant differences in the structures formed by the characteristics of the share of small business in the production of industrial products and the share of small business in total exports.

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EFFECTIVE DEVELOPMENT OF THE INDUSTRIAL SECTOR OF THE REPUBLIC OF UZBEKISTAN IN THE CONDITIONS OF A NEW ECONOMIC WAY

Azamat Abadovich Matchanov[1]

ABSTRACT

This article is devoted to the study of trends in the formation and identification of problems of the development of the industrial sector of the Republic of Uzbekistan in the conditions of a new technological revolution. The paper presents a generalization of the theoretical foundations of the essence of innovative transformations in the economy in the conditions of the fourth industrial revolution; the state and trends of scientific and technological development of the industrial sector of the Republic of Uzbekistan are analyzed, the degree of its readiness for the transition to the digital economy is assessed, the functional possibilities of improving the quality characteristics of the industrial sector of the Republic of Uzbekistan are identified and the directions of its state regulation in the conditions of digital transformation are determined.

Keywords: *innovative economy, new technological revolution, digital economy, development of the industrial sector.*

Introduction

In recent decades, the world is rapidly moving towards a new type of economy, the main tool for the formation of which is digital technology. At the present stage of development, it is digital technologies that are the main factor in technological change, the most important condition for the competitiveness of both individual enterprises and countries. They lead to the restructuring of all economic and production processes, a significant increase in productivity, improving the quality and reducing the cost of goods and services.

Bringing the collection, aggregation and exchange of accumulated information to a fundamentally different qualitative level with a minimal role and degree of human participation, new technologies become drivers of the fourth industrial revolution, which is characterized by the merging of technologies and the blurring of boundaries between the digital and industrial spheres. Many leaders of developed countries today believe that it is necessary to accelerate the transition to a digital economy, which will achieve inclusive sustainable development and prosperity. As one of the co-authors of the 2018 Global Competitiveness Report S. Zahidi notes, ¯All countries can become more prosperous‖ using the achievements of the Fourth Industrial Revolution[3]. By the Decree of the President of the Republic of Uzbekistan dated October 5, 2020, the Strategy ¯Digital Uzbekistan – 2030‖ was approved, which provides for the implementation of more than 280 projects for the digital transformation of the regions and sectors of the country‘s economy in the next two years. In accordance with the document, a wide range of long-term issues related to the introduction of digital technologies in the field of telecommunications, public services, the real sector of the economy, healthcare, the state cadastre, etc. are being resolved. The development of information and communication technologies in the country keeps pace with the interest of business in the introduction of

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digital technologies in various production processes to increase labor productivity, reduce costs, increase production and profits.

Literature review

Note that the formation of world industrialization (the middle of the 18th – 19th centuries) was accompanied by a rapid growth of productive forces [4]. Translation of the economy into industrial production was facilitated by the first industrial revolution, which ensured the transition from manual to machine labor. It is customary to associate it with the invention of the steam engine in the 17th century. The second industrial revolution (XX century) was associated with electrification and allowed organizing the assembly line production of first cars, and then most other goods. At the beginning of the XXI century. economic progress was ensured by the achievements of the third industrial revolution, which is based on the transition to renewable energy sources, the introduction of computers inproduction, production automation.

According to the German economist K. Schwab, the fundamental difference of the fourth industrial revolution is the synergistic effect that arises from the merging of different technologies: computer, information, nanotechnologies, biotechnologies, etc. Its other feature may be the blurring of boundaries between the physical, digital (information) and biological (including human) worlds. The main features of the fourth industrial revolution are the ―ubiquitous‖ mobile Internet, miniature production devices, artificial intelligence and learning machines [5].

In the context of the fourth industrial revolution, industrialized countries are setting themselves really large-scale structural tasks for reindustrialization, considering digital technologies as an accelerator of global industrial productivity growth. Thus, by 2025, the share of industry in the GDP of the OECD countries should be 20% of GDP against the current 15% in the EU states and 12% in the United States. The status of the domestic high-tech sector of the economy is defined as catching up. This is confirmed by the opinion of the overwhelming majority of scientists, experts and politicians, who point to the low competitiveness of the domestic industry, due to technological backwardness [2]. In this regard, scientific understanding of the organizational and methodological foundations for the introduction of technologies of the fourth industrial revolution will contribute to the successful implementation of the digital economy, focused on increasing the efficiency of industrial production.

Research methodology

The methodological basis of the study is a comprehensive analysis of the development of the industrial complex of the Republic of Uzbekistan in the context of a new industrial revolution and the development of an economy focused on the introduction of digital and information technologies into production, which are the technological basis for the economic growth of the Republic of Uzbekistan. In order to identify the effect of the influence of digital technologies on the industrial sector, to determine the directions of its transformation, an empirical base has been formed, covering the indicators of innovative development of the economy, as well as indicators of the development of the real sector of the economy. The information base of the study was the research of domestic and foreign economists in the field of scientific, technological and innovative development.

Discussion

The current changes in the world have a significant impact on the development of the Republic of Uzbekistan. In addition to such ―big challenges‖ as the depletion of traditional resources and the decrease in

the efficiency of their use, lagging behind industrialized countries in terms of life expectancy, in the first half of the 21st century, Uzbekistan faces specific challenges, one of which is participation in a new technological revolution.

One of the possible ways to solve the identified problems, as well as a response to the challenges that the domestic economy is currently facing, is the inclusion of Uzbekistan in a new technological revolution. However, it should be understood that the domestic situation with the deployment of large-scale technological and industrial modernization differs from similar processes in countries that are already implementing similar programs.

At this stage of industrial development, electronics, computer, information and Internet technologies cover the entire economy, providing horizontal and vertical integration of all business processes. The introduction of networking between machines, buildings and information systems leads to a change in the ¯paradigm‖ of technological development and the formation of a new digital economy[6, 7].

As the study showed, today in the world there is no common understanding of such a phenomenon as the ¯digital economy‖. Many scientists agree that the very concept of ¯digital economy‖ arose in the 90sof XX century. The ideology of the concept under study was outlined in 1995 by Nicholas Negroponte. An American scientist in the field of computer science outlined the digital economy in the form of the following metaphor: ¯the transition from the movement of atoms to the movements of bits‖.

A number of researchers understand the digital economy as an area of the economy in which the processes of production, distribution, exchange and consumption operate on the basis of digital technologies. Others – cover this definition with a philosophical and conceptual basis, meaning by the digital economy a new socio-cultural-economic reality, a new civilization based on the use of a binary code and obtaining a new digital product and capital as a result, and in the future – new relationships, augmented reality(change in nature and transformation of production relations, change in their subject-object orientation, according to K. Schwab – the transformation of mankind) [5, 8].

The definition of the digital economy is considered in the ¯Digital Uzbekistan-2030‖ Strategy, which means under the digital economy activities where digital data is the key factor [1]. Note that the interpretation of the terms ¯fourth industrial revolution‖ and ¯digital economy‖, the definition of their relationship are ambiguous in the works of foreign and domestic experts. In this article, we will consider the digital economy and its technologies as the basis of the fourth industrial revolution.

As you know, the set of technologies characteristic of a certain level of production development is a technological mode. This term was introduced into science by foreign economists D.S. Lvov and S.Yu. Glazyev. According to S.Yu. Glazyev, in connection with scientific and technological progress, there is a transition from lower ways to higher, progressive ones [9]. Each such mode covers a closed reproduction cycle from the extraction of natural resources and professional training of personnel to non-productive consumption. This thesis is supported by C. Perez, who argues that a new techno-economic paradigm is developing in the process of diffusion of new technologies, which leads to their multiplier impact on the economy, also changing socio-institutional structures[10].

Thus, a review of research in this area allows us to conclude that a change in the paradigm of economic development, the transition to a new technological revolution and the formation of a digital economy are becoming extremely relevant for Uzbekistan.

A feature of modern world economic development is the construction by leading countries of an economy based primarily on the generation, dissemination and use of knowledge. According to expert estimates, in recent years, the vast majority of the growth in gross domestic product (up to 90%) in developed countries has been obtained through new science-intensive products, which are the end result of the commercialization of research and development. For Uzbekistan, the transition from an export-raw material to an innovative type of development is also the main goal of state policy in the field of science and technology development, a necessary prerequisite for modernizing the economy and, ultimately, ensuring the competitiveness of domestic production. Therefore, it is the development of science and the innovation sphere, investment in the intellectual capital are becoming important components of success in achieving sustainable economic growth of the country. The task of innovative development of the economy of Uzbekistan seems to be very large-scale, due to its significant technological lag behind developed countries. So, according to the integral indicator, Uzbekistan became 86th, having risen by seven lines in a year. The previous ranking, including Uzbekistan, was published in 2015 – then the country took 122nd place. The Ministry of Innovative Development reports that one of the goals of the Strategy for Innovative Development of Uzbekistan is the country's entry into the top 50 in the Global Innovation Index by 2030 [21].

Currently, in the developed countries of the world, active processes of ¯new industrialization‖ are observed, involving the revival and further development of the real sector of the economy on the most advanced technological basis.

The development of the domestic economy is carried out according to a similar scenario, typical for most countries of the world. One of the indicators that demonstrate the degree of digitalization of socio-economic processes in the country is the share of the digital economy in the gross domestic product (GDP). The share of the digital economy in Uzbekistan‘s GDP in 2019 was 2.2% against 10.9 in the United States, 10% in China, 5.6% in India, and 3% in the total GDP of the EAEU [18]. On April 28, 2020, the President of Uzbekistan signed the Decree ¯On measures for the widespread introduction of the digital economy and e-government‖. Thus, the share of the digital economy in the GDP of Uzbekistan is planned to be doubled by 2023 [18]. However, the growth of this indicator is associated with the interest of large domestic companies in new information and digital technologies. An analysis of Internet resources and official websites of enterprises operating in various sectors of the domestic economy showed that large businesses are mainly focused on production management information systems (SAP-, EAM-, ERP-systems), the transformation of a business model based on digital technologies.

In developed economies, the main motive for the deployment of new industrial and technological policies aimed at stimulating the transition to the fourth industrial revolution was the need to overcome the slowdown in labor productivity growth. Thus, the fatherland faces a difficult task: it is necessary to ensure a steady increase in the level of labor productivity and, almost simultaneously, reach the maximum rate of its growth in order to fully realize the potential of the national economy.

One of the main conditions for increasing productivity is the technological modernization of production, which includes not only the improvement of existing equipment, but, above all, the commissioning of new equipment, the introduction of integrated automation, etc.

Statistics show that the share of the domestic industrial sector has grown significantly in recent years, reaching 28% of the country‘s GDP and providing jobs for 23.5% of the able-bodied population. The growth in the share of industry in the economy was the result of technical modernization and an increase in production capacity. So if in 2016 the share of industry was 19.5%, then in 2021 it was already 28%. Annual

growth for 2021 was a record, reaching 9.5%. This brought the industry to the level it had before the pandemic [19].

Uzbekistan has risen in the Industrial Competitiveness Index. This index allows you to evaluate the country's industry, the degree of its equipment with high technologies and its influence on the world market. In the Industrial Competitiveness Index for 2021 (estimated for 2019), Uzbekistan ranked 94th. According to the rating website, Uzbekistan received a score of 0.017, which is one thousandth more than in 2018. The country remained in the quintile of countries with a medium-low level of industrial development, but managed to improve the indicator by one position. It is noted that Uzbekistan took 11th place among 22 countries of Central and Western Asia, rising two lines up, as well as 5th place among the CIS countries [19].

№	The name of the country	2021 y.		2020 y.		Changes
		position	score	position	score	position
1	Russia	35	0,096	34	0,097	–1
2	Belarus	46	0,064	47	0,063	+1
3	Kazakhstan	65	0,038	65	0,035	–
4	Ukraine	69	0,035	69	0,035	–
5	Uzbekistan	94	0,017	95	0,016	+1
6	Armenia	99	0,015	103	0,012	+4
7	Moldova	108	0,011	111	0,01	+3
8	Azerbaijan	118	0,009	121	0,008	+3
9	Kyrgyzstan	123	0,008	124	0,008	–1
10	Tajikistan	129	0,006	128	0,005	–1

In particular, the position of Uzbekistan has significantly improved in terms of the share of industrial value added in GDP (from 0.372 to 0.439, plus 4 positions) and industrial exports per capita (by 3 positions). The indicator of the share of high-tech production in industrial value added also increased (from 0.192 in 2018 to 0.271). At the same time, positions on the share of industrial goods in exports (down 6 positions from 0.276 to 0.22) and on the share of high technologies in industrial exports (from 0.367 to 0.35, down 3 positions) decreased. Germany (0.460), China (0.386), USA (0.353), Japan (0.352) and South Korea (0.347) took the top five positions in the ranking [20].

Compared to other developing countries, the innovative activity of Uzbek enterprises is relatively low. For example, in developing countries with lower middle incomes, 36% of firms introduced innovative products, 35% – process innovations. In Eastern Europe and Central Asia, these figures were 29% and 20%, respectively. In addition, the gap between Uzbekistan and the leading countries of the new technological revolution in terms of the number of registered patents in such areas as robotics, new materials, additive technologies, the industrial Internet of Things, etc. remains significant.

Thus, among the main problems, one can single out a low level of activity industrial companies in the implementation of innovative activities, a reduction in the level of diversification of products manufactured in the country, Uzbekistan‘s lagging behind the leading countries in terms of the development of advanced technologies, and low rates of digitalization and platformization of the economy.

In the face of increasing competition, the issue of increasing economic power by activating the technological factor is becoming more and more acute. The consequence of the delay in the transition of the economy to a new development model will be the consolidation of the country‘s further lag in terms of labor productivity and, thus, competitiveness. There is no doubt that Uzbekistan should also develop within the framework of the global trend – new industrialization.

The current situation requires increased investments in those activities that determine the transition to a new technological order. Ultimately, it is investments that should become the source of a new level of economic development. Uzbekistan is also lagging behind in mastering the achievements of modern scientific and technological progress. This conclusion allows us to draw a low share of the country in the world high-tech markets, a high degree of dependence of industrial production on imports, reaching in certain sectors of the economy. The backward technological base does not make it possible to increase labor productivity and reach high rates of industrial growth, to successfully compete in world markets.

From this layout, it is extremely clear that the issue of transferring industry to a digital technological platform is becoming the most important for the domestic economy.

Conclusion

The development of the domestic industrial complex requires in the near future the solution of issues related to productive inclusion in a new technological revolution in order to implement a structural maneuver in the economy, radical technological modernization of traditional sectors of the economy, support for suppliers of technological solutions for the industrial sector of the economy and facilitating the transition to a new business organization, processes in industrial enterprises. The implementation of such a course coincides with the general global trend – new industrialization, which determines the main content of the industrial policy of the developed countries of the world. Given the current structure of the domestic economy, the current level of development of the national innovation system, we can conclude that the country‘s transition to a qualitatively new economic, industrial and technological paradigm will depend on the coordinated implementation of measures in a number of areas. These include the technological modernization of traditional sectors of the economy, the development of new high-tech sectors and ensuring the country‘s entry into new markets, the restart of the research and development management system, the reorganization of development institutions, as well as the end-to-end ―digitalization‖ of the real economy.

Recommendations

Thus, despite the high potential for technological transition in various sectors of the economy, especially in terms of the digitalization of economic and social processes, the negative dynamics demonstrated by the domestic economy does not allow it to effectively join the global trends set by the new technological revolution.

The development of domestic production in the context of the transition to a digital economy will require in the near future the solution of issues related to the productive inclusion in a new technological revolution in order to implement a structural maneuver in the economy, radical technological modernization of

traditional sectors of the economy, support for suppliers of technological solutions for the industrial sector of the economy, training for a qualitatively new industry and facilitating the transition to a new organization of business processes in industrial enterprises. The implementation of such a course coincides with the general global trend – new industrialization, which determines the main content of the industrial policy of the developed countries of the world. Given the current structure of the domestic economy, the current level of development of the national innovation system, we can conclude that the country's transition to a qualitatively new economic industrial and technological paradigm will depend on the coordinated implementation of measures in a number of areas [12].

Progress in solving this issue is impossible without the development and implementation of a state industrial policy adequate to the tasks set. It should ensure the formation of harmonious proportions in the economy through the development and implementation of a set of state regulation measures at the macro, mezo and micro levels. These measures should be aimed at structural restructuring and large-scale technological modernization of the economy, presented in the form of phased tasks formulated on the basis of global trends and internal economic features.

The most important task of the state industrial policy is to determinepriorities in the formation of a promising industrial structure of the national economic complex, capable of generating new sources of growth. The choice of structural priorities is important, as it will allow forming the basic requirements for the quantity and quality of resources necessary for their development – labor, technological, investment, as well as requirements for the institutional environment.

The choice of structural priorities should be preceded by a thorough inventory of the industrial complex, and a number of factors should be taken into account: promising commodity markets for national producers, potential, growth in the competitiveness of various sectors of industrial production, the level of provision with strategic goods, the social significance of certain industrial sectors, the available scientific and technological backlogs, etc.

In this context, within the framework of industrial policy, two groups of structural priorities should be formed. The first group should be focused on the advanced development of industrial potential, which ensures high competitiveness in fundamentally new technological areas. And this requires close attention to the new technologies of Industry 4.0, which open up new opportunities for the development of the industrial sector and form new promising markets.

The second group of priorities should ensure large-scale technological modernization of the most important sectors of the economy – their re-equipment and dynamic development, overcoming the technological gap and import dependence on foreign equipment manufacturers, including by building our own reproduction chains.

Of particular relevance is the linkage of the structural priorities of industrial policy with the main directions of scientific and technological policy, for the implementation of which it is necessary to form a technological vector for the development of the domestic economy, based on the vision of the future of the country, its promising sectoral structure, the technological state of the main sectors of the economy, and the tasks of socio-economic development. The formation of such a vector should be based on a qualitative forecast of scientific and technological development for the long term and disclosed within the framework of key tasks.

Strategies for scientific and technological development, followed by the development of relevant specific programs and projects. The scientific and technological priorities formulated in the Strategy should determine the contours of directions for structural and technological modernization, the practical implementation of which will make it possible to form the core of industrial production based on new promising technologies.

By Decree of the President of the Republic of Uzbekistan dated 05.10.2020 No. UP-6079, the Strategy ¯Digital Uzbekistan-2030‖ was approved, within which the main emphasis was placed on solving the problems of developing information technologies and creating digital platforms. At the same time, the problems of ¯digitalization of industries‖ and the introduction of advanced production technologies have practically remained out of sight of developers.

Thus, within the framework of Uzbekistan's transition to a new development model, the formation of its strategic technological vector should become an integral part of the domestic industrial policy. In fact, the principle of unity of scientific, technological, innovation and industrial policy should be adopted, on the basis of which developed countries achieve success in solving the problems of new industrialization, in increasing the global competitiveness of national economies.

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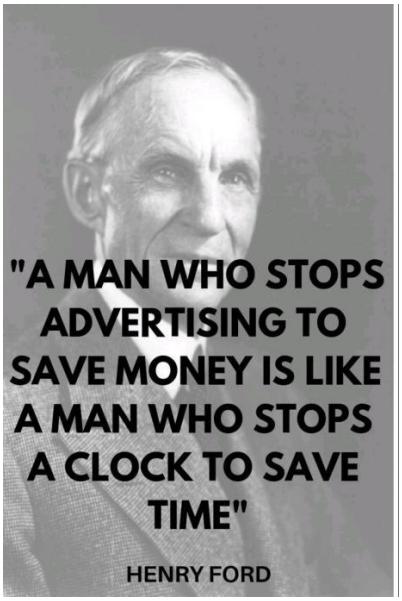

STATUS AND TRENDS IN THE DEVELOPMENT OF INTERNATIONAL AUDITING NETWORKS IN UZBEKISTAN

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ABSTRACT

This article examines the current state, future directions, and interactions between worldwide audit networks and Uzbek audit services.

Key words: *Audit services, audit organizations, international audit networks, international audit and accounting associations, auditor, investments, investment attractiveness, volume indicators, quality indicators, GDP, number of audit services.*

Introduction

We experience globalization, integration, aid from others, and contact in the modern world. Such circumstances enable comprehensive development in terms of economic and individualized indicators, both at the macro level of the state economy and at the micro level as persons and legal entities.

Based on the aforementioned circumstances, one of the variables influencing the growth of Uzbekistan's economy is the draw of international investment. 245.0 trillion will be invested in fixed capital for the Republic of Uzbekistan's economic and social growth in 2021. They were 23.1 billion US dollars in value, and the growth rate through 2020 is predicted to be 105.2%.[2]

We must make our country more attractive to investors if we want to see more investments. Transparent, easily understood financial statements for foreign investors that adhere to international financial reporting standards are one of the most crucial elements in luring investments (IFRS). The primary intermediaries for delivering such high-quality information in accordance with IFRS are audit companies that offer expert audit services, such as vetting the accuracy of financial statements prepared in accordance with national accounting standards (NAS), converting them to IFRS, and carrying out an audit in accordance with international auditing standards (ISA). The chance to expand foreign investment in a certain area of the Uzbek economy is offered by all of these services.

Can foreign investors trust Uzbekistan's national auditing organizations? What are the status and future prospects of communication with global audit networks?

Literature review

Numerous foreign and local scientists have researched the requirement and relevance of the growth of audit services as an entrepreneurial activity for conducting an independent examination, mandatory and initiative verification, and providing other professional services to business organizations. In particular, G.I. Zvorono is the author of the essay "Factors influencing the formation and development of the audit services market: the legal side," which identifies and analyzes the factors affecting audit activities and determines their significance for the market's growth.[3]In the writings of Arabyan K.K.[1], the issues surrounding the

[1] Samarkand Institute of Economics and Service,Uzbekistan

[2]www.stat.uz

[3]Ж.Вопросыэнономики и право, 2012, № 43, стр.162-164 Издательство: ООО "Экономические науки" (Москва)

emergence and growth of audit activity in the Russian Federation are examined, the evolution of scientific viewpoints on the function and significance of audit in the system of economic relations is presented, the main issues with audit as a separate form of control are analyzed, and a new audit model is suggested. The theoretical, organizational, and methodological aspects of auditing were researched by R. Dustmuradov, Kh.N. Musaev, M.M. Tulakhodzhaeva, K.B. Urazov, and other scientists[2] in our country. However, neither the entrepreneurial development of audit services nor the determinants of this section of the service sector in our nation have been identified.

Methodology.

As methodological pillars, the essay relied on the laws and executive orders of the President of the Republic of Uzbekistan as well as official documents from the Ministry of Finance. It employs system and factor analysis techniques, which allowed us to shed light on the organization and causal connections between the indicators defining the macroeconomic growth of audit services.

Result and discussion.

Auditing services have emerged as one of the most prestigious business categories in our republic during the years since we gained independence. Over time, a comprehensive market system for audit services has developed in the republic, one that includes state organizations in charge of overseeing and regulating this market, direct executors represented by certified auditors and national audit companies, as well as clients represented by a range of commercial entities.

Table 1 : Information on indicators characterizing the development of audit services in the Republic of Uzbekistan for 2017-2021[3]

Years	Volume of GDP from audit services, billion soums	Number of audit organizations, units	Number of certified auditors, persons	Number of audit services performed, units	Average volume of audit services per one audit organization, million soums	Average volume of audit services per one auditor, million soums
2017	65,7	102	649	8880	644, 1	101.2
2018	139,2	98	579	10371	1 420, 4	240.4
2019	130,1	96	558	11476	1 355, 2	233.2
2020	206,4	99	572	10196	2 084,8	360,9
2021	307,7	96	651	7186	3 205,2	472,7

As shown by the information in Table 1, the republic's GDP has expanded by over 4.7 times in the past five years due to the inclusion of revenue from audit organizations. From 644.1 thousand soums to

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[3] Составлена автором на основе данных Минфина Р.Уз, приведенных в wwwmf.uz

3,205.2 thousand soums, or nearly 5 times, the average value of the volume of audit services related to one audit company has grown over time. Average revenue per auditor increased by roughly 4.7 times, from 101.2 million soums to 472.7 million soums.The quantity of audit services offered tended to rise between 2017 and 2019. (from 8880 units to 11476 units). The number of businesses that received audit services declined in 2020 and 2021 compared to 2019, namely by 1280 (10196-11476) units in 2020 and 4290 (7186-11476) units in 2021. The number of certified auditors has decreased by 77 units, while the number of audit organizations has decreased by 6. The number of certified auditors did not reach 2017 levels until the end of 2021.

The participation and engagement of national audit organizations in international audit networks, as well as their membership in international audit and accounting associations, is the most crucial element in the supply of high-quality professional audit services.

Table 2 : Information on the participation of audit organizations in international networks for 2017-2021[1]

Denomination	Years				
	2017	2018	2019	2020	2021
Number of audit organizations, units	102	98	96	99	96
Number of certified auditors, persons	649	579	558	572	651
Number of audit organizations included in international networks, units	22	20	21	23	26
Number of auditors working in audit organizations that are members of international networks,	167	150	143	127	132
The share of audit organizations included in international networks in the total number of audit organizations, %	21,6	21,4	21,8	23,2	27,1
The share of auditors working in audit organizations that are members of international networks, in the total number auditors, %	25,7	25,9	25,6	22,3	20,3

Table 2 shows that over the past five years, the number of audit organizations included in international networks increased by 4 units, reaching a total of 26 units. The proportion of audit organizations included in international networks to the total number of audit organizations also tends to increase, with a value of 26%. This indicator grew by 5.5% between 2017 and 2021 and represented 27.1% of all audit organizations.The number of auditors working in audit organizations included in international networks in 2021 was 132, a decrease of 35 from 2017. As a percentage of the total number of auditors, the number of auditors working in audit organizations included in international networks also tends to decline, falling from 20.3% in 2017 to 20.3% in 2021.

Table 3 lists the national audit organizations that are members of international audit networks and associations in the Republic of Uzbekistan as well as the international audit organizations that are active on our territory.

[3] Составлена автором на основе данных Минфина Р.Уз, приведенных в wwwmf.uz

Table 3 : List of audit organizations that are members of the international audit network and international associations, as of 1st of January, 2021[1]

№	Name of the audit organization	Membership in the international audit network	Membershipininternationa lassociations
Internationalauditorganizations			
1	Auditorganization "PraysvoterxausKupers" LLC	PricewaterhouseCoopersInternationallimited 29.08.2002	
2	Audit organization "Deloitte vaTouche" LLC	"Deloitte ToucheTomatsu Limited" Dec.2002	
3	LLC audit organization "ERNST & YOUNG"	EY Global, 2004	
4	Audit organization "KPMG AUDIT" in the form of LLC	KPMG International, 2017	
Domesticauditorganizations			
1	Audit organization LLC "MARIKON AUDIT"	RussellBedford Oct.2009	
2	LLC audit organization GRANT THORNTON	Grant Thornton International 01.01.2011	
3	Audit organization "NAZORAT-AUDIT" in the form of LLC		Integra International Int. Assoc. June 2014
4	LLC audit organization "TSIAR-FINANS"		Geneva Group International LimitedЦюрихавг.2012
5	LLC audit organization "FTF-LEA-AUDIT"		Leading Edge Alliance (USA) Sept. 2013
6	LLC audit organization HLB TASHKENT	HLB InternationalFeb.2012	
7	Audit organization LLC "KRESTON TASHKENT"	KrestonInternational01.09.2011	
8	Audit organization "PKF MAK ALYANS" in the form of LLC	PKF InternationalLimitedJuly 2010	

[1]Составлена автором на основе данных Минфина Р.Уз, приведенных в wwwmf.uz

№	Name of the audit organization	Membership in the international audit network	Membershipininternationa lassociations
9	Audit organization "UHY TASHKENT" in the form of LLC	UHY Internationalin 2012	
10	LLC audit organization "BAKER TILLY TASHKENT"	BakerTillyInternationalNovember 2011	
11	Audit organization "CROWE TAC" in the form of LLC		CroweHorwathInternatoinal
12	Audit organization in the form of TRI-S-AUDIT LLC		BKR International AsiyaPasific Regional Group July 2015
13	LLC audit organization TTT AUDIT	JPA International January 2016	
14	LLC auditing organization "AUDIT-VARN"	FinExpertizaNetwork LLC, 2017	
15	Audit organization "PROKAR EKSPERT AUDIT" in the form of LLC	JPA International, May 2017	
16	Audit organization "SFAI-BUXGALTER-AUDIT TASHKENT" in the form of LLC	Santa Fe Associates ltd, October 2019	
17	Audit organization "MASLAXATAUDIT-M" in the form of LLC	JPA International, October 2019	
18	Audit organization "SATA-AUDIT" in the form of LLC	JPA International, June 2020	
19	Audit organization "AUDIT-KANON" in the form of LLC	HLB InternationalJan. 2018	

Table 3 shows that the "Big Four" worldwide audit organizations—Deloitte, PricewaterhouseCoopers, Ernst & Young, and KPMG—which comprise the largest global network of firms offering audit and consulting services—operate in our country. 19 domestic audit organizations, including Russell Bedford, Grant Thornton International, HLB International, Kreston International, PKF International Limited, UHY International, Baker Tilly International, JPA International, FinExpertizaNetwork LLC, and Santa Fe Associates Ltd., are members of prestigious international audit networks (Integra International, Geneva

Group International Limited, Leading Edge Alliance, Crowe Horwath Internatoinal, BKR International AsiyaPasific Regional Group).

The qualifications of our auditors, which include their education, undergraduate and graduate degrees, participation in various advanced training programs, acquisition of international certificates (CIPA, ACCA, DipIFR, CPA), work experience, and experience, are another of the most crucial factors in providing high-quality professional audit services. These qualifications will be one of the guarantees of professionalism and quality of the services provided for foreign investors and will increase investment attraction.

Table 4 : Information about auditors for 2018-2021[1]

Years	Auditors, total	Ofthem:		
		Having more than 10 years of continuous experience as an auditor	Having an international certificate of accountancy (CIPA, ACCA, DipIFR, CPA)	CAP certificate (1st level) within the international certification CIPA
2018	576	90	36	295
2019	558	106	49	-
2020	572	115	62	-
2021	651	130	68	-

According to Table 4, we can see that the number of auditors with more than ten years of continuous work experience is rising each year; in 2021, there were 130 of them, which is 40 more than there were in 2018. This informs us that the number of auditors with more experience is rising. The similar pattern is also shown in the area of getting foreign accounting credentials; in 2021, 68 out of 651 auditors had such qualifications, an increase of 32 or 88% from 2018.

Conclusion and recommendation

Therefore, we can conclude that trends in contact with global audit networks and the current stage of growth of audit services boost the investment attractiveness of various Uzbek economic sectors. However, development of auditing is moving quite slowly in comparison to other developing nations. The following, in our opinion, should be done in order to expedite the growth of audit activities and raise the level of confidence that foreign investors, large businesses, and small businesses have in professional audit services.:

- By offering numerous tax advantages and preferences, increase the number of active audit organizations (increasing the VAT mark for audit organizations up to 5 billion soums)
- Raise the quota for admission to institutions in this field (bachelor's, master's) and include young people in this area to increase the number of certified auditors.

[1]Составлена автором на основе данных Минфина Р.Уз, приведенных в wwwmf.uz

- Organize various international round tables, conferences, and interaction centers by area with the help of the Ministry of Finance to expand the number of audit organizations that are members of international audit networks and associations (CIS, Europe, Asia, America)
- Increase the number of auditors and accountants who hold one of the following types of international certificates: CIPA, ACCA, DipIFR, CPA, or CIMA. To do this, work with the organizations and centers that issue these certificates to establish Uzbekistan-based branches for conducting training and passing exams.

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METHODS FOR EVALUATION AND CALCULATION OF MACROECONOMIC INDICATORS OF THE DEVELOPMENT OF PROFESSIONAL AUDITING SERVICES

Urazov D.K.[1]

ABSTRACT

This article examines the challenges of categorization and systematization of indicators that describe the macroeconomic level of development of professional audit services, as well as techniques for their assessment and computation.

Keywords: *Professional Audit Services, Macroeconomic Indicators, Volume (Quantitative-Sum) Indicators, Qualitative (Average) Indicators.*

Introduction

Professional audit services are becoming more and more in demand from owners, potential investors, and other market players worldwide. The expansion of the global economy's GDP and labor market is significantly aided by auditing firms that offer this kind of service. Thus, in 2021, only the audit firms Deloitte, PWC, Ernst & Young, and KPMG–known collectively as the "big four"–conducted their professional activities in the fields of audit and consulting in more than 150 countries, had 1,188,995 employees, and generated 167.3 billion US dollars in revenue annually[2]. These auditing firms make an amount of money that, if they were seized instead, would roughly equal the GDP of numerous poor nations. This unquestionably illustrates the necessity, significance, and relevance of assuring the growth and enhancement of the socioeconomic effectiveness of professional audit services around the globe.

In-depth investigation is needed to determine the factors that best describe the macroeconomic growth of this service sector in order to ensure the professional audit services sector's fast development as one of the most promising company kinds.

Literature review

Numerous foreign and domestic scientists have studied the necessity and significance of the development of professional audit services as an entrepreneurial activity for conducting an independent examination, mandatory and initiative verification, and providing various professional services to business entities. In particular, G.I. Zvorono is the author of the essay "Factors influencing the creation and development of the audit services market: the legal side,"[3] which identifies and analyzes the factors impacting audit activities and determines their relevance for the market's growth.In the writings of Arabyan

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[2]ttps://ru.wikipedia.org/wiki/Большая_четвёрка_(аудит)

[3]Ж.Вопросыэнономики и право, 2012, № 43, стр.162-164 Издательство: ООО "Экономические науки" (Москва)

K.K.[1], the issues surrounding the emergence and growth of audit activity in the Russian Federation are examined. Additionally, the scientific community's evolving perspectives on the function and significance of audit in the system of economic relations are presented, and the main issues with audit as a stand-alone form of control are analyzed. The major focus of the research conducted by Uzbek academics R. Dustmuradov, Kh.N. Musaev, M.M. Tulakhodzhaeva, K.B. Urazov, and others[2] was on the theoretical, organizational, and methodological elements of auditing as well as the use of analysis techniques in audits.

At the macroeconomic level, the issues of systematizing indicators describing the growth and socioeconomic effectiveness of audit services as a type of commercial and entrepreneurial activity, as well as a methodology for their evaluation and calculation, which aids in the analysis of these indicators in dynamics and statics, are also important for determining the industry's development reserves. The country's service industry as a whole has not received adequate research.

Methodology

As methodological pillars, the essay relied on the laws and executive orders of the President of the Republic of Uzbekistan as well as official documents from the Ministry of Finance. It employs system and factor analysis techniques, which allowed us to shed light on the organization and causal connections between the indicators defining the macroeconomic growth of professional audit services.

Result and discussion

In terms of goal, indicator composition, calculation, and other factors, the evaluation of the growth of professional audit services at the macro and micro levels of the economy is different from one another. According to the objective, the assessment of the macroeconomic level development of professional audit services in particular should provide insight into the current situation and future prospects of this segment of the service industry throughout the entire nation. To do this, a special set of indicators that capture the growth of professional audit services in terms of quantity and quality must be developed. Various models and algorithms may be used to calculate these quantitative and qualitative indicators of the macroeconomic growth of professional audit services.A comparative analysis of quantitative and qualitative indicators enables you to ascertain the socioeconomic effectiveness and development trend of professional audit services over a number of years, as well as the development trend of this service sector across the entire nation. It also enables you to identify internal reserves, lost profits, and positive and negative factors that are crucial in predicting the future of a particular service sector.

We believe it is wise to separate the primary indicators into volumetric and qualitative indicators in order to better describe the state of development of audit services across the nation. Volume indicators should be viewed as indicators that describe in quantitative and monetary terms the development characteristics of professional audit services. The standard standards for the growth of professional audit

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services in quantitative and total terms are qualitative indicators. Our recommendation is to consider the following as the primary quantitative and volumetric macroeconomic indicators indicating the country's degree of development of professional audit services (see Figures 1 and 2).

The system of macroeconomic volumetric (quantitative-sum) indicators of the development of professional audit services in the country

1. Total revenue from audit services(Σ**Вау)**;
2. Total number of audit firms**(Као)**;
3. Total number of certified auditors**(Кса)**;
4. Total number of entities covered by audit services(Σ**КСоау):**
5. Total number of entities covered by audits (Σ**КСоап);**
6. The total number of entities covered by outsourcing, consulting and other professional audit services(Σ**КСпау)**

Figure 1. The system of macroeconomic volumetric (quantitative-sum) indicators of the development of professional audit services in the country

The system of macroeconomic qualitative (averaged) indicators of the development of professional audit services in the country

1. Average revenue from audit services per audit firm**(СВао)**;
2. Average audit revenue per certified auditor**(СВса):**
3. The average amount of revenue from audit services per one of the economic entities covered by this type of service**(СВхс);**
4. Average cost per audit**(СВап)**
5. The average value of the cost of one outsourcing, consulting and other professional audit services**(СВпау)**
6. Average number of audit services performed per audit firm**(СКао)**
7. Average number of audit services performed per certified auditor **(СКса)**
8. The share of revenue from audit services in the country's GDP**(Дау)**;
9. Share of revenue from audit services in GDP from services**(Дау)**;
10. The share of certain types of audit services in the total revenue from audit services**(Доау)**.

Figure 2. The system of macroeconomic qualitative (averaged) indicators of the development of professional audit services in the country

Numerous techniques may be used to compute both the volumetric (quantitative-total) and qualitative (averaged) indices listed above. Let's look at a few of them down below.

Total revenue from audit services (ΣBay). This indicator is crucial for figuring out the position and significance of professional audit services in the overall economy of the nation. The GDP of the nation includes the entire cost of professional audit services, and this inclusion highlights the significance of professional services in the development of the primary macroeconomic indicator for the nation as a whole. The sum of the revenues from various professional audit services offered by audit firms to their clients is the entire income from professional audit services. The Republic of Uzbekistan's current law on audit activities (Article 31)[1] states that audit companies must offer a variety of professional audit services.Model classification of ethical professional auditing methods, presented by the author, presented in the figure 3.

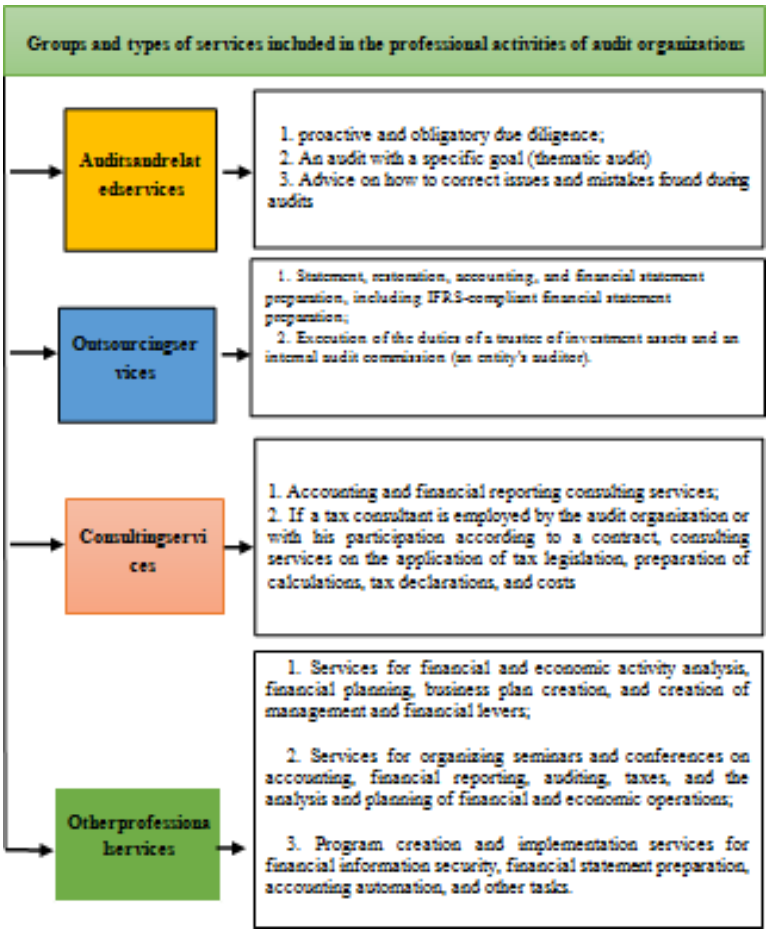

Figure 3. Classification model for groups and types of services included in the professional activities of audit organizations [2]

[1]Law of the Republic of Uzbekistan "About audit activity", 25.02.2021 g. No. ZRU-677

[2]Developedbytheauthor

The total national income from professional audit services (Σ**Вау**), that is, at the macroeconomic level, may be determined using the following model based on this model for the classification and structure of professional audit services offered by audit firms:

ΣВау = ΣВоап + ΣВиап + ΣВтап + ΣВасу+ ΣВку+ ΣВппу (1)

here: Σ**Воап** – revenue from statutory audits by country; Σ**Виап** – volume of revenue from proactive audits by country; Σ**Втап** – revenue from thematic audits by country; Σ**Васу** – volume of revenue from outsourcing services in the country; Σ**Вку** – volume of revenue from consulting services in the country; Σ**Вппу** – revenue from other professional services in the country.

On the basis of the "Information on Auditing Activities," the Ministry of Finance summarizes the overall GDP generated by auditing services in the nation, which includes the aforementioned audit kinds as well as professional auditing services. Domestic audit firms produce this data, which they then yearly submit to the Ministry of Finance no later than the 20th day after the end of the reporting year. The Ministry of Finance compiles the total amount of income submitted to the Republic's State Statistics Committee for inclusion in the GDP for the entire nation, according to this report from auditing firms.

At the macroeconomic level, it is also possible to determine the GDP contribution from audit services utilizingthe following algorithms:

ΣВау=Као*СВао (2)

ВВПау = Кса*СВса (3)

ВВпау = Кау*СВау (4)

here:

Σ**Вау -**total revenue from professional audit services in the country;

Као - total number of audit firms;

Кса- total number of certified auditors;

Кау-total number of audit services rendered;

СВао -average GDP per audit firm;

СВса – average GDP per certified auditor;

СВау -the average value of GDP attributable to one rendered audit service.

Total revenue (Σ**Вау)** acts as a cost (monetary) indicator, and the total number of audit organizations, auditors and audit services rendered (**Као, Кса, Кау)**quantitative indicators. The average amount of revenue attributable to one audit organization **(СВао),**per certified auditor **(СВса),**for one audit service **(СВау),** as well as the average number of audit services per one audit organization**(Скау),** are relative qualities. These qualitative indicators, in turn, can be calculated on the basis of volumetric sum and quantitative indicators based on the following algorithms.

A cost (monetary) indication is the total amount of revenue (Σ**Bay)**, and quantitative indicators are the total number of audit companies, auditors, and audit services provided (**Kao, Kca, Kay)**. Relative qualitative indicators include average revenue per audit firm (**Kao, Kca, Kay)**, average revenue per certified auditor **(CBca)**, average revenue per audit service **(CBay)**, and average number of audit services per audit firm **(Cкay)**. These qualitative indications may then be converted into quantitative indicators using the following methods and volumetric sum:

$$CBao = \Sigma Bay / Kao \quad (5)$$

$$CBca = \Sigma Bay / Kca \quad (6)$$

$$CBay = \Sigma Bay / Kay \quad (7)$$

$$CKay = \Sigma Bay / Kao \quad (8)$$

We shall attempt to assess the volume (quantitative-value) and qualitative indicators of the development of audit services generally in our nation over the last five years using the aforementioned algorithms.

Table 1 Information on volume indicators characterizing the development of audit services in the Republic of Uzbekistan for 2017-2021 [1]

Years	Volume of GDP from audit services (GDPau), billion soums	Number of audit organizations (Kao), units	Number of certified auditors (Ksa), pers.	Number of audit services performed (Kau), units
2017	65,7	102	649	8880
2018	139,2	98	579	10371
2019	130,1	96	558	11476
2020	206,4	99	572	10196
2021	307,7	96	651	7186

According to the information in Table 1, the republic's GDP expanded by about 4.7 times between 2017 and 2021 in terms of the quantity of money incorporated through audit entities. The quantity of audit services offered tends to rise between 2017 and 2019. (from 8880 units to 11476 units). In addition, owing to the pandemic, fewer businesses received audit services in 2020 and 2021 compared to 2019–more specifically, less businesses received audit services in 2020 by 1280 (10196-11476) units and fewer businesses received audit services in 2021 by 4290 (7186-11476) units. The number of qualified auditors has fallen by 77 units, while the number of audit firms has declined by 6. Only by the end of 2021, the number of certified auditors reached the level of 2017

[1]Compiled by the author on the basis of data from the Ministry of Finance R.Uz, given in wwwmf.uz

Indicators of the quality (averaged) kind are crucial for gauging the advancement of audit services. We determine the average indications of the growth of audit services in our nation over the previous five years using the aforementioned methods (see Table 2).

Table 2 Calculation of qualitative (averaged) indicators characterizing the development of audit services in the Republic of Uzbekistan for 2017-2021[1]

Indicators	Years				
	2017	2018	2019	2020	2021
1. Average value of GDP per one audit organization (UAO), million soums	644,1	1420,4	1355,2	2084,8	3205,2
2. Average GDP per auditor (Avsa), million soums	101,2	240,4	233,2	360,9	472,7
3.Average value of GDP per one audit service (AWA), million soums	7,4	13,4	11,3	20,2	42,8
4. Average number of audit services performed per one audit firm (AS), units	87	106	120	103	75

According to the information in Table 2, the average GDP for each audit business, auditor, and audit service has risen steadily between 2017 and 2021. Over time, the average cost of the audit services related to one audit company climbed from 644.1 thousand soums to 3,205.2 thousand soums, or about 5 times. From 101.2 million soums to 472.7 million soums, or approximately 4.7 times, more money was generated on average by one auditor. From 7.4 million soums to 42.8 million soums, or an increase of 5.8 times, on average, the value of GDP per audit service through time.The pandemic period is to blame for the decline in the average number of audit customers served by each audit company over the years, from 87 clients to 75 clients.

As a result, metrics like the average income per audit service and the average number of audit services done by one audit organization were largely responsible for the increase in the country's revenue from professional audit services from 2017 to 2021. The overall income from audit services in 2021 rose compared to 2017 by 254.4 billion soums (35.4 * 7186), specifically because the average amount of revenue, or, in other words, the price for one audit service, grew by 35.4 million soums (42.8-7.4).The overall income from professional audit services grew by 1.9 billion soums in 2019 compared to 2015 (35 * 5.4) because the average number of audit services done per audit organization increased by 35 units (120-85).

It should be noted that the aforementioned algorithms for calculating and analyzing the macroeconomic indicators of the development of audit services also allow for the calculation of missed chances or unrealized

[1]Compiled by the author on the basis of data from the Ministry of Finance R.Uz, given in wwwmf.uz

gains in terms of revenue growth for this kind of service.For instance, the nation lost out on potential to boost income by 19.2 billion soums (6 * 3205.2) as a result of a 6 unit decline in the number of audit organizations in 2021 compared to 2017 (96-102). The gains from the rise in audit service income that were lost as a result of 1694 units doing less audit services were about 73 billion soums (1694 * 42.8).

Conclusions and recommendation.

So, in our opinion, the following are the resources for attaining sustainable and rapid development of audit services in our nation.

First, in the increase in the number of companies offering audit services, as a further decline in the number of audit organizations will make it harder to complete the work tasked with advancing this branch of the service industry.

Second, a growth in the quantity of certified auditors, as a decline in this number results in a drop in the level of supply with an increase in demand for audit services, or, to put it another way, in a reduction in the coverage of business entities with audit services.

Thirdly, in the removal of all discouraging elements mentioned in the President of the Republic of Uzbekistan's Decree No. 3946 of September 19, 2018, "On Measures for the Further Development of Auditing Activities in the Republic of Uzbekistan." It is crucial in particular to:

- Increase the degree of confidence in audit organizations;
- Remove current limits and the practice of choosing audit firms through competitions;
- Develop methods to end unfair competition, particularly price competition, which lowers the quality of audit services;
- Raise the bar for auditors' special training and advanced training significantly so that they get the degree of professional preparation and audit services that are required, particularly those that adhere to international auditing standards, which will boost the audit profession's standing;
- Creation of systems, tools, and techniques for efficient external quality control of audit organizations' activity;
- Aligning national auditing requirements with widely accepted international auditing norms,
- This guarantees that international investors get an awareness of the validity of domestic companies' financial accounts.

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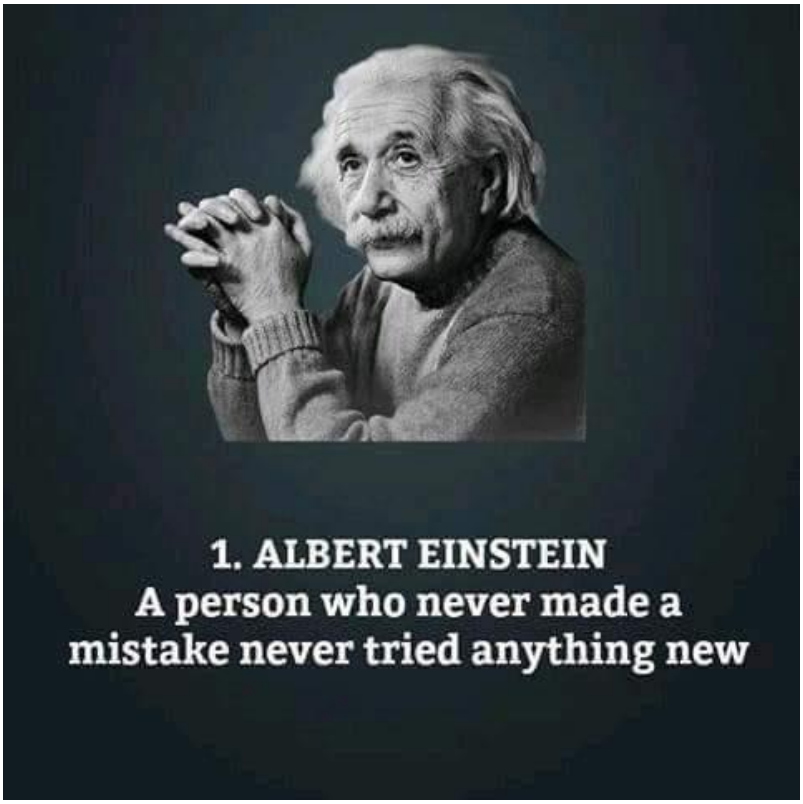

THE ROLE OF EVENT-GASTRONOMIC TOURISM IN INCREASING THE EFFICIENCY OF THE REGIONAL ECONOMY

Akhmedova Yulduz Alisherovna[1], Azizova Nazira Tukhtayevna[2]

ABSTRACT

In all countries, event-gastronomic tourism has a high potential and offers many opportunities for tourists. The organizational and economic mechanism of event-gastronomic tourism plays an important role in the development of the entire tourism industry in the region. This is due to the following: some regional gastronomic phenomena serve as an important and defining reason for travel; the development of event-gastronomic tourism in the region allows to receive certain benefits at the regional level. With sustainable development and the right advertising strategy, the tourism product, including event-gastronomic events, will undoubtedly take its place as a domestic tourism product. Event and gastronomic tourism in many countries has high potential and gives a lot of possibilities for tourists.

Key words: *event tourism, event tourism, region, event-gastronomic tourism, regional economy, event.*

Introduction

The organizational and economic mechanism of organization of event gastronomic tourism plays an important role in development of the whole tourism industry in the region. It is explained by the following: certain gastronomic events in life and history of the region can quite be paramount travel motive; development of event-gastronomic tourism in the region allows receiving certain benefits at the regional level. With sustainable development and if there is a correct strategy for promoting event-gastronomic tourism, the tourist product including event-gastronomic events, will undoubtedly take its niche as domestic tourist product.

Main part

Event and gastronomic tourism in many countries has high potential and gives a lot of possibilities for tourists. The organizational and economic mechanism of organization of event gastronomic tourism plays an important role in development of the whole tourism industry in the region. It is explained by the following: certain gastronomic events in life and history of the region can quite be paramount travel motive; development of event-gastronomic tourism in the region allows receiving certain benefits at the regional level. With sustainable development and if there is a correct strategy for promoting event-gastronomic tourism, the tourist product including event-gastronomic events, will undoubtedly take its niche as domestic tourist product.

At the current stage of development, tourism should be considered as one of the factors of socio-economic development of the whole country and one of the main factors in the development of its regions.

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The development of the tourism industry will help to diversify the sources of income of the regional budget, which, together with other sources, will become a factor of synergistic impact on the socio-economic development of a particular region. possible.

Given the role of tourism in the economy, we can talk about its importance, for some regions, its leading role in providing sustainable fuels to the economy of the country, region, city, which is primarily related to meeting people's needs and improving the quality of life.

Most developed countries are actively competing with each other in the fight for tourists, improving the quality of existing ones and inventing new events, thereby developing a relatively young and promising area of tourism business - event tourism. Event tourism or event tourism has started to develop abroad as a business, but in recent years it has firmly entered the lexicon of many tourism professionals and has been added to the list of types of domestic and inbound tourism.

In the current situation, event tourism should be one of the factors to increase local production, diversify the sources of income of regional budgets, create jobs and improve the living standards of the population.

The complex approach to the organization of events, consisting of several blocks, has been introduced in our country only in recent years. Event tourism activities are of great economic importance. During their holding, the activities of all facilities of the tourism industry will become more active. Consumer demand significantly exceeds supply, while local cultural traditions and customs are being revived and folk arts are being developed. An important advantage of event-gastronomic tourism is explained by the fact that it does not require rich tourist and recreational resources for the development of this type of tourism.

Creating and promoting new, world-renowned, event events, extensive marketing research, well-thought-out management, forming long-term interest among potential visitors through PR campaigns, creating a large number of professionals requires financial investment, i.e. there are many shortcomings in the development of this area in our country, but it is important to talk about significantly increasing the role of event tourism throughout the country.

We are confident that the activities will be more effective on a regional scale. Holding events is much more beneficial for small budgets of regional and municipal importance. At the regional level, event tourism revenues could be much higher than for the entire country. Of course, it is the destinations that are attractive for tourists, which include many factors: climate, geographical location, quality of tourist infrastructure, historical and cultural potential, and so on.

Given the development of event tourism, we saw that the event should pay special attention to the formation of elements of gastronomic tourism, as the country has unique opportunities for event types, including gastronomic tourism activities.

Gastronomic tourism is a rapidly developing type of global and domestic tourism. This allows us to reveal the origins of the cultures of different peoples, countries and regions.

The theory of tourism includes the terms "event tourism" and "gastronomic tourism", each of which has several approaches.

Analysis of literary sources allows us to formulate the following description of an event - a set of events that are uncertain, significant for the whole of humanity or for a particular society, individual or group.

Such an event may be in the form of a one-time event or recurring periodically or observed annually or at certain intervals. Based on this, it is safe to say that most of the tourism products in tourism activities are timed to suit specific events, which makes the product unique and attractive to tourists.

Currently, there is a variety of event tourism. For example, A.V. Babkin classifies it according to the scale and subject of the event. Events (cultural festivals, sports, social, private, political, and public events, events in education and science, events in the arts, and entertainment events) identified by Donald Goetz, a professor at the University of Calgary, Canada, as reasons for tourism.

Consider the definition of the term ¯gastronomic tourism‖. In the scientific literature there are the terms "culinary tourism", "wine-gastronomic tourism", "gourmet (lovers and lovers of delicious food)", "gastronomic tourism". D.Basyuk, who studies the relationship between food and culture and considers the most comprehensive concept of gastronomic tourism derived from the term gastronomy, a social science, has a favorable view.

However, cooking is an area of activity related to cooking, including a set of technologies, equipment and recipes, and part of gastronomy. Gastronomic tourism allows travelers to discover the richness of folk traditions. After getting acquainted with the local cuisine, they join a unique layer of folk material culture, studying its folklore, as well as traditional methods of preparing food and beverages.

It is no coincidence that Italy, France, Spain and some other countries, which were the first to develop gastronomic tourism, are countries with a rich tradition of national cuisine. It is difficult to overestimate the importance of national cuisine, it is it that gives a unique flavor to different cultures. National dishes can tell stories about the history of a country or region, their past and present, no less than music, architecture, literature. Along with them, he is the brightest. In a study by the Gottlieb Duttweiler Institute (GDI) in Switzerland, the success factors for national cuisine placement are:

- People's appetite for food;
- Availability of regional kitchen advantages;
- Authenticity of the kitchen;
- Availability of tourist attractions in the region;
- Presence of culinary traditions;
- The existence of a national legend;
- Health benefits;
- The existence of a number of specialties that form the basis of the image of national cuisine.

While countries that are actively developing gastronomic tourism have at least half of these factors, the regions have proven to be successful in creating and promoting gastronomic tourism products.

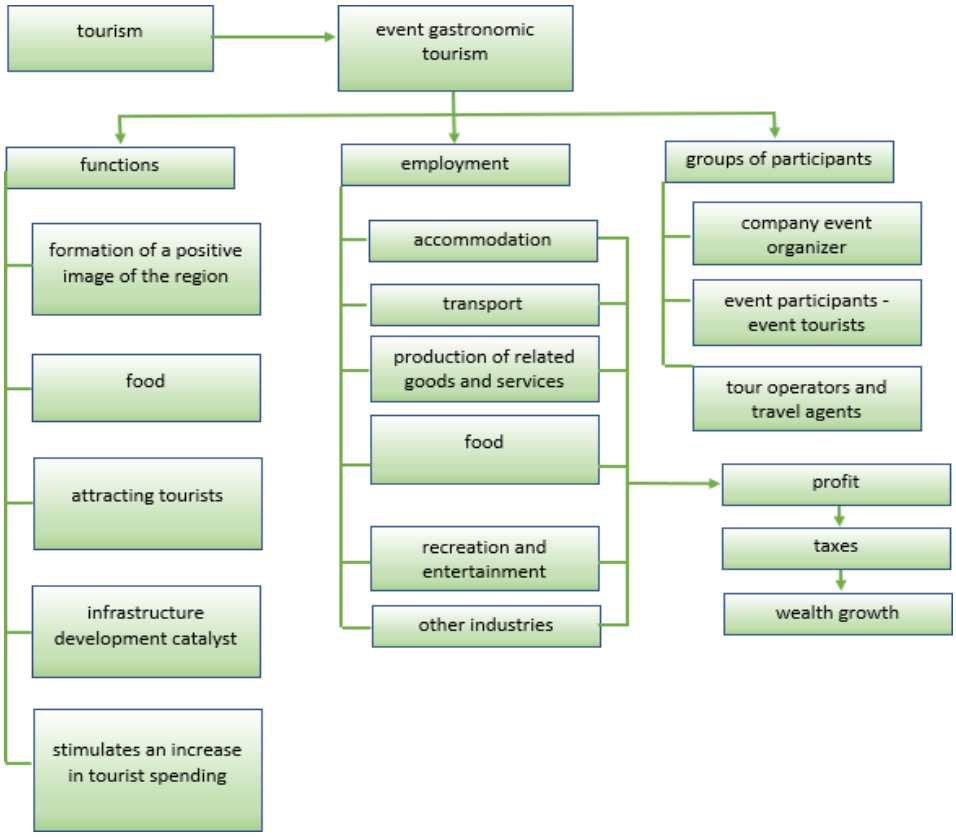
- The conditions for the development of gastronomic tourism include:
- Development of global gastronomic trend - healthy eating;
- Use of locally produced local ingredients;
- Active slow eating movement in response to the widespread development of fast food ("slow food" slow food);

- The revival of people's interest in what they eat, where the products are grown, the preservation of regional gastronomic traditions, the growing number of adherents of this trend in the world;
- Increase the share in the production of environmentally friendly products without the use of fertilizers and various food additives;
- Wide coverage of cooking shows on TV, creation of films and TV films on gastronomic themes.

Gastronomic tourism is a combination of different types of tourism and consists of several components: event, ethnographic, rural, educational and others. It should also be borne in mind that there is a direct link between gastronomic tourism and agriculture, which focuses on the production of environmentally friendly food.

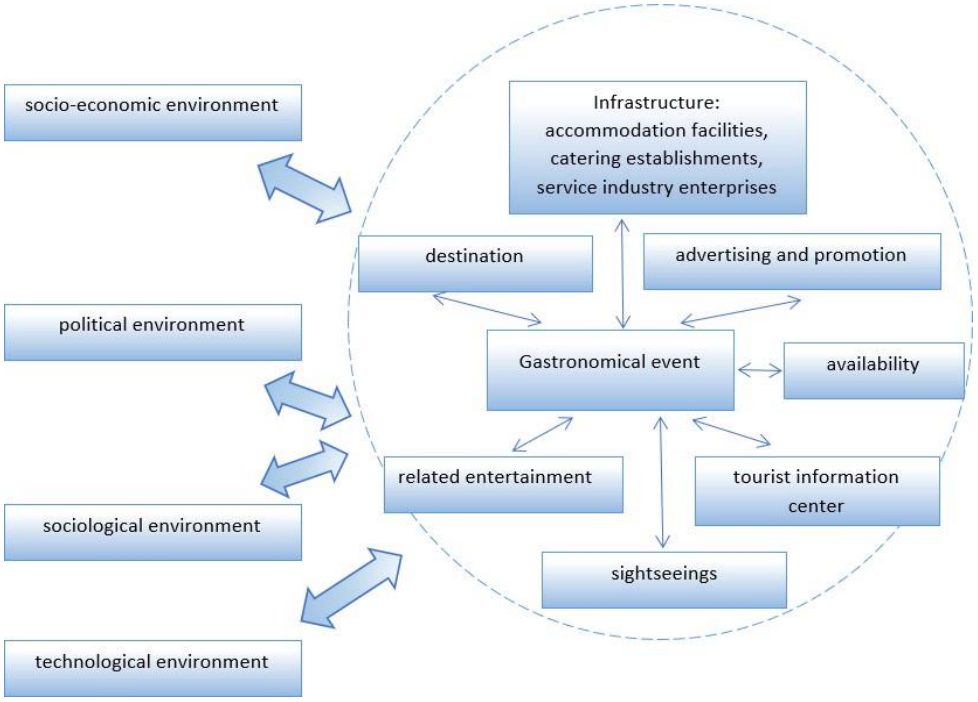
In our opinion, at the current stage of tourism development, a special type of tourism has been formed, which combines the features of both event tourism and gastronomic tourism - event-gastronomic tourism. This type of tourism can be understood as a type of tourist activity that attracts tourists during national and international gastronomic events, serving the development of tourism infrastructure, the integration of different segments of the population and the formation of a positive image of the destination.

Event-gastronomic tourism, which is one of the new and highly profitable types of tourism, has the following organizational system, which includes the following elements: functions of event tourism; areas of employment through the development of event tourism; key players in the field of event tourism (picture 1).



Picture 1 - Organizational system of event-gastronomic tourism

Destination of gastronomic tourism consists of the following components: mainly gastronomic event, infrastructure, advertising and promotion tourist information center, attractions, appropriate entertainment and convenience, which in turn are a constant interaction with environmental factors (picture 2).

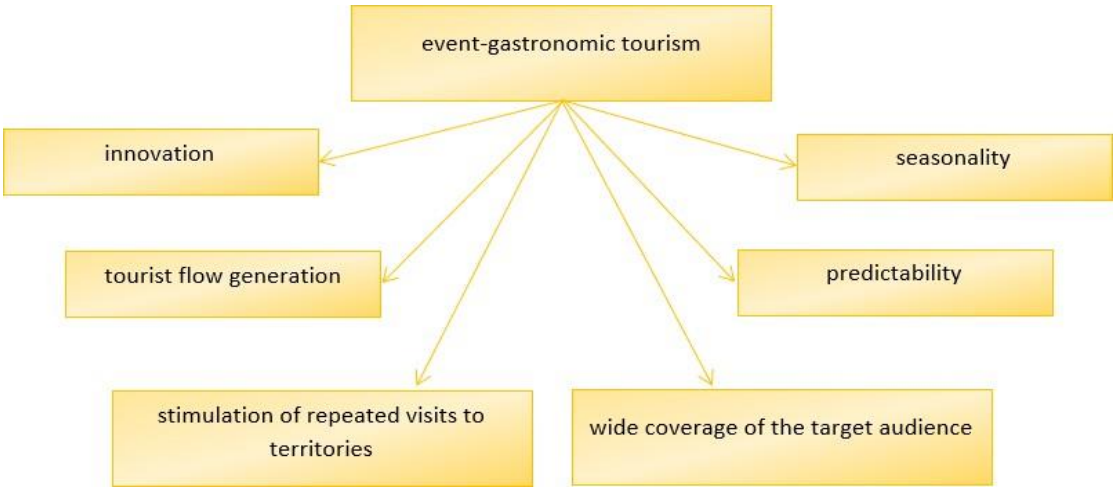


Picture 2 - A model of a comprehensive approach to goal setting for events and gastronomic tourism

Thus, it can be concluded that the organizational and economic mechanism for the formation of event-gastronomic tourism plays an important role in the development of the entire tourism industry in the region.

An important feature of event-gastronomic tourism is its opportunity for continuous development, which is not over, it is supplemented every year with new programs of events, from events these programs can become a permanent status.

The development of event-gastronomic tourism will affect the socio-economic development of the region, create new jobs and bring economic benefits to the organizers. In addition to the above effects, the peculiarities of event-gastronomic tourism can be highlighted, which will bring additional benefits to its development: innovation, the formation of tourist flows, the promotion of repeated visits to the regions, event-gastronomic tourism , target audience coverage, forecasting, the entire season (picture 3).



Picture 3 - Features of event-gastronomic tourism

Due to the entertainment and interactivity of gastronomic events, this direction of tourism can attract many tourists to the region. For greater economic efficiency, activities should be planned throughout the calendar year.

The main advantages of gastronomic festivals are the reduction of sales costs of products, internal and external marketing opportunities, the establishment of long-term relationships with consumers based on product loyalty (often through direct marketing), revenue from the sale of ancillary products and other related products.

Thus, the acute problem of seasonality for tourism can be solved. In addition, successful events in the coming year, as a rule, can turn from casual to habitual, have a positive impact on the image of the region, as well as encourage repeated visits of tourists to the region. This is especially important for areas that are not included in the list of leading tourist destinations.

Event-gastronomic tourism in Uzbekistan also has a high potential and offers a lot of opportunities for tourists, because Uzbekistan is a huge multinational and multicultural country, through which you can travel and get unforgettable gastronomic experiences. Its territory serves a variety of cuisines of the peoples of Uzbekistan. Event-gastronomic tourism is gaining popularity in Uzbekistan and around the world. It is an effective means of attracting tourists and a driver of the development of tourist areas.

Conclusion

The organizational and economic mechanism of the formation of event-gastronomic tourism plays an important role in the development of the entire tourism industry in the region. This is due to the following: some regional gastronomic events serve as important and defining reasons for travel; The development of event-gastronomic tourism in the region will provide certain benefits at the regional level. Tourism with sustainable development and the right advertising strategy event-gastronomic activities, including the product, will undoubtedly take its place as a domestic tourism product.

It should be noted that today many tourist centers are working on the formation, support and development of the gastronomic brand (Maldives, Salt Lake City, Popayan, Chengdu, Catalonia, Estonia, etc.).

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ECONOMETRIC MODELS OF INCREASING EFFICIENCY OF PROCESSES OF USING ALTERNATIVE ENERGY SOURCES

Kodirov Bakhodir Tursunovich[1]

ABSTRACT

In this article, the qualitative and quantitative indicators affecting the effectiveness of the use of alternative energy sources are studied, the criteria determining the economic potential are analyzed and their composition is compiled. Also, the processes of using alternative energy sources and the factors affecting it were their quantitative effects were evaluated based on econometric models.

Key words: *Renewable energy, alternative energy sources, econometric models, evaluation indicators, efficiency.*

It is known that efficiency is the achievement of a specific result at the lowest cost or the maximum possible output from a given amount of resources.Economic efficiency is the high profitability of economic entities achieved as a result of economic activity, that is, it is expressed by obtaining high income (profit) by spending the least amount of resources or costs.

In other words, it is characterized by the ratio of the obtained economic effect to the consumption of production factors and resources, which led to the achievement of the highest production volume using resources of a certain value.

Economic efficiency is expressed as an economic indicator reflecting the profitability or profitability obtained in relation to the unit of resources and costs spent on production.

$$E_i^t = \frac{R^t{}_i}{C_i^t} \qquad (1)$$

E^t_i - i-network economic efficiency (profitability) of i-network at time t, R^t_i - *i*- network's net income at time t, C_i^t - *i*-network's resources and costs spent at time.

Of course, factors affecting the economic efficiency of economic entities can be divided into two groups. In particular, they include qualitative indicators: competition, innovative ideas, effective management, personnel competence, scientific developments, and quantitative indicators: fixed assets, labor resources, capital investments, resource costs, storage and transportation costs (Figure 1).

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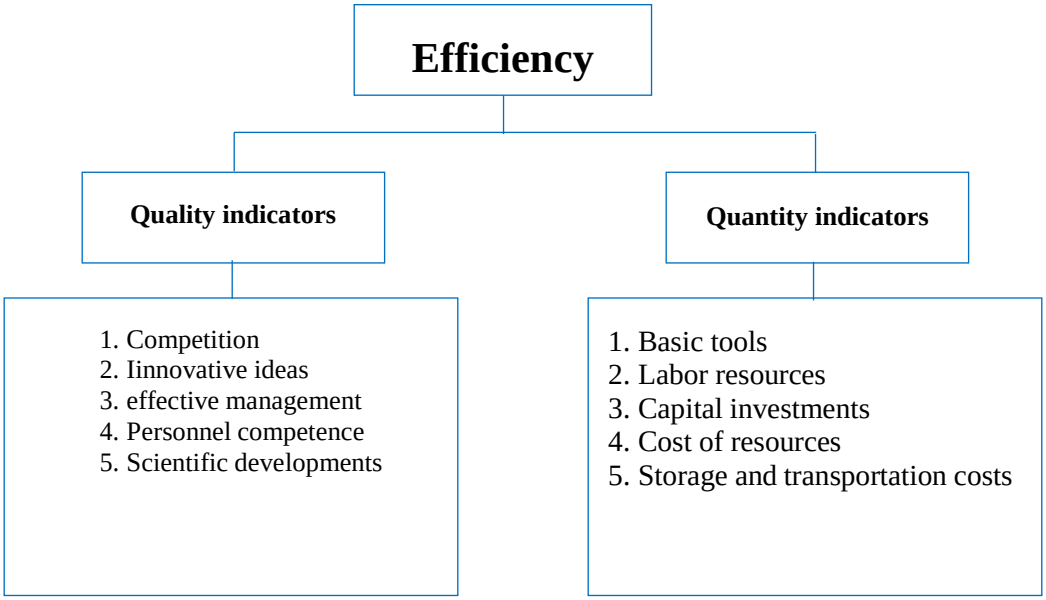

1-figure. Grouping the factors which are affecting efficiency

Quantitative indicators are often used in the study, analysis and evaluation of economic efficiency. Because, quantitative indicators reflect the quantitative aspects of the studied process and are expressed in specific measurement units. This makes it possible to evaluate the quantitative relationship between the resulting and factor indicators on the basis of econometric models.

This, in turn, shows the economic potential of the studied economic object. That is, the economic potential depends on all the factors affecting it and participating in the process of production and sale

In other words, the economic potential of the production process depends on the company's resources and their ability to transform into the necessary results to achieve specific goals in the production process.

In general, it can be seen that different methods and criteria are used in the evaluation of economic potential in economic literature and field studies. In particular, E.V. Nikolskaya [3] believes that the potential of each resource is related to other resources in the production system. He emphasized that the acceleration of production should reduce the material consumption of individual types of production units and increase the contribution of resources that help to increase its efficiency by organizing production accordingly.

Accordingly, the criteria for evaluating economic potential are divided into production components, material resources, personnel composition, technical and technological components, and information resources (Figure 2).

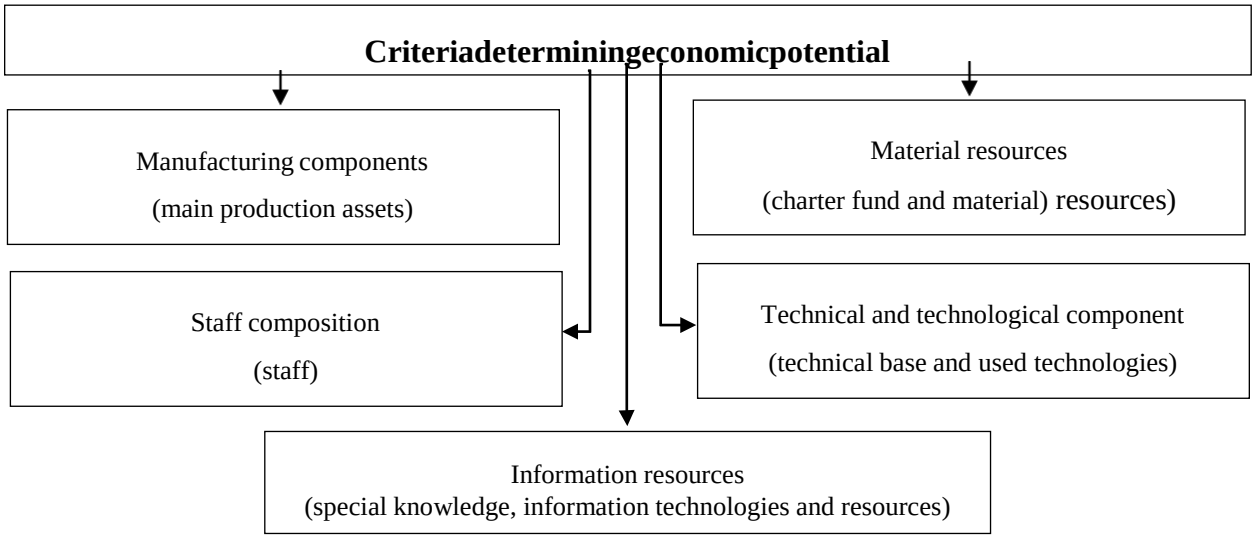

Figure 2. Criteria determining economic potential [4]

According to studies [5], the structure of economic potential does not only enterprise, but also depends on other factors participating in its production chain, as well as on management decisions.

Based on the above, the following can be cited as quantitative indicators affecting the efficiency of the use of renewable energy sources. In particular, renewable energy producing (converting) technologies, labor resources operating in the field, investments made to finance the field, and others are included. . However, the main qualitative indicator affecting the efficiency of the use of renewable energy sources is the sustainability of existing natural renewable energy sources, and the main quantitative indicator is the renewable energy production (converting) technologies (Figure 3).

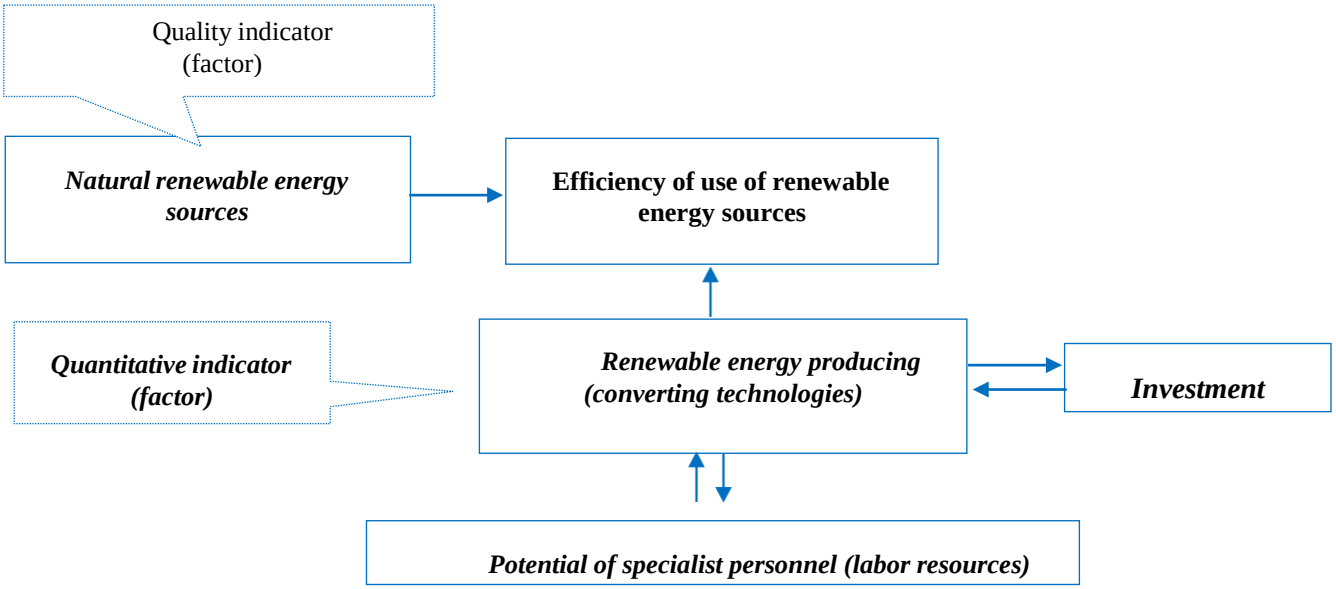

Figure 3. A model that determines the efficiency of using renewable energy sources

Today, in order to study, analyze, and econometric modeling of the processes of increasing the efficiency of the use of renewable energy sources in our country, first of all, it is necessary to observe, collect, process, group and summarize statistical indicators of renewable energy sources.

According to statistics, in 2021, 30815.5 bln.soum equivalent of electricity was produced, of which 3103.1 bln. soums or 10.1 percent is the contribution of renewable energy. Observations showed that during the period 2015-2021, 9.5 percent of the total electricity, gas, steam supply and air conditioning products were accounted for by renewable energy. In this case, renewable energy is mainly produced in hydroelectric power stations.

The volume of renewable energy productiondynamics, billion in sum

Indicators	2015 y.	2016 y.	2017 y.	2018 y.	2019 y.	2020 y.	2021 y.
Electricity, gas, steam supply and air conditioning	8 993,3	10 522,6	11 656,0	14 518,5	22 014,7	27 375,3	30 815,5
Fromthis:							
Renewableenergy	836,4	926,0	1 049,0	1 437,3	2 135,4	2 600,7	3 103,1

Using the data in the table above, the quantitative relationship between electricity, gas, steam supply and air conditioning industry products (y) and renewable energy products (x) can be estimated based on correlation and regression analysis.

First of all, it is necessary to determine the presence of multicollinearity between the outcome and factor indicators based on correlation analysis. Specific and pair correlation coefficients are calculated by formulas 1.3.1 and 1.3.2.

According to the resulting and factor indicators pairwise correlation matrix 3.

According to the result of the correlation analysis, the correlation coefficient of the outcome is $r_{yx} = 0{,}998017$ and factor indicators was equal, which showed the presence of multicollinearity between them. That is, |r|>0,

	y	*X*
y	1	0,998017332
x	0,998017332	1

Satisfying the inequality, showing the presence of autocorrelation or strong correlation between these indicators. This can also be seen in the output chart analysis (Figure 4).

blue= Electricity, gas, steam supply and air conditioning, red= renewable energy.

Figure 4. Dynamics of electricity, gas, steam supply and air conditioning industry products and renewable energy product volumes, billion. in sum

It should be noted that until recent years in our country, things have been slow in fully meeting the demand for electricity of the population and economic entities. Naturally, the use of renewable energy sources, which require a large initial investment, was indifferent to the establishment. For example, the establishment and popularization of solar photoelectric power stations and biogas power stations are among them.

The increasing demand for electricity in the country and the increase in environmental damage caused by traditional power plants, as well as the limitation of the natural resources used in this, the use of renewable energy sources, which are the most important natural clean product in our country, is being paid attention at the special government level.

Today, hydroelectric power stations are leading in the production of alternative energy in the republic.

According to the analysis, the volume of renewable energy in 2021 will be 3103.1 billion. was 3.7 times compared to 2015, 3.4 times compared to 2016, 3.0 times compared to 2017, 2.2 times compared to 2018, 1.5 times compared to 2019 and 2020 increased by 1.2 times.

In addition, in 2021, among the factors that determine the efficiency of the use of renewable energy sources, the volume of the main funds used in the sector is 2007.3 billion. soums and the average annual number of employed employees was 1751 people, this indicator compared to 2015, the volume of basic funds increased by almost 10.1 times, while the average annual number of employees decreased by 0.9 times (Table 3).

Years	The volume of renewable energy, billion soum	The amount of the main funds, billion soum	Average annual number of employees, In person
2015	836,4	198,2	1,9
2016	926,0	257,6	1,9
2017	1 049,0	221,2	1,7
2018	1 437,3	260,7	1,6
2019	2 135,4	182,0	1,7
2020	2 600,7	3,0	1,7
2021	3 103,1	2 007,3	1,8

In order to econometrically analyze the influence of the factors influencing the trend of the volume of renewable energy (y), in particular, the volume of Basic funds (x_1) and the average annual number of employees in the field (x_2), it is first necessary to determine the presence of multicollinearity between these factors based on correlation analysis (Table 4).

Table-4 **Pairwise correlation matrix for renewable energy volume, fixed assets volume, and average annual number of employees in the industry**

	y	x_1	x_2
y	1	0,692996164	-0,303675851
x_1	0,692996164	1	0,041824791
x_2	-0,303675851	0,041824791	1

According to the results of the correlation analysis, the correlation coefficients of the outcome is $r(y:x_1)$ ва $r(x_1:x_2)$ if it shows that there is a weak correlation between them $r(y:x_2)$ showed a weak inverse relationship between

It can also be checked by the autocorrelation coefficient

$$r_{ei} = \frac{\overline{\in_i \in_{i-1}} - \overline{\in_i} \cdot \overline{\in_{i-1}}}{S_{ei} \cdot S_{e_{i-1}}} \qquad (2)$$

If $r_{ei} < 0,5$ is ,, indicating no autocorrelation. $r_{ei} = 0,328$ so there is no autocorrelation.

Therefore, the quantitative relationship between the volume of renewable energy and the influencing factors: the volume of fixed assets and the average annual number of employees in the field can be estimated based on a multifactor regression model. In this case, the multifactor regression model can be

expressed as follows.

$$y = a_0 + a_1 x_1 - a_2 x_2 + \varepsilon \quad (3)$$

Based on the data in Table 3, a multifactor regression model is constructed using the method of least squares

$$y = 6744{,}316 + 1{,}0061 x_1 - 3136{,}0336 x_2$$

The obtained regression equation should be statistically analyzed. First of all, the approximation error of the constructed models is determined by the following formula.

$$A = \frac{\sum |\in : Y|}{n} \cdot 100\% \quad (4)$$

$$A = \frac{1{,}847}{7} \cdot 100\% = 26{,}38$$

Approximation error allows you to check the significance of the equation and its coefficients, estimate absolute and relative approximation errors. Also, the standard error of (y) is determined. $S_y = 662{,}401$

Evaluation of the overall significance of the multivariate regression equation is done by the coefficient of determination and Fisher's criterion.

$$R^2 = 1 - \frac{s_e^2}{\sum \left(y_i - \bar{y}\right)^2} \quad (5)$$

$$F = \frac{R^2}{1 - R^2} \cdot \frac{n - m - 1}{m} \quad (6)(6)$$

$$R^2 = 0{,}6345;\ F = 3{,}472\ (F.table = 6{,}94)$$

The significance of the parameters of the regression equation is checked by the t-statistics criterion.

$$t_i = \frac{b_i}{S_{b_i}} \quad (7)(7)$$

$$t_{a_0} = 1{,}597;\ t_{a_1} = 2{,}464;\ t_{a_2} = 1{,}299\ (t_{table} = 3{,}495$$

The Durbin-Watson test is used to analyze the correlation of deviations.

$$DW = \frac{\sum \left(e_i - e_{i-1}\right)^2}{\sum e^2} \quad (8)(8)$$

$$DW = 1{,}33$$

According to the Durbin-Watson criterion, the deviation of the error should be within the interval. Otherwise, it means that there is autocorrelation.

In short, according to the multifactor regression model created as a result of the calculations, the volume of the main funds (x_1) to 1 unitincrease leads to an increase of renewable energy volume (y) by 1,006 units, while an increase in the average annual number of employees (x_2) by 1 unit leads to a decrease of renewable energy volume (y) by 3136,034 units.

Therefore, it can be concluded that (y) is the factor that has the greatest influence on the resulting factor of (x_1).

However, according to the model evaluation results, it was found that the model was not statistically significant according to Fisher and t-statistics criteria.

This model can be expressed on a standard scale. The regression model on the standard scale assumes that all the values of the studied properties are converted to standards (standardized values) according to the formulas, and this is defined as follows.

$$t_j = \frac{xj_i - \overline{xj}}{S(x_j)} \quad (9)(9)$$

where: x_{ji} -the value of the variable in the observation of x_{ji}

$$t_y = \frac{y_i - \overline{xj}}{S(y)} \quad (10)(10)$$

Thus, the origin of each standardized variable is combined with its mean value and its standard deviation is obtained as a unit of variation.

If the relationship between variables in a natural scale is linear, then changing the origin and the unit of measurement does not violate this property, so standardized variables are associated with a linear relationship.

$$t_y = \sum \beta_j t_{xj} \quad (11)(11)$$

To estimate the unknown parameters, we use the method of least square and create a system of normal equations.

This system of linear equations is solved by the Gaussian method and the standardized form of the regression equation is constructed.

$$t_y = 0{,}754x_1 - 0{,}397x_2$$

In addition, it is appropriate to consider the above econometric analysis based on other types of models. For example, in the form of the Kobba-Douglas model, the relationship between the indicators of the volume of renewable energy (y), the volume of fixed assets (x_1) and the average annual number of employees in the field (x_2) can be expressed as follows.

$$y = a_0 x_1^{\alpha} x_2^{\beta} \quad (12)(12)$$

where: - a_0, α, β unknown parameters of the model.

To find the unknown parameters of this model, the model is transformed into a small equation by logarithmization,

$$\ln(y) = \ln(a_0) + \alpha \ln(x_1) + \beta \ln(x_2)$$

and the parameters are found by the method of least squares.

$$y = 7{,}3748 x_1^{0{,}4111} x_2^{-4.3434}$$

In short, an increase in the volume of fixed assets used in the production of renewable energy by 1 unit can lead to an increase in the volume of renewable energy by 0.4 units, an increase in the number of employees working in the production of renewable energy by 1 unit can lead to a decrease in the volume of renewable energy by 4.3 units .

It is worth noting that the factors affecting the adoption of renewable energy are trust, distributive justice, location and socio-demographic factors. Of all these four factors, trust has the most significant impact on the development of renewable energy.

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EMPLOYEE CREATIVITY, TRANSFORMATIONAL LEADERSHIP, PSYCHOLOGICAL EMPOWERMENT, ORGANIZATIONAL INNOVATIVENESS AND HRM PRACTICES IN IT EMPLOYEES

Km Gulshan[1], Ajai Pratap Singh[2]

ABSTRACT

The aims of the present study were (1) to explore employee creativity-related differences and (2) to estimate the associations between employee creativity, transformational leadership, psychological empowerment, organisational innovativeness, and HRM practices. A sample of Indian IT employees (N = 187) took part in this study. They responded to the employee creativity scale, transformational leadership scale, psychological empowerment scale, organisational innovativeness scale, and HRM practises scale. Results indicated that high creative obtained the higher mean scores on psychological empowerment, organisational innovativeness, and HRM practices. All the correlations between the variables were statistically significant and positive, except for those between employee creativity and transformational leadership. It was concluded that those who consider themselves creative experienced greater empowerment and perceived organisational innovativeness and HRM practices more favourably.

Keywords*: employee creativity, transformational leadership, psychological empowerment, organizational innovativeness, HRM Practices.*

Introduction

Having reached scale and complexity in its offering, the IT sector is focusing on boosting technology adoption and constructing a new delivery platform as it creates more and more value for its clients (Yojana, 2012). In reality, jobs in the IT and ITES industries are knowledge-based and stressful. IT work culture is transformative in nature and includes creativity, innovation, critical thinking, job re-engineering, and highly qualified professionals to complete the assignment.

Challenges in the IT business include repetitious tasks like as testing, production support, and maintenance, which demotivate employees. Managers or team leaders lack knowledge of software development, proper programming, and design skills, and employees avoid risky decisions (Dhal, 2015). IT sector HR difficulties include a lack of trained labour, poor management, increasing diversity, talent acquisition and retention, employer branding, and employee engagement. Today, this industry has the problem of fostering greater employee innovation (Awasthy and Gupta, 2011; Amabile et al., 2005). Since employees are a key factor in the IT industry (Griffeth et al., 2000), today's organisational leaders face the challenge of balancing important factors such as the need to motivate employees and develop their creative skills so that they can consistently deliver high-quality and on-time performance. In contrast, corporations must create an environment conducive to creativity so that creative work outputs can help them achieve a competitive advantage over other firms (George and Zhou, 2002; Oldham and Cummings, 1996).

The definition of employee creativity is based on the widely understood concept of creativity. According to Wang and Zhu (2010), employee creativity was defined as a process when employees develop new and

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useful ideas or solutions relating to products, services, procedures and processes within the organisation (Thatcher and Brown, 2010). Previously, Shin and Zhou (2007) also broadened this term to include the context of teamwork inside an organisation rather than individual abilities. Cheung and Wong (2011), on the other hand, believed that employee creativity occurs when employees use their expertise, critical thinking abilities, and experience to provide unique ideas for decision-making, problem-solving, and efficiently accomplishing given tasks. According to Amabile (1988), employee creativity ¯refers to producing novel and useful ideas by an employee.‖ Employee creative is defined as ¯novel or original products, ideas, or procedures‖ that are ¯potentially relevant for, or useful to, an organisation‖ (Oldham and Cummings, 1996). Employee creativity may contribute to the organization's competitive edge; consequently, it is regarded as one of the most important characteristics of an organization's environment (Sosik et al., 1999). An employee engages in a process that transcends normal or routine behaviour in order to produce creative results (Dewett, 2006).

J.V. Downton coined the term "transformational leadership" in his work Rebel Leadership: Commitment and Charisma in a Revolutionary Process (1973). Transformational leadership theory was initially articulated by James McGregor Burns (1978), who contrasted transformational leadership with transactional leadership in his best-selling book on political leadership. Bass and colleagues (Bass, 1985, 1996) further developed a theory defining the two types of leadership in terms of the component behaviours used by a leader to influence followers. The original formulation of the transformational leadership theory describes three types of behaviour: idealised influence, intellectual stimulation and individualised consideration (Bass, 1985). In a revised version of the theory a behavioural dimension of inspirational motivation was added which focuses on future needs and long-term issues (Bass &Avolio, 1990, Avolio and Bass, 2004). TFL refers specifically to the interaction between leaders and their followers in raising one another to higher levels of motivation and morale, inspiring employees with visions, and encouraging them to excel in performance and goal fulfilment (Li et al., 2012; Wang and Howell, 2010).

Transformational leaders emphasise that there is a consciousness of collective organisational interests that helps employees achieve organisational goals (García-Morales et al., 2012). Robbins et al. (2009) define transformational leaders as those who can motivate their subordinates by gaining their respect and trust and motivating them to work more efficiently to achieve their leaders' objectives. Transformational leaders are charismatic and able to articulate and carry out a vision. Their subordinates can then internalise the vision and objectives of the organisation (Herrmann and Felfe, 2013; Hoffman and Frost, 2006; Tyler and Cremer, 2005). Indeed, transformational leadership has evolved into an innovative culture and a method for ensuring the highest level of organisational performance. (Garca-Morales et al., 2012) Transformational leaders are committed to their organization's goals, and their followers become committed to achieving the same goals.

The psychological perspective of empowerment is known as Psychological Empowerment. Psychological empowerment is the belief that one has necessary knowledge and skills to perform the job well that can make a difference in the organisation (Sprietzer, 1995a). According to psychological researchers, psychological empowerment can be enhanced by changing both the employee's internal mental characteristics and the exterior work environment. Bowen and Lawler (1992) argued that the empowerment is one of those management practises that ¯empower‖ employees, such as delegation of the decision making and the provision to access information and resources without much hindrance. Eylon (1997) further argue that empowerment is an energising process that expands the feelings of trust and

control in one as well as in one's organisation, which leads to outcomes such as enhanced self-efficacy and performance.

Drucker (1954) was one of the first who addressed the importance of innovativeness in organisational settings. The term ¯organisational innovation‖ is a summation of two key conceptual words of management studies, i.e. ¯organisation‖ and ¯innovation‖. Organization is the human enterprise, whereas innovation relates to tiny adoptions or modifications. At the behest of rapid technological developments, firms around the world are pursuing organisational innovation to improve their current product, process, services, and technology. Organizational innovation is the generation and successful implementation of a new idea within the organisation (Amabile, 1998; Damanpour, 1996). Innovation is regarded as a key constituent of organisational success in a highly competitive landscape (Francis and Bessant, 2005). (Camisón and Villar-López, 2014) Research shows that technology innovation arises from organisational innovation, and both together result in a greater level of organisational performance.

HRM practises refer to organisational activities directed at managing the pool of human resources and ensuring that the resources are employed towards the fulfilment of organisational goals (Schuler & Jackson, 1987; Schuler & MacMillan, 1984; Wright & Snell, 1991). It was observed that majority of studies define HRM in terms of human resource practises or systems or bundles of practises. There are various perspectives on the nature of HRM. Several studies define HRM in terms of individual practises (Batt, 2002) or systems or bundles of practises (Capelli and Neumark, 2001). There does not appear to be a definitive list of HR practises or systems of HR practises that describe human resource management. Beer et al. (1984) defined HRM as involving all those management decisions and actions that affect the nature of the relationship between the organisation and the employee. Important to note about this definition is the inclusion of the phrase "action'. This makes Beer and his colleagues the first to assert that line managers are responsible for implementing successful HRM practises (Blyton and Turnbull,1996; Armstrong, 1998).

The general aim of the current investigation was to explore the associations between employee creativity, transformational leadership, psychological empowerment, organisational innovativeness, and HRM practices. This study was designed to test the following hypotheses: (1) creativity-related differences will be significant for the study variables in favour of high creative, (2) the correlations will be statistically significant and positive between the study variables.

Methodology

Participants and procedures

We approached the human resource departments of IT organisations in National Capital Region (Delhi) and Bangluru, India, to conduct a study. After obtaining permission from ten IT organizations, we distributed a survey questionnaire to 225 employees who opted to participate in this study. We did, however, receive a complete questionnaire from 187 respondents. A total of 88.2 percent of the respondents in the study were male, their average age was 31.06 years, and their average level of work experience in the IT sector was 7.47 years. All the respondents in the study were graduates, with 35.3 percent of them having post-graduate levels of education. The purpose of this study was to incorporate a one-way classification of variable employee creativity (high and low) on transformational leadership, psychological empowerment, organisational innovativeness, and human resource management practices. Here one theoretical and methodological concern relating to this part of the study deserves mention. Low and high scores on the employee creativity measure (subjects falling below and above the median) were screened out, and their

corresponding scores on transformational leadership, psychological empowerment, organisational innovativeness, and HRM practices were taken into consideration.

Measures

Employee Creativity Scale

Creativity was measured with a scale adapted from Zhou and George (2001). The 13 item scale was averaged for an overall score. In the present study adapted 8 items were used.Cronbach's α coefficient for this scale was 0.84.

Transformational Leadership Scale

Leadership style was evaluated by the short, updated version of the MLQ (Bass &Avolio, 1997). The MLQ (5x) contained 45 items tapping nine conceptually distinct leadership factors and three leadership outcomes. Four scales were identified as characteristic of transformational leadership (Idealized influence (attributed and behaviour), Inspirational motivation, Individualized consideration, and Intellectual stimulation). Respondents rated items related to their leader's behavior along the four dimensions, i.e. Idealized Influence Attributed and Behaviour, Inspirational Motivation, Individualized Consideration, and Intellectual Stimulation using a five-point Likert scale ranging from ¯Not at all‖ (0) to ¯frequently, if not always‖ (4). The Cronbach's α coefficient for this scale was 0.92.

Psychological Empowerment Scale

Psychological empowerment was measured using a 12-item scale developed by Spreitzer (1995). The scale is composed of four subscales: meaning, competence, self-determination, and impact. Each of the sub scales has three items each. Sample items were ¸The work I do is very important to me' (Meaning), ¸I am confident about my ability to do my job' (Competence), ¸I have significant autonomy in determining how I do my job' (Self-determination), and ¸My impact on what happens in my department is large' (Impact). Respondents were asked to indicate their level of agreement or disagreement on each item on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's α coefficient for this scale was 0.836.

Organisational Innovativeness scale

Organisational Innovativenesswas measured using a 29-item scale developed by Wang & Ahmed (2004).A total of 29 items were generated from literature. The questionnaire uses 7-point Likert scale, ranging from 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither disagree or agree, 5=slightly agree, 6=agree, 7=strongly agree. A neutral response, ¸neither disagree or agree', was adopted to reduce uninformed response, since it assures respondents that they need not feel compelled to answer every questionnaire item. The Cronbach's α coefficient for this scale was 0.91.

HRM Practices Scale

HRM practices were measured by using questionnaire used by Birasnav and Rangnekar(2009) on Likert Scale which included 28 questions. The Cronbach's α coefficient for this scale was 0.896.

Table 1. Alpha reliability of the scales in Indian sample

SN	Scale	M	SD	Cronbach's Alpha
1	Employee Creativity	29.17	3.27	.84
2	Transformational Leadership	58.15	11.6	.92
3	Psychological Empowerment	48.67	5.9	.836
4	Organisational Innovativeness	113.29	17.62	.91
5	HRM Practices	80.52	12.90	.896

Table 1 sets out the reliability with Indian IT employees. Alpha reliabilities ranged from .836 to .92, i.e., between acceptable to high.

Results

Table 2. Mean score (M), standard deviation (SD), t value, and Cohen's d of the scales for low and high creative employees

Scale	Creativity Level	N	M	SD	t	p	Cohen's D
Transformational Leadership	Low	69	58.01	11.91	.212	.83	.03
	High	118	58.391	11.14			
Psychological Empowerment	Low	69	46.95	5.44	5.55	.000**	.83*****
	High	118	51.60	5.64			
Organisational Innovativeness	Low	69	130.43	15.71	2.97	.000**	.43***
	High	118	138.20	19.64			
HRM Practices	Low	69	79.127	10.83	1.95	.05*	.23***
	High	118	82.92	15.62			

*p < .05, **p < .01, ***d > .2 (small effect size), ****d > .5 (medium effect size),*****d>.8(large effect size)

Table 2 presents the descriptive statistics and the t values of the study variables. Statistically significant differences between high and low scores were found. The inspection of this table indicates that high creative obtained the higher mean scores on psychological empowerment, organizational innovativeness and HRM

Practices than did low creative, and the effect size was significant for psychological empowerment, organizational innovativeness and HRM Practices.

Table 3. Pearson correlation coefficients between employee creativity, transformational leadership,psychological empowerment, organizational innovativeness and HRM Practices

Variables	1	2	3	4	5
Employee Creativity	1	.068	.455**	.292**	.196**
Transformational Leadership	.068	1	.238**	.240**	.205**
Psychological Empowerment	.455**	.238**	1	.380**	.178*
Organisational Innovativeness	.292**	.240**	.380**	1	.566**
HRM Practices	.196**	.205**	.178*	.566**	1

p< .05 ** p < .01*.

Table 3 reveals that all the correlations between the variables were statistically significant and positive except between employee creativity and transformational leadership.

Discussion

As for the first hypothesis regarding the employee creativity-related differences, high creative employees obtained higher mean scores on psychological empowerment, organisational innovativeness, and HRM practices than did low creative employees, and the effect size was significant for psychological empowerment, organisational innovativeness, and HRM Practices.

Zhang and Bartol (2010) obtained a positive and meaningful relationship between psychological empowerment and employee creativity, asserting that a lack of psychological empowerment will lead to the avoidance of employee creativity. Empowered employees have a higher potential to achieve superior levels of productivity and creativity because they feel in control of their work (Koberg et al., 1999). The positive relationship between psychological empowerment and employee creativity has been recognised in research in several Asian countries, such as China (Yang et al., 2019), Pakistan (Javed et al., 2017), Indonesia (Siswanti and Muafi, 2020), and Japan (Matsuo, 2020).

The relationship between employee creativity and organisational innovation has been well documented by a number of both conceptual and empirical studies (Jaiswal and Dhar, 2015; Muceldili et al., 2013). Kunz, Schmitt, and Meyer (2011) argued that employee creativity is an important part of organisational innovation, characterised by two key aspects: novelty and meaningfulness. Additionally, employee creativity was perceived as the first stage of organisational innovation and served as the foundation for organisational innovation to develop (Allen et al., 2015; Baer, 2012; Hughes et al., 2018; Ismail et al., 2019). According to Amabile (1988) and O'Regan et al. (2006), employee creativity is one of the strongest drivers of innovation at the organisational level.

The literature on HRM practices indicates that motivational practices are important in promoting employee creativity (Parker 2000). If HRM practices can motivate employees to have a sense of autonomy, then employees will become more effective at solving problems and creating new ideas to cope with job demands (Dorenbosch, Engen and Verhagen 2005). Jiang, et, al., (2012) showed that four HRM practices, hiring and selection, reward, job design, and teamwork, were positively related to employee creativity while training and performance appraisal were not. Chaubey, et. al. (2020) posited that the relationship between training and organisational innovation was leveraged by employee creativity, which acts as a mediator between the two. Further, Mumford (2000) presented several propositions about the kinds of HRM practices that are likely to influence the likelihood of innovation and creativity.

The second hypothesis was partially supported, i.e., all the correlations between the variables were statistically significant and positive except between employee creativity and transformational leadership. The correlation between employee creativity and transformational leadership was not significant. In past research, Gumusluoglu and Ilsev (2009) found that transformational leadership behaviours act as "creativity enhancing forces." A study of professional employees of an IT company in China found transformational leadership to foster employee creativity (Zhang and Bartol, 2010). Henker et al. (2014) found that transformational leadership has a positive relationship with employee creativity. Al Harbiet al. (2018) found that transformational leadership has a positive and significant relationship to followers‘ creativity. Accoding to Nguyen, et al., (2021) found that the significant positive effect of transformational leadership on employee creativity. Maria et al. (2022) reported that transformational leadership has a positive and significant relationship with employee creativity.

In congruence with the present results, Mubarak and Noor (2018) found that employees who are psychologically empowered tend to express more creativity in their work. Quinn and Spreitzer (1997) assert that empowered employees tend to experiment, look at old problems from new approaches and create innovative results. Conger and Kanungo (1988) argue that psychological empowerment is important to stimulate and manage creativity and innovation in organizations. Sangar and Rangnekar (2014) revealed that meaning, self-determination, and impact significantly predict creativity. Creativity requires a workforce that is high on psychological empowerment and role satisfaction. The study identified two essential variables that affect creativity. It is an innovative attempt to use psychological empowerment and role satisfaction independently to improve creativity in an Indian framework. Nguyen and Doan (2021) establish that psychological empowerment has a positive direct and indirect relationship through creative process engagement and intrinsic motivation.

In congruence with the present findings, Shalley and Perry-Smith (2008) mentioned that employee creativity is a crucial determining factor for innovation. Creative employees tend to incline towards idea generation and look for ways to implement the ideas after thorough assessment (Gumusluoglu and Ilsev, 2009). They create such an atmosphere that influences others to think outside the box. Fagerberg et al. (2005) said that the capacity of an organisation to innovate acts as a provision for the effective usage of useful ideas and new technologies, which is nothing but the creative outcomes of employees. According to a study conducted by Chuang (2007) on Toyota, it was suggested that employee creativity has a direct influence on organisational innovation as proposed in Amabile (1988) model. According to research on creativity, employees' creativity is an important factor in innovation (Heye, 2006).The greater the individual‘s capability to generate new, novel, and useful ideas more is their likelihood to be innovative, which, in turn, contributes to group and organisational innovation (Ghosh, 2015).

HR practices boost employee creativity by developing the required knowledge, skills, and abilities, which are important for the execution of discretionary and extra-role activities, enhancing employees' motivation to engage in idea creation and testing these ideas, and providing opportunities and execution of developing skills and behaviour at the workplace (Rehman et al., 2019; Yasir and Majid, 2020). The key is to provide employees with an environment that is challenging enough but not so overstimulating that employees feel overwhelmed and unable to break out of their old ways of doing their work (Joo et al., 2013), as an important characteristic of an organizational HR system, HRMS reflects dimensions of the work environment that potentially influence an employee's creativity (Shalley and Gilson, 2004).

Conclusions

The results of the present study extend previous research findings by pointing toward a comprehensive understanding of how psychological empowerment, organisational innovativeness, and HRM practices are related with employee creativity in IT employees. An exhibition of empowerment, an innovation conducive environment, and favourable HRM practices for the different categories of IT workers are paramount and indeed essential to maximising creativity. More specifically, the findings show that when employees perceive their work environment to be innovative and empowering, they are more likely to engage in creative behavior.Overall, the findings suggest that organisations provide the enabling conditions for employees to be creative and the propensity to stay productive in their organisational context.

Implications for practice

Many practical implications can be derived from the present findings. First, it appears that providing employees with an innovation friendly and empowered environment might have positive outcomes in terms of creativity. By enhancing empowerment and innovativeness in environment, organisations can, directly and indirectly, stimulate creativity. In addition, this study provides researchers with useful information based on the Indian context for conducting similar studies in different cultural contexts. It also helps us to recognise the importance of empowerment, innovativeness, and HRM practices in IT organisations to enhance creativity.

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LEGAL AND ECONOMIC BASIS OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP IN THE FIELD OF FISHING OF THE REPUBLIC OF UZBEKISTAN

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ABSTRACT

This article contains opinions on a number of decrees and resolutions adopted by the President of the Republic of Uzbekistan and the Cabinet of Ministersannounced in order further development of small business and private entrepreneurship (SBPE) in the fishing industry in the Republic of Uzbekistan today, regulation of SBPE relations in the fisheries sector, increase of fish farming on the basis of effective use of available opportunities, further deepening economic reforms and mastering innovative technologies of intensive fish farming, support the fishing industry, increase the efficiency of fisheries and fishing, rational and efficient use of land and water resources in this area and ensure the widespread introduction of innovative technologies.

Keywords: *small business, private entrepreneurship subjects, fisheries, fish seeds, -Uzbekbaliksanoat‖ Association, fish products, farms, natural water bodies.*

Introduction

Today, during the pandemic, the growing demand of the population for meat and meat products is simultaneously leading to an increase in the cost of these types of products. This, in turn, requires the provision of poultry and fish products as substitute goods in order to meet the growing demand of the population for beef. As a solution to this problem, it is necessary to develop and improve small business and private entrepreneurship (SBPE) in the field of poultry and fisheries. This, in turn, will create new jobs, increase real incomes, increase welfare, including increased production of fish and fish products in domestic markets and foreign consumers, lower prices and the formation of a competitive environment in this area. creates the basis for increased consumption.

Analysis of the relevant literature

Scientific, theoretical bases and methods of studying the development of the SBPE and agricultural fisheries were widely covered in the researches of foreign scientists such as Y.Shumpeter, A.Smith, R.Hizrich, A.Hosking, S.M.Esengalieva, V.P.Gorshechnikov, She Son Gun, D.V. Borodin, N.Y.Butikova, O.V.Kirsanova, I.A.Chernyavskiy, N.M.Kotov, I.A.Chernyavskiy, I.V.Khilinskaya [8,9,10, 11,12,13,14,15,16].

The researches on theoretical and practical aspects of the development of the SBPEand fishing industry, as well as on improving the organizational and economic mechanisms has been conducted by economists such as I.U.Ibragimov, A.M.Kosimov, K.I.Kurpayanidi, MSAshurov, N.B.Ulugmuradova, I.O. Yunusov, U.Kh. Beglaev, B.A. Sarsenbaev [17, 18, 19, 20, 21,22,23].

However, although the work of the above scientists serves as an important scientific source to shed light on the general theoretical and methodological basis of the development of agriculture and fisheries, the

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issues as identification of development trends of the SBPE and agricultural fisheries in the country, priorities for the development of the fisheries sector, in-depth study of various aspects of the organization and development of SBPE in this area, development of science-based proposals and recommendations to improve the socio-economic mechanisms of SBPE in fisheries are not enough studied.

Therefore, there is a real need to ensure the sustainable and balanced development of the agricultural sector in the country, to solve scientific and practical problems and to implement them in order to identify trends in the development of entrepreneurship in the field with the help of the methods and models being effectively used in the classification of SBPE in the field of agriculture and fisheries in the country at present, identification and assessment of development trends, improvement of mechanisms and priorities for the development of the industry, study of best practices in entrepreneurship in developed countries, organization and management of SBPE in fisheries.

Research methodology

The methodological basis of the study is based on the legislative and regulatory documents on the development of agricultural and fisheries, in particular, the Decree of the President of the Republic of Uzbekistan dated January 13, 2022 ¯On additional measures for further development of the fishing industry‖ PQ-83 [1], Presidential Decree of the Republic of Uzbekistan numbered PF-60 from January 28, 2022 ¯On the New Development Strategy of Uzbekistan for 2022-2026‖ [2].

These decrees and resolutions also address the main directions of institutional and structural reforms aimed at reducing state participation in the economy, strengthening the protection of private property rights and strengthening its priority position, stimulating the development of SBPE and agricultural fisheries, intensification of artificial (extensive) reservoirs. modern statistical methods and observations, comparative and systematic, analysis and synthesis, induction and deduction methods are widely used in the collection and processing of proposals and recommendations, as well as relevant statistical data.

Analysis and results

In order to meet the growing needs of the population of New Uzbekistan in food products, especially meat products, the development of SBPE in the fishing industry, along with strengthening food security, will provide the population with high quality fish protein. In particular, the calcium content of fish is important in the healthy growth of children. Fish is such an integral part of the diet that health professionals recommend consuming fish even if it is at a minimum. Such a norm for Uzbekistan is 12 kg / person / year. Worldwide, in 2005 the population consumed an average of 16.6 kg / person / year of fish [3]. In particular, the consumption of fish products in 2020 amounted to 21 kg per capita.

It has been found that all types of substances in fish meat contain different amounts depending on their type and other characteristics. For example, water – 92%, oil – 0.1-54%, nitrogen – 5.4-27%, minerals – 0.1-3%, etc. The high content of nitrogenous substances in fish meat allows to increase its nutritional value [4].

The President of the Republic of Uzbekistan and the Cabinet of Ministers have also developed a number of decrees and resolutions on the development of the fisheries sector and the expansion of the fisheries sector.

These normative and legal acts, along with the regulation of relations in the field of fisheries in the country, create conditions for expanding access to finance and services for SBPE entities and the population, increase their economic and business activity and enable the poor to engage in entrepreneurial

activities. created a legal basis for the provision of microcredits, microloans, microleasing and other microfinance services to microfinance entities by microfinance services.

Resolution of the President of the Republic of Uzbekistan numbered PQ-2939 from May 1, 2017 ¯On measures to improve the management system of the fishing industry‖, April 6, 2018 numbered PQ-3657 ¯On additional measures for the accelerated development of the fishing industry‖ and the Resolution numbered PQ-4005 from November 6, 2018 ¯On additional measures for further development of the fishing industry‖ raised the development of the industry to a new level.

Coordination of the implementation of program measures for the development of the fisheries sector, the single scientific, technical, technological, investment and export the tasks of consistent implementation of the policy, as well as monitoring of prices in domestic and foreign markets were identified. In the field of fisheries, tasks have been set to conduct research for the development of SBPE, the widespread introduction of innovative technologies developed in the field of fish farming and processing.

In accordance with this decision, the ¯Uzbekbaliksanoat‖association was established, which includes 13 regional limited liability companies ¯Baliksanoat‖, which coordinate the work of local fisheries organizations.

The main tasks of Uzbekbaliksanoat are to systematically organize the organizational and technological processes of fish production, reproduction of small fish and strengthen the feed base, rational use of resources of natural reservoirs and artificial lakes, as well as the introduction of science-based methods and intensive technologies in fish farming. and directions.

In addition, in order to further improve research in the fisheries sector, train scientific personnel, deliver scientific and technical innovations to businesses, the Fisheries Development Experimental Station was transformed into the Fisheries Research Institute and its branches will be opened in the Aydar-Arnasay lake system and other regions.

In order to finance research, selection and breeding, to develop modern feed recipes and assist in the introduction of advanced technologies in the fishing industry, the Fisheries Development Fund was established in the ¯Uzbekbaliksanoat‖ Association to form investment projects for the prevention and treatment of fish diseases.

In order to provide financial support to the Association ¯Uzbekbaliksanoat‖, its regional limited liability companies ¯Baliksanoat‖ and legal entities that are members of the association until January 1, 2023 to pay them a single tax on income from the cultivation, production and processing of fish products exemptions were granted.

The resolution also established a working group to develop and implement program measures for more comprehensive development of the fishing industry in 2017-2021, aimed at increasing the volume of fish farming and processing, providing with small fish, the introduction of modern methods of fish farming. was found. Due to the scientific organization of climatization of high-yielding fish species, the reproduction of African bream, tilapia, trout, Hungarian carp and sturgeon species has been established. This, in turn, will ensure the uninterrupted supply of a wide range of cheap and quality fish products to domestic markets.

Clearly, achieving these successes requires the timely and quality solution of a number of urgent and practical tasks. These include the widespread introduction of cage fishing, further strengthening the material and technical base of fish farming and fishing organizations, the establishment of the Faculty of Fisheries at

Tashkent State Agrarian University, the study of international experience in this field and the involvement of foreign experts in fisheries. issues such as engagement.

The President of the Republic of Uzbekistan said in his speech at the solemn ceremony dedicated to the Day of Agricultural Workers on December 9, 2017:

The -Uzbekbaliksanoat‖ Association has been established to revitalize another fishery sector that has been neglected for the past 20 years. Its system includes 3,600 fisheries. This year, more than 100,000 tons of fish have been raised on 580,000 hectares of natural and 28,000 hectares of artificial lakes.

Close cooperation has been established with these countries in the field of intensive fish farming, breeding and production of fish feed on the basis of Vietnamese and Chinese technology [5].

In recent years, the country has adopted and is implementing targeted programs aimed at increasing food production, including filling the domestic market with quality and affordable fish products, ensuring price stability for high-demand types of food.

As a result, more than 3,000 fish farms have been established across the country. In order to systematically support the development of fisheries, loans are allocated by commercial banks, which are aimed at the introduction of modern technologies of intensive fish farming in reservoirs and artificial devices in natural basins.

At the same time, it is necessary to take measures to attract foreign investment in the fisheries sector, make effective use of existing reservoirs,build new hatcheries and fish farms, increase fish farming on the basis of intensive technologies and strengthen the fodder base of fisheries and finance this sector. not being implemented.

In particular, the potential of artificial reservoirs, reservoirs and natural basins of the Aydar-Arnasay lake system in Kashkadarya, Tashkent and Syrdarya regions is not fully used and practical measures to fish in water bodies in all regions of the country are not implemented properly.

In order to increase the volume of fish farming on the basis of effective use of existing opportunities, further deepen economic reforms in this area, organize the systematic introduction of positive experience of foreign countries and master innovative technologies of intensive fish farming, the Resolution of the President of the Republic of Uzbekistan numbered PQ-3505 ―On Additional Measures to Increase Crop Production in 2018‖was adopted on February 3, 2018.

Resolution of the President of the Republic of Uzbekistan dated August 29, 2020 numbered PQ-4816 ―On measures to support the fishing industry and increase its efficiency‖ reflects the goals of supporting the fishing industry in the country, increasing the efficiency of fisheries and fishing farms. The resolution raised the work on rational and efficient use of land and water resources and the widespread introduction of intensive technologies in this area. In 2021-2022, in the conditions of water scarcity, fisheries that receive water from rivers and canals have gradually introduced the practice of extensive use of new resource-saving intensive technologies and secondary water sources in artificial reservoirs. Foreign internships have been organized to train and improve the skills of personnel in the field, to form knowledge and skills in the use of modern laboratory equipment. In the future, paid training courses will be organized to train heads and specialists of fisheries on intensive fish hatchery in large fishing clusters, indoor water circulation systems, cages, concrete pools and soil ponds. One of the benefits of the decision is the provision of special

assistance in obtaining loans through commercial banks for applicants wishing to grow fish in intensive households.

In order to ensure the implementation of Resolutions numbered PQ-5017 of the President of the Republic of Uzbekistan dated March 3, 2021 ¯On additional measures for further state support of the livestock sector‖ and PQ 5146 ¯On additional measures for the development of poultry and strengthening the feed base of the industry‖ dated June 14, 2021, the Cabinet of Ministers adopted the Resolution numbered 434 ¯On approval of the Regulation on the procedure for allocating subsidies to livestock, poultry and fisheries for products grown and sold by them‖ on July 12, 2021.

This Regulation states:

- Terms of subsidies to livestock, poultry and fisheries for products grown and sold by them;
- Documents required for the allocation of subsidies to livestock, poultry and fisheries for products grown and sold by them, the procedure for their consideration and decision-making on the allocation of subsidies;
- Grounds for refusal to grant a grant and the procedure for appealing the decision to refuse to grant a subsidy;
- Control over the targeted use of the allocated subsidy by the subsidy recipient [6].
- According to the regulations, no subsidies are allocated for livestock, poultry and fishery products sold for export.

Chapter 2 of this Regulation sets out the terms of the subsidy.

According to it, from June 1, 2021, the recipients of value-added tax subsidies will receive a subsidy from the national budget to fisheries - 3,000 soums per kilogram of intensively grown cold-water fish (salmon, trout and sturgeon), 1,000 soums for other species. marked.

At a meeting chaired by the President of the Republic of Uzbekistan on 20 December 2021 on ¯Measures to ensure food security, including the development of fisheries and increase the efficiency of cooperative fish farming‖ in the past five years in the fishing industry as a result of the project, the volume of fish farming will increase by 6 times, but these figures are not enough, the existing opportunities are not fully used, he said.

The urgency of fish farming is that, first of all, it is food.

At this meeting, the head of our state Shavkat Miromonovich said that the rise in food prices in the world, the threat of inflation, clearly shows that food security will remain the most pressing issue next year. Therefore, the governors of the regions should analyze the state of fish farming in their territory and systematically work to create all the conditions for entrepreneurs and households [7].

It was noted that in many regions of the country, the yield is still 3-4 tons per hectare, the volume of intensive fish farming in these areas does not exceed 10% of total production, and the task is to increase fish production to 600,000 tons next year.

Given that Uzbekistan currently has 54,000 hectares of water, it is possible to increase the volume of fish farming several times if approached with science. In other words, the current yield of 2-3 tons per hectare can be increased to 10-12 tons with the help of science. In this regard, the head of state gave

special instructions to involve scientists in the field. Recommendations were also made to use the experience of China, Vietnam and other foreign countries.

As of 2020, 3,850 cages have been installed in natural water bodies, and their contribution to fish farming is invaluable. In addition, 53 fish processing enterprises have been set up, producing canned fish, fish fillets, fish cutlets and lunches.

An increase in the volume of fish and fish products can be achieved through a comprehensive study of the current state of water bodies in the country and the organization of work in accordance with the recommendations.

Analysis of decisions and decrees on the accelerated development of the fishing industry in the Republic of Uzbekistan in 2017-2022 [24]

№	Resolutions and decrees	The aim and summary of the resolutions and decrees
1.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 124 from March 7, 2017 ¯On organizational measures to ensure the rational use of biological resources of the Aydar-Arnasay lake system‖	The purpose of this resolution is to ensure a rational use of fish resources of the Aydar-Arnasay lake system and the organization of effective management, conservation of biodiversity, development of fisheries, as well as a comprehensive approach to addressing issues related to fish reproduction in natural reservoirs.
2.	Resolution of the President of the Republic of Uzbekistan numbered PQ-2939 from May 1, 2017 ¯On measures to improve the management system of the fishing industry‖	The resolution was adopted to improve the management system of the fishing industry, increase the efficiency of fisheries and fishing organizations, expand production capacity for processing fish products, rational use of natural and artificial reservoirs, as well as the introduction of science-based methods and intensive technologies of fish farming. The resolution stipulates that the Ministry of Agriculture and Water Resources, the Ministry of Economy, the State Committee for Privatization and Development of Competition, the State Tax Committee, the State Committee for Ecology and Environmental Protection of the Republic of Uzbekistan and the Uzbekbaliksanoat Association of Ipoteka-Bank. The main tasks and activities of the ¯Uzbekbaliksanoat‖ Association were approved.
3.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 593 from August 7, 2017 ¯On measures for the lease of natural water basins to fishing farms and the establishment of the Fund for Fisheries	This resolution was made in pursuance of the Resolution of the President of the Republic of Uzbekistan from May 1, 2017 numbered PQ-2939 ¯On measures to improve the management system of the fishing industry‖, which approved the following 2 regulations: 1. Regulations on the procedure for allocation of natural watersheds to fishing farms, industrial fishing, calculation and collection of rent for the use of natural water bodies by fisheries.

	Development‖	2. Regulations on the procedure for formation and use of funds of the Fisheries Development Fund of the Association ¯Uzbekbaliksanoat‖.
4.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 719 from September 13, 2017 ¯On measures for integrated development of the fishing industry‖	This resolution is based on the implementation of the Resolution of the President of the Republic of Uzbekistan from May 1, 2017 numbered PQ-2939 ¯On measures to improve the management system of the fishing industry‖, as well as the effective organization of integrated development, fishing, fish farming and fishing adopted in order to introduce new technologies and attract preferential credit resources. The resolution approved a program of measures for the integrated development of the fishing industry in 2017-2021 (hereinafter referred to as the Complex Program) and target parameters for the development of the fishing industry in 2017-2021.
5.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 845 from October 18, 2017 ¯On measures to strengthen the feed base of livestock and fisheries‖	The resolution was adopted in order to strengthen the feed base of the industry on a systematic basis, to provide livestock, fisheries and organizations with high quality feed.Annex 1 to this resolution is the Regulation on the procedure for sale of wheat from the state resources to the subjects of business of animal husbandry and fishery for the food purposes, According to it, business entities in the field of animal husbandry and fisheries purchase wheat from state resources for food purposes in accordance with the approved register of buyers, provided that they sell livestock and fishery products in volumes and prices approved by the Ministry of Economy and Industry and the Ministry of Agriculture.
6.	Resolution of the President of the Republic of Uzbekistan numbered PQ–3505 from February 2, 2017 ¯On additional measures to increase fish production in 2018‖	The resolution was adopted to increase the volume of fish farming, deepen economic reforms in this area, organize the systematic introduction of positive experience of foreign countries and master innovative technologies of intensive fish farming, and set priorities for the development of the fishing industry.
7.	Resolution of the President of the Republic of Uzbekistan numbered PQ-3657 from April 6, 2018 ¯On additional measures for the accelerated development of the fishing industry‖	The resolution was adopted to create conditions for further development of the fishing industry, improve the system of training and retraining, improve the quality of scientific and innovative research and development, widely implement their results in practice. Proposals of the State Committee for Competition Development, Tashkent Region Khokimiyat and ¯Uzbekbaliksanoat‖ Association to establish a free economic zone ¯Fish Producer‖ on the basis of property and land plots, including water basins, transferred to the Lower Chirchik District Khokimiyat of Tashkent

		Region by a court decision.
8.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 572 from July 24, 2018 ¯On measures to effectively use the existing opportunities for fish farming in Namangan region‖	The resolution was adopted to ensure food security in the country, increase fish production, scientifically organize the technology of fish farming and more effective use of existing opportunities for fish farming along the Naryn River, which flows through the Namangan region.
9.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 606 from July 31, 2018 ¯On measures to further improve scientific activities in the field of fisheries‖	This resolution was adopted to ensure the implementation of the Resolution of the President of the Republic of Uzbekistan from April 6, 2018 numbered PQ-3657 ¯On additional measures for the accelerated development of the fishing industry‖. According to the resolution, the Academy of Sciences of the Republic of Uzbekistan, the Ministry of Innovative Development, the Ministry of Agriculture and the Association of Uzbekbaliksanoat will further improve the activities of the Fisheries Research Institute under the Ministry of Agriculture of the Republic of Uzbekistan. Proposals for international cooperation with research institutions were approved.
10.	Resolution of the President of the Republic of Uzbekistan numbered PQ-4005 from November 6, 2018 ¯On additional measures for further development of the fishing industry‖	This resolution was adopted in order to gradually establish and encourage intensive fish farming in the country, the efficient use of available water resources, the widespread introduction of innovative ideas, scientific developments, modern technologies and scientific achievements, further support the fishing industry. The resolution was also developed by the Ministry of Agriculture, the Ministry of Economy, the State Tax Committee, the Uzbek Fish Industry Association, the Council of Ministers of the Republic of Karakalpakstan and regional khokimiyats. The forecast parameters for the supply of mixed fodder and mineral fertilizers (ammophos), the establishment of breeding ponds, the cultivation of fish fry, the commissioning of processing and storage facilities for fish products have been approved.
11.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 280 from May 12, 2020 ¯On approval of regulatory legal acts regulating the allocation of state subsidies to the livestock sector‖	This decision was made in accordance with the Resolution of the President of the Republic of Uzbekistan from January 29, 2020 numbered PQ-4576 ¯On additional measures of state support of the livestock sector‖. In accordance with the second appendix to this document, the Regulation on the procedure for allocating state subsidies for intensively farmed fish and breeding mother fish imported into the territory of the Republic of Uzbekistan in 2020-2022 by member farms of the Association ¯Uzbekbaliksanoat‖ was approved.

12.	Resolution of the President of the Republic of Uzbekistan numbered PQ-4816 from August 29, 2020 ¯On measures to support the fishing industry and increase its efficiency‖	This resolution was adopted in order to support the fishing industry in the country, increase the efficiency of fisheries and fishing farms, ensure the rational and efficient use of land and water resources in this area and the widespread introduction of intensive technologies. The decision stipulates that from 2020, the tax on the use of water resources by fish farms in artificial reservoirs will be calculated at the rates established for irrigation of agricultural lands, based on the difference between the volume of water received and withdrawn from the water body.
13.	Resolution of the President of the Republic of Uzbekistan numbered PQ-5017 from March 3, 2021 ¯On additional measures for further state support of the livestock sector‖	The decision was made to ensure the sustainable supply of meat, milk, eggs and other livestock products in the domestic market, expand the fodder base of livestock, poultry and fisheries, increase the production of competitive products in domestic and foreign markets and the widespread introduction of intensive technologies.According to the resolution, from March 1, 2021, entrepreneurs who use the compensation and guarantee of the State Fund for Entrepreneurship Support, who repay their loans on time in the field of livestock, poultry, fisheries and rabbits, will be allowed to use the loan guarantee until their loan indebtedness is fully repaid.
14.	Resolution of the Cabinet of Ministers of the Republic of Uzbekistan numbered 434 from July 12, 2021 ¯On approval of the Regulations on the procedure for allocating subsidies to livestock, poultry and fisheries for products grown and sold by them‖	This resolution was adopted for the purpose of legal regulation in accordance with the Resolution of the President of the Republic of Uzbekistan numbered PQ-5017 from March 3, 2021 ¯On additional measures for further state support of the livestock sector‖ and PQ-5146 from June 14, 2021¯On additional measures for the development of poultry and strengthening the feed base of the sector‖, as well as, for the purpose of legal regulation of relations in the field of allocation of subsidies to livestock, poultry and fisheries for products grown and sold by them.
15.	Resolution of the President of the Republic of Uzbekistan numbered PQ-83 from January 13, 2022 ¯On additional measures for further development of the fishing industry‖	The resolution was adopted to further develop the fishing industry, increase the range of fish products, increase export potential, effectively use the potential of existing basins, increase the volume of fish farming on the basis of intensive technologies and strengthen the feed base of fisheries. According to it, the forecast parameters of fish farming in the Republic of Karakalpakstan and the regions in 2022 in accordance with Annex 1; The forecast parameters for the intensification of artificial (extensive) reservoirs and fishing volumes in 2022 were approved in accordance with Annex 2.
16.	Decree of the President of the	The decree is aimed at further improving the welfare of our people,

	Republic of Uzbekistan numbered PF-60from January 28, 2022 ¯On the new Development Strategy of Uzbekistan for 2022-2026‖	transforming sectors of the economy and accelerating the development of entrepreneurship, ensuring human rights and interests and building an active civil society in recent years on the basis of the principle ¯For Human Dignity‖ adopted in order to set priorities for reform. This document contains seven priority areas, the third of which is aimed at accelerating the development of the national economy and ensuring high growth rates.

In conclusion, it should be noted that the Republic of Uzbekistan and its regions consistently should support small businesses and private entrepreneurship, as well as small business and private entrepreneurship in the fishing industry, to consistently produce quality products and services that can compete in the domestic and foreign markets. it must become a strong economic sector that can be established

Conclusions and suggestions

It will ensure the transition of the legal framework for the development of agricultural fisheries, i.e. the system of formation of the agricultural fishery sector on a scientific basis to new legal forms that can meet the requirements of the times.

In our opinion, it is expedient to take the following measures to form a legal system for the development of agricultural and fisheries in the Republic and its regions:

1. An integrated national program for further liberalization of all areas of regulation of agricultural and fisheries activities in the field of fishery, i.e. the National Concept of Liberalization of Fisheries in the Republic of Uzbekistan should be adopted.

2. Improving the legal framework for solving existing problems in the provision of material and technical resources to the subjects of the SBPE in the field of agriculture and fisheries;

3. It is necessary to develop not only traditional but also innovative directions in the field of agriculture and fisheries, and in turn to strictly control the legal basis for granting long-term venture loans to small businesses operating in such areas on preferential terms and to ensure that there are no artificial barriers to benefits. provide the basis;

Based on the world practice, the introduction of intensive fish farming in river basins will allow to fully meet the growing demand of the population for fish products through aquaculture-intensive fishing in the country, as well as to provide employment.

We believe that the consideration and implementation of the above conclusions and recommendations will further increase the employment of the population in our country, in particular, small business and private entrepreneurship in this process.

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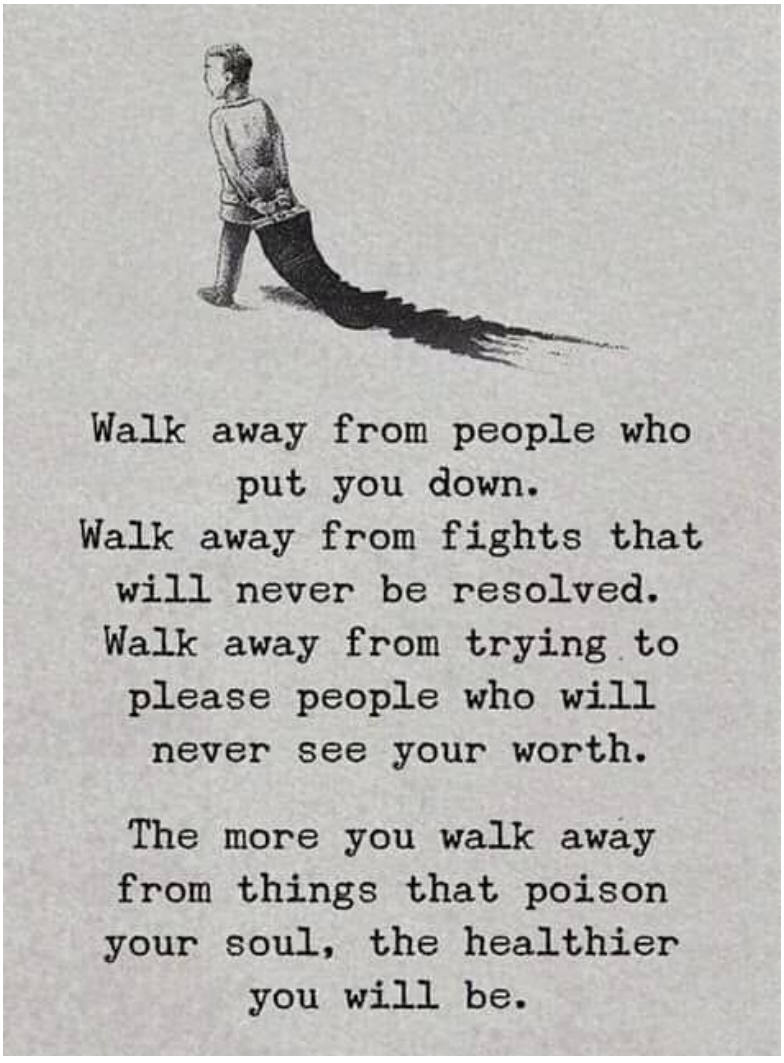

USING THE PRINCIPLES OF MARKETING IN THE PRODUCTION AND SALE OF HANDICRAFT PRODUCTS

Gulbakhor Akhmadjanovna Solieva[1], Ranokhon Makhmudovna Karimjanova[2]

ABSTRACT

The article discusses the relevance of the development of the handicraft products market and the specifics of marketing in it. Approaches to the market of handicrafts, special methods and principles of marketing that are used in this area are also expressed.

Keywords: *marketing, handicraft market, marketing purposes, marketing principles, marketing approaches.*

Introduction

Craft is one of the oldest forms of human production activity, small-scale production based on the personal skill of the worker and the means of manual labor, which makes it possible to produce high-quality, highly artistic products. The main part of handicraft goods is represented by small enterprises or private entrepreneurs. Consumers looking for such unique, one-off, limited goods are in large numbers, and they are served by trade and craft enterprises that produce goods. These businesses attract artisans and engineers looking for new products and market opportunities.

In order to accelerate socio-economic development in our country, much attention is paid to improving the market for handicrafts and handicrafts.

Numerous scientific studies are being carried out on the formation of a market for goods and services in the field of crafts and the widespread use of marketing, increasing the potential of crafts and its effective use, improving the mechanism of state support for the development of crafts in a market economy. In this regard, a number of regulatory documents have been adopted in our country, which define the tasks to be performed. In particular, the creation of centers for the development of handicrafts in cities and regions with widely developed folk crafts and creative traditions, the restoration and further development of unique types of handicrafts, the formation of a market infrastructure for supplying consumers with handicraft products; It is planned to stimulate the export of handicrafts and implement a number of similar measures.

Main part

Handicraft activity – based on historically established, special knowledge, skills, secrets, methods of the people, using manual labor, equipment and small mechanized means, based on traditional and modern requirements, household, household, creative or professional activities in production (service) and production of art objects.

Handicrafts are products of labor prepared for sale, based on the widespread use of manual labor of a consumer nature and the involvement of artisans. Handicraft products, in addition to performing an aesthetic

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function, not only satisfy the needs of their owners, but also meet the requirements of art, because craftsmen with a more artistic approach are involved in their production. They have a high aesthetic value and educate the taste of a wide audience.

The originality of marketing in the market of handicraft goods is determined by the characteristics of these goods, which combine two functions: utility and aesthetic (beauty). The utility function makes them commodities, and the aesthetic function makes them works of art.

There are also resellers for the delivery of handicrafts from producer to consumer. Therefore, here we can describe the marketing of handicrafts as a complex system dependent on the actions of actors (producers, buyers, sellers) in the market, which can be considered from two sides: on the one hand, study the market for handicrafts, the demand for these products, the tastes and habits of buyers, study their requirements for this product, direct the production of handicrafts to these requirements; on the other hand, to influence the market for handicrafts, to shape the demands and needs of customers.

In the market for handicrafts, marketing objectives are activities aimed at meeting the demand of buyers for handicrafts and generating income.

In order to achieve marketing goals in the market for handicrafts, specialists from the marketing departments of manufacturing enterprises conduct research and forecast the market for handicrafts. Researches the internal and external environment, develops the strategy and tactics of the handicraft market, product development and sales, pricing and service measures.

At the same time, the marketing activities of handicraft enterprises are based on three main principles:

- Handicraft enterprises work to meet the needs of buyers for these goods;
- The activities of a handicraft enterprise should be aimed at solving the main task-meeting the needs and requirements of customers;
- A craft enterprise must operate and make a profit.

Special methods of marketing activities of handicraft enterprises:

- Analysis of the external environment and determination of favorable or unfavorable conditions for the development of handicraft enterprises;
- Analysis of real and potential buyers of handicraft products;
- Study of existing handicrafts and planning of promising handicrafts;
- Planning the movement and sale of handicraft products;
- Formation of demand for handicraft products and sales promotion, their advertising;
- Determining the pricing policy for handicrafts, such as market planning and handicraft control.

One of the main tasks of marketing in any product market is the development of products and the formation of a product range. This activity takes into account the following main situations:

- The duality of handicrafts. When we talk about handicrafts, we imagine some real material thing. In fact, the buyer, firstly, accepts handicrafts for their usefulness (flower vase), and secondly, for aesthetic pleasure.

The buyer considers handmade products from different points of view-style, shape, material, color, quality, price. Craft businesses design their products for a pre-defined customer group in order to attract loyal customers.

- The life cycle of a handicraft is the period during which handicrafts are available on the market. It is known from the life cycle of a product that there is no eternal product on the market. Like other goods, handicrafts go through the following stages:
- Product development;
- Market penetration;
- An increase in sales as a result of an increase in demand for goods;
- Saturation of the market with goods, a decrease in demand, a decrease in sales;
- A sharp decline in sales, a decrease in profits and the withdrawal of goods from the market.

Product development is the introduction of new ideas, new approaches and methods of work, the development of test samples to create a new look for handicrafts.

Bringing handicrafts to market. The purpose of this phase is to introduce a new product. Usually at this stage, the volume of sales of handicrafts is small, the profit barely covers the costs.

An increase in sales as a result of an increase in demand for goods. Customers recognize new handicraft products, they like them, the demand for goods increases and profits increase. The growth in sales volumes for this product will be higher than for the same handicraft products.

Maturity period of handicrafts – when the market is saturated with this type of handicrafts, the sales growth rate decreases, the product becomes traditional, competition increases and profits decrease.

Reduced demand for handicrafts. Buyers are losing interest in this type of handicraft, and there has been a steady decline in demand, sales and profits. In this situation, an enterprise producing handicrafts decides to update its marketing program to change its position in the market or to stop the production of these products.

Discussions and results

The conducted research shows that in the marketing approach in the production and sale of handicrafts, attention should be paid to the following:

1. Trademark. In order for handicraft products to take their rightful place in the domestic and foreign markets, handicraft products must have a trademark. A trademark is a duly registered designation of a handicraft and provides protection for handicrafts from counterfeiting. A trademark has a number of benefits.

Firstly, the trademark makes the handicraft products easily recognizable. This will be an incentive to improve product quality.

Secondly, brands attract customers, they trust them, the brand gives the product an emphasis on the product of the highest quality.

Thirdly, there is no need for additional advertising for customers who trust the brand, which allows craft enterprises to save administrative and advertising costs.

2. Formation of the assortment. This is part of the handicraft market sales policy, which in turn is part of the marketing program.

Formation of the assortment of handicrafts consists of the following stages: determination of current and prospective needs of buyers in handicrafts, study and analysis of consumer behavior; assessment, comparison of handicrafts and similar products with similar products of competitors according to the approach (view) of buyers; increase or decrease in the range of products, taking into account the creation of new handicraft products and the improvement of existing ones.

Because most handicrafts are art, cultural factors have a significant impact on how these products are produced and marketed. These include: culture, subculture and class.

Culture is a set of beliefs, norms, values and customs that form the basis of behavior in a cultural society. The culture and values that influence the trade in handicrafts are constantly changing and adapting to the external environment.

A subculture is a group of consumers who share similar values that differ from the values of society as a whole. People of different nationalities live on the territory of our country, each nation has its own culture. Folk crafts traditionally develop in the places of residence of these peoples, and folk crafts are consumed there without conflicting with other cultures.

There are similarities and differences in the purchasing behavior of social classes. The division of society into such classes is determined primarily by the level of income. However, other factors such as occupation, source of income, education, health status and other factors are also taken into account.

In order to offer craft products to a particular class, marketers must study the tastes and habits of that class. What the middle class needs in everyday life is not used in the upper class and vice versa.

Final part

In conclusion, we can say that for the further development of the market for handicrafts, it is important to conduct deep and wide marketing research.

We consider it appropriate that marketers in the development of trade in handicrafts should do the following: study the motives (incentives) that determine the desire to satisfy the needs of the buyer; convey information about the product that attracts the attention of buyers; the formation of a positive opinion of buyers about the uniqueness, originality, individuality of handicrafts and so on.

Also in the development of the market for handicrafts: the provision of consulting services on the organization and conduct of activities of handicraft enterprises, the formation of a unified system that provides information on suppliers of raw materials necessary for the production of handicrafts, the organization of trainings and seminars with the effective use of modern Internet networks for the development of the industry; the use of new and convenient methods of advertising, the study of foreign experience in increasing the volume of trade in handicrafts, the application in practice of its optimal aspects.

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METHODS FOR EVALUATING THE EFFECTIVENESS OF THE MARKETING ACTIVITIES OF AN ENTERPRISE, ANALYSIS AND RESULTS

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ABSTRACT

This article presents a theoretical and practical analysis of market activity assessment of enterprises. The market activity of grain processing enterprises in Namangan region was evaluated and the importance of PEST analysis in their activity was presented.

Keywords: *enterprise, assessment methods, marketing, PEST analysis, market share, income, cost.*

Introduction

Effective organization of marketing activities is important for enterprises to ensure competitive advantage in the market. One of the important factors of increasing the economic potential of enterprises is determined by marketing potential. Through marketing, the enterprise allows to identify the prospective market segment and establish an effective relationship with them.

Marketing aims to study the ways of activating economic relations in the market, the problems of production and sale of goods, quickly adapting to changes in the market, creating competitive new goods and organizing their production, forecasting the business environment, and developing advertising.

It is important to adapt the products produced by the enterprises to the consumer demand, to improve the products taking into account the competition. Today, the income and desires of consumers are changing from year to year, which requires the development of more promising marketing strategies in this market. As a result of increased competition in the market, the main task of marketing is to study the demand of the population for high-quality and modern design products, to increase the range of products. For this, first of all, it is necessary to evaluate the potential of marketing activities of the enterprise.

The main part

As a result of the systematic analysis of existing approaches to the evaluation of marketing potential, conducted by E.N. Kolisnik, a model of increasing marketing potential was proposed. This model evaluates the internal and external factors affecting the marketing activities of the enterprise, its opportunities in the market and its competitive position.

To evaluate the marketing activity of enterprises, we offer an evaluation methodology that describes the state and development of all factors affecting it. We believe that the following factors directly affect the company‘s marketing potential:

I_{mpc} – marketing communication potential;

I_{mpc} – market share potential;

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I_{fn} – financial potential.

To analyze the marketing potential of the enterprise, we use the geometric mean indicator. To evaluate the potential of marketing communication (I_{mpc}), we use indicators that describe marketing communication activities.

In order to determine the level of organization of marketing communication activities of the enterprise, it allows to determine the expenses spent on marketing communication activities taken by the company during a certain period by dividing it by the net profit of the same period and is calculated by the following formula:

C_{tmc} – total marketing costs;

A_{np} – profit.

The effectiveness of marketing communications directly depends on the volume of sales of goods and services. The enterprise is determined by the number of activities carried out by marketers and the ratio to the total number of activities and is calculated by the following formula:

Q_{nmr} – the number of actions taken on marketing communications;

Q_{nmo} – total number of events.

The index of marketing potential reflects the integrated index of its separate indicators. In order to evaluate the market share of the enterprise, we evaluate the indicators describing the level of competitiveness of the company in the market.

We determine the ratio of the size of the products developed by the enterprise to the size of the total products on the market:

R_{pt} – is the production volume of the enterprise;

R_{apt} – is the size of all products on the market.

It is desirable to determine the indicator of consumer behavior. The output volume and population and has the following formula:

M_{npt} – the volume of products produced by the enterprise;

M_{sp} – the number of the country‘s population.

The cost of attracting and retaining existing customers is significant. Introducing new types of products involves high costs, so effective advertising of existing products often becomes an attractive alternative:

C_{cme} – costs of marketing activities;

C_{sc} – selling expenses.

The enterprise requires the implementation of certain investments in the development of the potential of its personnel, which in time will lead to an increase in labor productivity in the enterprise, the emergence of new ideas and proposals:

Q_{mstc} – marketing staff training costs;

Csc – selling expenses.

The index of financial potential reflects the integral index of its individual indicators. The integrated index of marketing potential of the company (Iimc) is calculated as the geometric mean value of the indicators of marketing communication potential.

Analysis and results

Tree large enterprises are processing grain and grain products in Namangan region. By 2022, 22,155 tons of grain from Mingbulok district, of which 1,440 tons are for seeds, 17,304 tons of commercial grain, 4,851 tons are planned for temporary storage (for sale on the stock market) and 15,855 tons of grain from Namangan district, of which 3,220 are seeds. tons, commercial grain 9868 tons temporary storage (for sale on stock market) 2767 tons are planned. Total grains grown in Kosonsoy and Yangikurgan districts are not allocated for seed. These grains are destined for sale only to commodity grain and stock market. Market subjects producing flour products in Namangan region include ¯Uchkurgandonmahsulotri‖ JSC, ¯Popdonmahsulotri‖ JSC, ¯Namangandonmahsulotri‖ JSC, individual entrepreneurship, households, small enterprises. The market share of ¯Uchkurgondon products‖ JSC among the market entities in the region producing flour products was 49.5 percent in 2020, and by 2021 this figure has decreased to 13.4 percent. ¯Namangandon Products‖ JSC produced 44,554 tons of flour in 2020, and by 2021, this indicator has increased by 117.6 percent, and the market share has increased from 34.4 to 40.4 percent. In 2021, the JSC ¯Popdon products‖ enterprise produced 20,100 tons of flour, and its market share was 15.5 percent, unchanged compared to 2020. 200 tons of flour products were produced by individual entrepreneurs in 2021, an increase of 200% compared to 2020. In 2021, 1150 tons of flour products were produced by small enterprises, which increased by 214.5% compared to 2020. It can be seen that among the market entities producing flour products in the region in 2021, ¯Uchkurgandonmahsuloteri‖ JSC has the largest share, totaling 42.9%, ¯Namangandonmahsuloteri‖ JSC 40.4%, ¯Popdonmahsuloteri‖ JSC 15.5%.

Table1 Market share analysis of enterprises producing flour products in Namangan region

№	Market entities	2020		2021		% of 2021 to 2020
		Tons	Share of total (%)	Tons	Share of total (%)	
1	¯Uchkurgondon products‖ JSC	64183	49,5	55645	42,9	86,6
2	¯Popdon products‖ JSC	20090	15,5	20100	15,5	100,01
3	¯Namangandon products‖ JSC	44554	34,4	52400	40,4	117,6
4	Sole proprietorship	100	0,1	200	0,2	200
5	Household	100	0,1	100	0,1	100
6	Small businesses	536	0,4	1150	0,9	214,5
	Total:	129563	100	129595	100	100,02

Secondly, it is important to use the PEST analysis to clarify the risks in the external environment when evaluating the company‘s activities. The company can identify risks in the external environment through PEST analysis. In order to identify, assess and reduce the impact of these risks, the company analyzes its activities. PEST analysis also begins with collecting primary data about the company‘s external environment. PEST analysis enables us to analyze the organization of the goods market: producers, suppliers, consumers, dealers, competitors, the market and other situations. This analysis increases the possibility of

developing a competitive strategy that is acceptable for the enterprise. For this purpose, we evaluated the impact of political ((politics), economic (economics), technological (technology), socio-cultural (socio-culture) factors with 3 scales. In this case, the impact on services on the 1st scale is almost not noticeable, on the 2nd scale, the development of services is partially affected may affect, the influence of the factors identified in scale 3 may be significant.

In this PEST evaluation system, we used the following formula (11):

O_{td} – the degree of influence of the factor;

R_{ud} – the average level of the rating; Ftd – level of influence of the factor; Cumulative level of F_n+T_d factor. Through this evaluation method, not only the evaluation, but also the analysis of the performance of the enterprise will appear.

Conclusions and recommendations

Evaluation of marketing potential refers to the possible opportunities for the future development of the enterprise. In the methodology of evaluating the marketing potential of the enterprise, the factors of marketing communication potential, personnel potential, market share potential, and financial potential are considered important factors. The enterprise will be able to develop strategic plans by evaluating its internal activities through SWOT analysis and external activities through PEST analysis.

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DETERMINING THE VALUE OF THE ECONOMIC POTENTIAL OF PLACES OF ECOLOGICAL TOURISM IN THE SAMARKAND REGION.

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ABSTRACT

Ecotourism has become one of the areas of great interest among world economists. Therefore, several methods are used to study this area. The easiest and widely used method is the "Travel cost" method. In this article, the scope of this method, why it is necessary to use this method, as well as the advantages of this method and the analysis, conclusions and suggestions on the example of ecological tourism places of Samarkand region are given.

Key words: *Ecotourism, Travel, Travel Costs, Travel Cost Method, Place, Ecosystem, Method.*

Introduction:

Evaluation of ecotourism objects is currently of great importance in investment projects, leasing ecotourism objects, forensic conclusions in case of damage to environmental objects.

This area also has its own difficulties and problems, namely:

- The use of natural habitats for tourism purposes is not sufficiently regulated and, as a result, their destruction;
- As a result of the fact that the value of natural objects is not taken into account in the investment projects of eco-tourism places in the development of eco-tourism, they are not preserved by users and mystics;
- Lack of development of organizational and economic mechanisms for the implementation of an integrated approach to the development of ecotourism.

From this point of view, we have studied and analyzed several methods for assessing the value of ecotourism objects.

The purpose of the study is to use the best international experience in the development of ecotourism in the Samarkand region, improve the mechanisms for the effective organization of ecotourism in natural habitats, including protected natural areas, recommend economic assessment methods and calculation formulas adapted to local conditions.

The objectives of the study are as follows:

- Substantiation of trends, socio-economic significance and the objective need for the development of ecological tourism;
- Improvement of methods for economic evaluation of ecotourism objects, development of a system of methods adapted to local conditions;
- Analysis of the current state of tourism in Samarkand, assessment of the resource potential of ecological tourism in the region;

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- Bring practical accounting books of the selected method into the assessment.

One way to solve the problem of estimating the cost of a particular attraction is to determine the cost of travel from the point of arrival of the visitor to the site for visitors, regardless of its nature and the presence of an entrance fee.[1].

Research methodology:

If only one characteristic differs between two locations, then multiple location models are used to determine the value of that location. However, in practice there are several distinguishing features. The ¯individual choice method‖ model is the personal choice of the visitor as a characteristic of the territory. People make choices based on a combination of many characteristics of a place**.**.

He used the method of transportation costs to assess the recreational situation in the area. This method is used to evaluate the economic effect of the following results:

- Access to recreation areas;
- Refusal to abandon recreational areas;
- Adding new recreation areas;
- Mmproving the quality of the environment in recreational areas [3].

According to the Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 828 dated September 30, 2019 "On the effective use of the tourist potential of the Samarkand region and measures for its development", based on the tasks set for the development of ecotourism and recreational tourism in the Samarkand region, as well as in rural areas specified in decision, especially ¯In the villages of Amonkoton, Koratepa, Yukori Tersak, Tersak, Orta Tersak, Aksoy, ecotourism complexes, restaurants, etc., work was carried out to assess and forecast prospects.

We selected the following objects as objects for our scientific study by selective sorting.

Table 1 Ecotourism objects selected from rural areas of Samarkand region

№	Name of ecotourism objects	Location address
1.	Zarafshan National Park	Jomboy region
2.	World of fairy tales	Ishtikhan region
3.	Teshiktosh	Urgut region
4.	Mingarcha	Urgut region
5.	Okbuiro	Samarkand region
6.	Hazrati Dovud	Nurabad region

* Source: chosen by the author.

Using the regional travel cost method, a researcher can estimate the value of an asset by looking at actual visitors or users of a place or asset rather than potential visitors or users. The level of analysis focuses on the areas where people live in relation to the location of the asset. In the course of our research, we divided the resort into 5 regions, taking into account the distance from which visitors come.

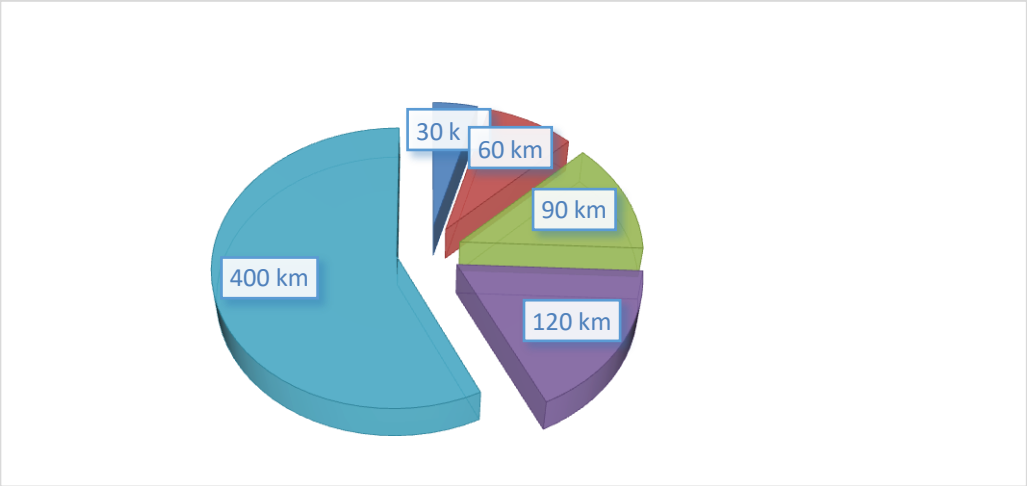

Figure 1: Division of ecotourism objects into regions

In region A, the average travel time is half an hour, and the distance is up to 30 km. In area B, the average travel time is 1 hour and the distance is 60 km. In area C, the average travel time is about 1.5 hours and the distance is 90 km. In area D, the average travel time is 2 hours and the distance is 120 km. In region E, the average travel time is 3.5 hours and the distance is up to 400 km. According to the results of our observations and questionnaires during our study, the number of annual visits was as follows in 6 institutions.

Table 2 Number of visitors to ecotourism sites (persons)

№	Zone	The world of fairy tales	Khazrati-Dovud	Zarafshan National Park	Teshiktosh	Mingarcha	Akboyro
1	A zone	13720	4900	4704	4060	6216	4312
2	B zone	10388	24780	3136	7980	14280	12740
3	C zone	980	2520	0	0	1176	4508
4	D zone	0	440	0	0	0	2156
5	E zone	0	14840	0	0	840	588
	overall	25088	47480	7840	12040	22512	24304

*Source: Authoring based on survey results

From the table data, we see that the World of Fairy Tales object is visited on average by 25,088 people in 3 regions, Hazrat Davud is visited on average by 47,480 people from 5 regions, Zarafshan National Park 2 on average, 7,840 people from each region, Teshiktash was visited on average 12,040 people from 2 districts, Mingarcha was visited by an average of 22,512 people, and in total Akboyro was visited by 24,304 ecotourists from 5 districts.

When using the transportation cost method, it is important to ensure that the average hourly wage rate is accurately measured as well as the marginal operating cost per vehicle. With this in mind, based on the results of our surveys conducted in 6 sites, we took into account the transport costs of visitors and found that on average each traveler spends 505 soums per 1 km.

We calculated the average hourly wage rate by region, taking into account the fact that the objects are located in different places.

Table 3 The size of wages in the regions. (sum)

№	Zone	The world of fairy tales	Khazrati-Dovud	Zarafshan National Park	Teshiktosh	Mingarcha	Akboyro
1	A zone	10850	8850	33575	12430	12430	20000
2	B zone	11000	15000	9720	11725	11971,4	11110
3	C zone	20000	13230	0	0	10000	12400
4	D zone	0	10000	0	0	0	11000
5	E zone	0	14666,7	0	0	11500	13400

* Source: Author's development based on survey results

From the data in the table it can be seen that the hourly wages of ecotourists visiting the World of Fairy Tale ecotourism facility is 10,850 soums in zone A, 11,000 soums in zone B, and 20,000 soums in zone C. Hazrat Davud has the lowest indicator in region A, and the highest rate in region B. Ecotourists visiting the Zarafshan National Park from region A amount to 33,575 soums, this high figure is also due to the fact that foreign citizens visit the ecotourism site from the region, and those visiting from region C amount to 9 720 soums. For the Teshiktosh facility in zone A, it amounted to 12,430 soums, in zone B - 11,725 soums. For the Mingarcha facility in section A, it amounted to 12,430 soums, in section B - 11,971.4 soums, in section C - 10,000 soums, in section E - 11,500 soums. In our last site, Okboiro, the average hourly earnings of ecotourists coming from 5 regions were in region D, while the highest was in region E.

Now he can calculate the cost of ecotourism facilities for each area to get the total value of the asset. We now use the following simple equation to calculate asset cost per visit (V):

$$V = ((T \times w) + ((D \times v) + Ca) \times Va$$

where,

T = travel time (in hours)

w = average wage rate (£/hour)

D = distance (in km)

v = marginal vehicle operating cost

Ca = asset input value

Va = average number of visits per year [4].

Table 4 The total cost of ecotourism facilities (thousand soums).

№	Zone	The world of fairy tales	Khazrati-Dovud	Zarafshan National Park	Teshiktosh	Mingarcha	Akboyro
1	A zone	452765,4	74239,4	132434,4	61515,2	94178,6	65336,8
2	B zone	685619	750849	135798,5	241805,7	432695,9	386033,1
3	C zone	97050	114553,8			53464,2	204907,2
4	D zone		26684				130675,6
5	E zone		2997731,3			169720,2	35976,6
	Total	1235434,4	3964057,6	26232,9	303320,9	750059	822929,3

*Source: author's analysis based on survey results

Thus, the average annual cost of the object of ecotourism "World of Fairy Tales" is 1235434.4 thousand soums, Hazrat Davud - 3964057.6 thousand soums, Zarafshan National Park - 26232.9 thousand soums, Teshiktosh - 303320.9 thousand soums, Mingarcha - 750059 thousand soums, Akboyro - 322929 thousand soums. soums for the amount of soums.

It can be seen from this that tourists visiting ecotourism sites increase the level of the cost of this object during the year. From this point of view, we can calculate the entrance fees to ecotourism sites by keeping track of the expenses of visitors from each region.

Table 5 Entrance fees to ecotourism facilities (sum).

№	Zone	The world of fairy tales	Khazrati-Dovud	Zarafshan National Park	Teshiktosh	Mingarcha	Akboyro
	Оплата за 1 человека	49243,5	83488,2	34213,1	25192,6	33317,1	33858,4

*Author's analysis based on the results of the survey

According to the ledgers in the table, the entrance fee to the "World of Fairy Tales" is 49,234.5 soums, "Hazrat Davud" - 83,488.2 soums, "Zarafshan National Park" - 34,213.1 soums, "Teshiktosh" - 25,192 soums, 6 sum. in Mingarcha up to 33 317.1 soums, in Akboyra up to 33 858.4 soums.

There are a number of limitations associated with the method of estimating travel expenses. These are the following:

1. Difficulties in Measuring the Cost of Visiting a Site Measuring the cost of visiting an ecotourism site or destination can be very difficult. This is due to the opportunity cost associated with travel time. If all people

have the same opportunity cost, the estimated cost is accurate. However, if people have different location access, it is more likely that the measurement will be inaccurate.

For example, the opportunity cost of travel time for a person to enter a resort is 35,000 UZS per hour. However, the opportunity cost of another person's hourly wage is only UZS 8,000. This is problematic for MCRs because individual opportunity costs vary, including the cost of time spent in a particular location, which changes the price faced by different people by different amounts.

2. The willingness to pay assessment used in the IQR is designed to be comprehensive, not specific. Because the ICR provides only the price or cost associated with the cost of visiting the facilities or resort, it does not represent all costs incurred for the entire location. However, in evaluating a place, we can evaluate a certain aspect of the place, an aspect of general excellence. For example, we may want to evaluate fish ponds in a park rather than the entire park.

3. Without taking into account the marginal cost of other additional goods. The travel expense method does not take into account the costs associated with the purchase of additional goods that may be needed to use the facility. For example, people who go to the park spend money on things that they can take with them to play football or go for a walk. In addition, persons entering the resort can take camping equipment and tents with them. The marginal cost of using this equipment should be included in the estimated price.

4. Multi-purpose or multi-purpose trips. People may arrive at a resort in the morning and want to go somewhere else or do other things in the afternoon.

5. The cost of the trip. Perhaps the journey itself can be valuable to a person. If so, the ecotourist is not interested in how much it costs to travel to the site.

6. Anticipated reactions to price changes. The PR method, regardless of its composition, assumes that people respond to price changes. For example, the MKR does not take into account how a 10,000 UZS increase in the fare will affect the number of people traveling. [5].

Conclusions and suggestions:

The development of ecotourism cannot but have a positive impact on the socio-economic development of rural areas where ecological settlements are located. The development of the service sector leads to an expansion in the number and size of economic entities, thereby increasing the employment and income of women and youth. Newly built catering and entertainment facilities will enhance the appearance of communities and expand the range of services provided to local residents, which will serve to reduce poverty and increase prosperity in rural areas. At the same time, the overuse of ecological places leads to their destruction, and it is necessary to develop an economic and organizational framework to optimize the flow of tourists coming to these places. In addition, ecological habitats used by humans, in addition to their natural restoration potential, require constant cleaning and restoration activities at the expense of income from it. Improving the methods for determining the price ("entrance ticket") for the use of ecotourism facilities, on the one hand, will allow maintaining their condition at the level of restoration, not exceeding the maximum number of users, and on the other hand, in order to maximize income from this facility.

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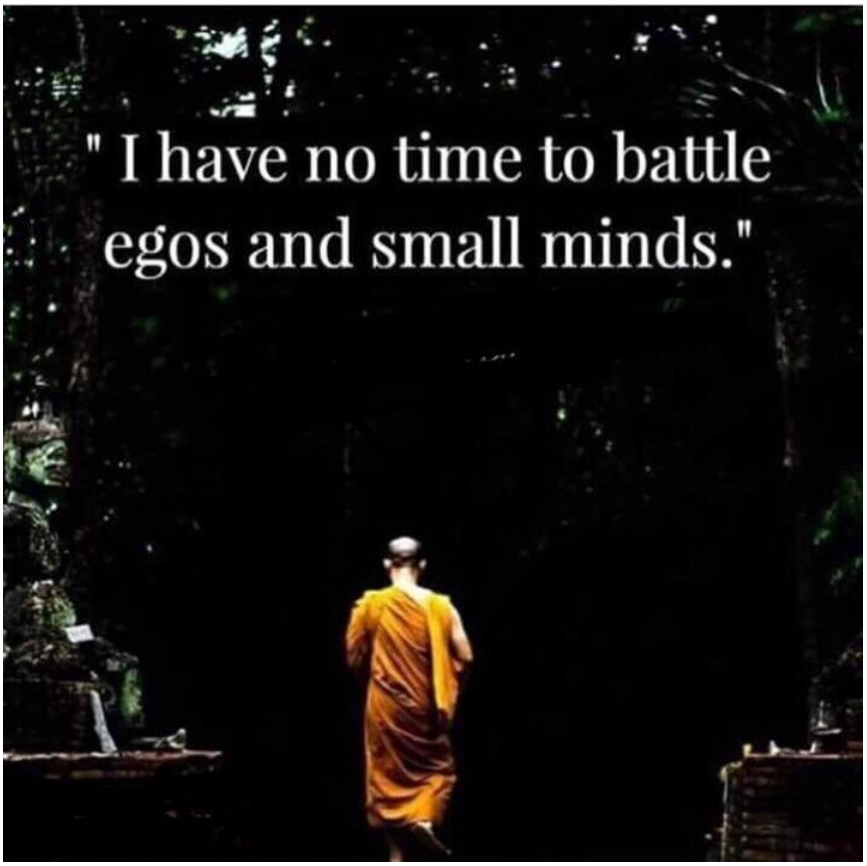

SELF-EFFICACY AND AUTONOMY INFLUENCING RATIONAL DECISION MAKING AMONG EMPLOYEES WORKING IN PUBLIC WORKS DEPARTMENT OF UTTAR PRADESH

Nitin Ramesh Gokarn[1], Abhinav Srivastava[2], Avinash. D Pathardikar[3]

ABSTRACT

This study is based on Theory of Planned Behavior (TPB) and aims to test how rational decision making in digital work environment is fostered by self efficacy. The study proposes a structural equation model to predict rational decision making and tests mediating role of job autonomy between self-efficacy and rational decision making. Data were collected from engineers and other officers working in Public Works Department (PWD) of Uttar Pradesh, India. The findings revealed positive relationship between self efficacy and rational decision making, and model was identified with good fit indices. The study also revealed mediation of job autonomy between self-efficacy and rational decision-making style highlighting the importance of organizational resource in organization.

Keywords: *Organizational resources, Rational Decision making, Job autonomy, Self –efficacy,*

Introduction

Making decision is one of the key functions of management as making sound decision leads to favorable outcomes and overall organizational growth. Organizations and academicians are looking for ways which facilitates in making effective decisions for organization's sustenance and growth.

Decision making in business context have been referred as the process of selecting a logical choice from the available alternatives (Decision Making). The decision-making styles are a kind of learned behavior which is reflected by individual when confronted with different situations. Scott and Bruce(1995) have proposed four types of decision-making styles namely,rational, intuitive, dependent, and avoidant decision-making styles. Making choices out of available option needs to be backed by some logical evaluation. Therefore, rational decision making is considered as one of the best approaches for making decision (Scott & Bruce 1995; Oliveira 2007).

Literature on decision making is good enough and has identified many variables which aids in making decision such as maturity and decisiveness in career (Blustein, 1987; Mau, 1995), access to information (Jepsen, 1974), efficiency in solving problem (Phillips, Pazienza, & Ferrin, 1984a).Blumes and Easly (2008) gave a choice theory which states that decision making is outcome of individual behavior and it is a determinant of individual choices. The choice are determined by the ability of an individual to evaluate and analyze the available choices and perceived organizational support (Bandura, 1977; Hutchison, 1997).

The present study is conducted on the employees working in Public Works Department (PWD) of Uttar Pradesh. The study tests how self-efficacy of employees working in PWD department influences the rational

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decision-making style. The study is unique as it directly tests the influence of self-efficacy on rational decision making. The past findings have indicated the relationship between belief of individual on his competency and makingrational decision (Bandura, 1997; Oliveira 2007). The study proposes a model to predict rational decision making through self efficacy in presence of job autonomy. The overall aim of the study could be interpreted as to test the influence of self efficacy on rational decision making and to test how this relationship is influenced by autonomy given by organization.

Conceptual framework

Study is framed on the Theory ofPlanned Behavior (TPB). The theory intends to predict all human behavior which people can control (Icek Ajzen, 1991). The theory states that controlling a behavior depends on behavioral intention which is further influenced by attitude towards the expected outcome. Theory further proposes that human behavior is guided by three belief components namely, behavioral, normative and control belief. Behavioral belief produces favorable response, normative belief is about subjective norms and control belief relates with perceived behavioral control (Icek Ajzen, 1991). In the present study, self-efficacy has been taken as behavioral belief which is about belief of an individual in his ability which may lead to favorable outcome as rational decision making. The belief in self ability may lead to taking rational decision as favorable outcome but this relation may get influenced by subjective norms or autonomy as organizational resources.

Self efficacy

Belief in self is known to play significant role in performing task in organizational settings (Brief and Aldag, 1981). Albert Bandura (1977)defined self efficacy as an individual‘s belief in his capacity to behave in a required way which is necessary to achieve desired goals. Self efficacy is measured into three dimensions namely, magnitude, strength, and generality. Magnitude is about the level of difficulty which could be achieved strength is about conviction regarding the magnitude and generality talks about generalizability of the belief in different context (Bandura, 1977). Self efficacy is an outcome of personal skills such as physical skill, cognitive skill and social skill. Bandura and Adams (1977) defined self-efficacy as one of the dimensions arises from the model of self.A person with higher self-efficacy is expected to give many favorable outcomes (Bandura, 1982);

Rational Decision Making

Making decisions is about making choices from the available alternatives. Criteria of selecting the available alternative may differ in person and situation specific context. These criteria of making decision are referred as decision making style. These decision styles are regular pattern of behavior reflected by individual when subjected to specific decision situation (Scott and Bruce 1995).Out of the four decision stylesrational decision making style is assumed to the best approach (Scott & Bruce 1995; Oliveira 2007).

Rational decision making is kind of decision making style where an individual takes decision after collecting facts, information and their proper analysis (Scott and Bruce, 1995). According to Russ et al (1996) rational style of making decision is deliberate analytical and logical analysis of long term impact of decision. Making rational decision is an outcome of process which involves problem identification, identifying saluting, gathering facts and information, analyzing and interpreting the expected future outcomes and then selecting the best alternative (Uzonwanne, 2016).

Organizational Resources

Organizational resources could be referred as the organizational factors of job which contributes to achieving organizational goals. Organizational resources in context of job demand referred as support from organizations and job which helps in meeting job demands (Demerouti et al., 2001). They further added that organization resources reduces the psychological cost associated with it and contributes in individual well being. Job resources includefeedback, supervisor support, job control, autonomy (Demerouti et al 2001). Organizational resource has ability to motivate employee for example Hackman and Oldham (1980) identified five characteristics of job which keeps employee motivated.

Salanova et al (2005) in their work stated that organizational resources as a facilitator in achieving organizational well being. They also identified organizational resources as an ingredient of three factors which are organizational training, autonomy and technology. The present study takes only one aspect of Job autonomy as organizational resources. Job autonomy is amongst the one of the characteristics of job which keeps employee motivated (Hackman & Oldham, 1980).

Job autonomy is content of job and could be defined as the extent to which an individual is given freedom and independence in performing his work and work related tasks and making decision (James Breaugh, 1999). Studies have established that autonomy in job contributes significantly in individual and organizational outcomes (Gellatly and Irving, 2001; Langfred and Moye, 2004). High autonomy allows individual to perceive himself as capable and this keeps him motivated to perform better.

Literature Review

Self-efficacy and Rational Decision Making

Self-efficacy is identified as one‘s cognition about own capabilities and influences one‘s choice of action and efforts to be invested (Bandura,1982). Making rational decision is a complicated process and needs physical, social and psychological skill.Past studies have reported significant relation of self efficacy with task performance (Singh et al, 2019; Saragih, 2011; Kakeh et al, 2020). Making decision is about making choices which needs confidence in self which only comes when a person believes in his capabilities. A person with higher self-efficacy is full of confidence and in position to selects the choices available without any hesitation (Kuijer and Ridder 2003). Similarly, Markman et al (2002) stated that self-efficacy as a tool to gain control over self which allows them to face every life situation. There are studies which observes the role of self-efficacy in making decision making in general (Musculus, 2018; Pertiwi, P. A., Ningrum, A. S. B., & Rasyid, F., 2022) which hints that rational decision making in specific will also be influenced by self efficacy so our first hypothesis states that,

H1: Self-efficacy influences rational decision making positively.

Self-efficacy and Job Autonomy

Autonomy in job is the degree of freedom one enjoys in performing anddetermining the procedure to be used in the job. The literature of job autonomy suggests that autonomy in job is a kind of empowering employees to take decisions (Honold, 1997; Herzberg, 1968). Empowerment allows employees to do their job more effectively and make choices on their own. Giving more power and autonomy is one of the ways to make employees involved and motivated Employees when given opportunity to make their own choice feels trusted and develop a positive self-image (Honold, 1997). Hackman and Oldham (1976) also have identified job autonomy as one of the key ingredients of job which should be there in every job to motivate employees.

Employee with high on motivation feels good about them and develops self-efficacy. Studies conducted in the recent past also confirms that job autonomy helps in realizing the potential and self-sufficient while executing the task at the workplace (Skaalvik&Skaalvik, 2014; Orth & Volmer,2017; Fong, Dillard & Hatcher,2019). Therefore, we propose our second hypothesis as-

H2: Self-efficacy will have positive relation with job autonomy.

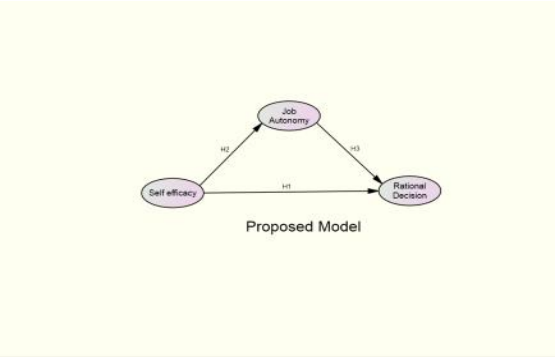
Job autonomy as mediating variable

Freedom given to employees in executing their work is referred as job autonomy (Heckman & Oldham, 1976).This phenomena in literaturehave been referred as empowerment, Job enrichment and organizational resources (Honold, 1997; Demerouti et al.,2001). Similarly, there are studies which have defined autonomy in relation with autonomy in decision making(Kim et al., 2009; Lin et al., 2011; Sisodia and Das, 2013, Lippke, 1989; Laceulle, 2018). Making rational decision needs skills and competency and giving autonomy to employees allows him regulate their conduct and decision according to their personal understanding and desirability.(Wu et al.,2015; Lippke, 1989; Laceulle,2018).

Organizational Resource has been identified as system level and system sponsored support offered to individual or group to achieve organizational goal. Job autonomy has been identified as one of the organizational resources (Albrecht, Breidahl and Marty; 2017; Bigs et al, 2014). Past studies establishes job autonomy as mediator in achieving individual and organizational goals (Gözükara andŞimşek, 2015; Watto,Zhao and Xi, 2020) This allowus to propose as (Figure 1)

H3: Job autonomy will mediate the relationship between self-efficacy and rational decision making

Figure 1: Proposed Model



Methodology

Sample

The study was conducted on employees working in Public Works Department, Uttar Pradesh, India. The department is performing its operations in all the seventy five districts and divided into 18 zones of the state. The department absorbs more than 1000 employees and we have used purposive sampling in reaching the targeted population. The survey was conducted through online mode during the Covid-19 pandemic between 2020-21. The questionnaire was sent to the respondents through a link containing google.doc on their mobile phones and or personal e-mail ids to get theresponses. Total 450 respondents were mailed out which 432 responded and only 408 responses were used for further analysis. Twenty-four responses were eliminated as they were duplicate responses.

Instruments Used

Self-efficacy

The study has self-efficacy as mediating variable which was measured using the tool given by Schwarzer and Jerusalem (1995). The scale seeks response on 4-pointLikert scale (1= Not at all true to 4= exactly true) and has total 10 items.

Job autonomy

To measure job autonomy, we have used scale developed by Salanova and Peiro (2005). The scale consists of three sub dimensions namely, training, autonomy, and technology. For this study purpose we have used autonomy which has total of three items. The data was collected on four-point Likert scale (1=Not important and 5=Very important).

Rational decision making

The five items scale of rational decision making developed byScott and Bruce (1995) was employed.The responses were collected on five-pointLikert scale (1= Not Important to 5= Very Important).

Procedures

The procedure of data analysis includes descriptive statistics for the analysis of demographic data. The descriptive statistics includes frequency, mean, and standard deviation. To test the authenticity of the adapted scale in the present context reliability followed by correlation was conducted. The next step includes testing of the proposed model through structural equation modeling (SEM) in AMOS. The fit indices such as Goodness-of-fit index (GFI), Comparative fit index (CFI), Increment fit index (IFI), Normed fit index (NFI), and Root means square error of approximation (RMSEA) was observed to assess the goodness of fit of the model.(Bentler, 1990). The mediation was tested using Process macro regression analysis was done to test the direct and indirect effect and detecting the mediation (Hayes, 2013).

Results

The respondents include engineers of three levels namely,junior, assistant, and executive engineer. Out of which junior engineer had the maximum per cent of response and accounts for 48.8 per cent followed by executive engineer 26.2 per cent and assistant engineer 25 per cent. The experience of the subjects ranging from less than one year to maximum 40 years **(see Table 1)**

Table 1 Demographic Profile

		Frequency	Percent	Cumulative Percent
Designation	AE	102	25.0	25.0
	JE	199	48.8	73.8
	EE	107	26.2	100.0
Experience	0-20	287	70.3	70.3
	20-40	121	29.7	100.0
Gender	Male	395	96.8	96.8
	Female	13	3.2	100.0

Notes: AE-Assistant Engineer, JE-Junior Engineer, EE-Executive Engineer

The reliability values of all the adapted scales revealed sound reliability ranging from .826 to .880. (seeTable 2). In the next step correlation analysis have conducted to identify the nature and directions of the relationship between the variables. The relationship between all the variables were aligned with the proposed hypotheses and found significant. The strongest relationship was revealed between self-efficacy and rational decision making (r=0.533, p<.01) and with autonomy (r=0.364, p<.01) (see Table-3)

Table 3 Mean Standard deviation and Correlations

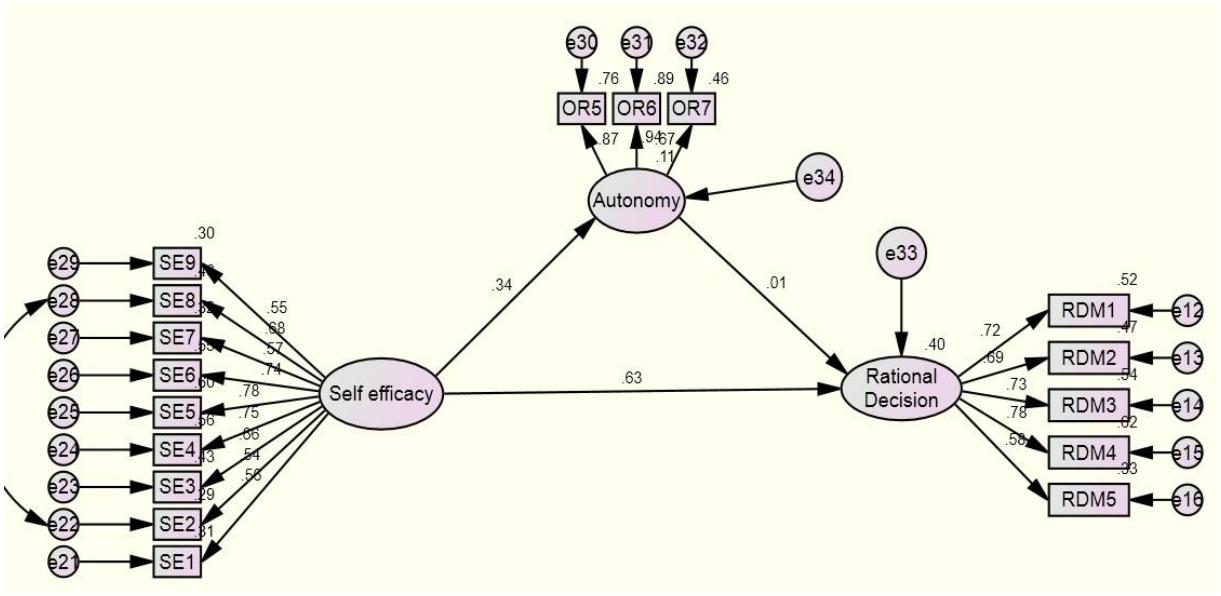
Sl.	Variable	Mean	SD	1	2	3
1	Self-efficacy	34.51	4.60	***(.880)***		
2	Autonomy	14.64	3.21	.364**	(***.856)***	
3	Rational decision making	21.62	2.78	.533**	.303**	***(.826)***

Notes: Figures in the parenthesis at the diagonal are alpha reliability coefficients

**p<.01 (2-tailed).

The SEM analysis revealed that proposed model was identified with sound fit indices (χ^2/df=2.856; GFI=0.910; NFI=0.896; IFI=0.930; TLI=0.916; CFI=0.929; RMSEA=0.068). Model was finally identified after few modifications (Steiger, 1990). Self-efficacy was taken as an exogenous variable and predicted job autonomy (directly), rational decision making (directly and indirectly) (see Figure-2).

Figure 2: Confirmed Model



Self-efficacy influences 40 per cent of variance (β= .630; p<.0001) in explaining rational decision making (SE‣RDM). Whereas, influence on job autonomy reported variance of 11percent with (β= .335; p<.000).

To test the proposed hypothesis and mediation Process Macro (Hayes, 2013) was used. The first hypothesis states that self-efficacy will influence rational decision making which holds true in the context of the present study the observed beta coefficient was 0.2941 (SE= .0270, LLCI= .2411-ULCI=.3471) (p < .01)and second hypothesis was also supported which says self-efficacy will influence job autonomy the values reported are .2536 (SE= .0322, LLCI=.1903- ULCI=.3169)(p < .01)(see Table 4). The third hypothesis assumes that job autonomy will mediate the relationship between self-efficacy and rational decision making. The assumption for mediation was also proved as both direct and indirect effect was found significant. The total effect of self-efficacy on rational decision making was reported significant with beta value of .3217 (SE=.0253, LLCI=.2719-ULCI= .3715) whereas the direct effect reported beta coefficient of .2941 (SE= .0270, LLCI= .2411, ULCI= .3471) 95% boot confidence interval.

Table 4 Decision on Hypothesis

Hypothesis	Relationship	B	SE	t value	LLCI	ULCI	Decision
H1	SE→RDM	.294	.027	10.91	.2411	.3471	Supported
H2	SE→JA	.254	.032	7.87	.1903	.3169	Supported
H3	SE→JA→RDM	.322	.025	12.71	.2719	.3715	Partial Mediation

Notes: SE-Self-efficacy, RDM-Rational decision Making, JA-Job Autonomy

Discussion

Organizational decision making is known to give favorable organizational outcomes (Crawford et al., 2010). The study tests how an individual‘s belief in his ability or self efficacy contributes in making rational decision. The study also tests how organizational resources facilitates rational decision making. The findings show self-efficacy contributes significantly to rational decision-making process. The finding also reveals that if an individual with high on self-efficacy is given organizational resources it will help him making rational decision.

The first hypothesis which posits that self-efficacy helps in making rational decision was accepted. No significant study to test the role of self efficacy in rational decision making have been found directly, but the available literature on decision making derived from psychological base has indicated the role of human mind and self belief in making rational decision. Simon HA (1977) in his study indicated that the role of human mind and its self-created limits influences decision making style and process. Kelly(1973)also stated that it is an individual‘s tendency to think in causal manner which aides in rational decision making. Another study also suggested that how a person observes himself and believe about his self image and potential influences rational decision making (Beach & Mitchell, 1987).

The second hypothesis which assumes that self-efficacy has significant relationship with organizational autonomy. The hypothesis was supported and in line with the similar studies in past (Watto, Zhao and Xi,2020; Moriera et al 2019). Self-efficacy which is being referred as an individual‘s belief in his own competency (Bandura 1997) has been identified as process and part of empowerment (Conger and Kanungo 1988), whereasautonomy in job is about freedom given to employees in carrying out job in terms of time and procedures. The findings of the study gives us ground to argue that if an individual believe in his competency he will be in position to enjoy the autonomy and other organizational resources. Individual who

believe in his own potential and limits have better control over the organizational procedures, cultures and norms (Archer,1982). Jonsson et al.,(2016) in their study conducted in hospital states that empowering and giving autonomy to employees will give them an opportunity to test their self-efficacy which allowing them to develop mastery over the organizational ways and procedures.

The third hypothesis was also accepted which states that organizational autonomy will mediate between self-efficacy and rational decision making. Autonomy in organization is referred as a part of organizational culture (Costanza et al., 2016; Denison et al., 2014; Ployhart and Turner, 2014). Autonomy being a part of organizational empowerment will make an individual empowered and helps them to make rational decision (Conger and Kanungo 1988). It is being argued that organizations want their employees to feel involved and motivated. Organization gives autonomy to take their decision so that they may feel involved and motivated. Studies have proved that empowered employees have more command in taking decision and makes effective decision (Honold, 1997).

Mediation analysis reported partial mediation proving our third hypothesis. The available literature indicated the similar findings (Unterrainer, C., Jeppesen, H. J., & Jønsson, T. F. (2017; Hackman and Oldham, 1975). Rational decision making is about logical evaluation of the alternatives which needs ability to judge and evaluate the alternatives (Kelly, 1973) not only this making rational decision also needs complete information, support from organizational regulation, policies (Alison, 1971; Hickson 1986). The mediating role of autonomy as organizational resources indicates that self efficacy of employee if assisted by organizational resources such as autonomy, employee would take rational decision. Organizational support and autonomy to employees will aid the process of rational decision making.

The proposed model was also identified with good fit indices the model could be interpreted as employees with higher self efficacy will be assisted by organization's support in making rational decision. If employees were given autonomy then only he would be able to utilize his skills and potential to make effective decision. Studies in past with different context also indicated similar outcomes (Menon, 1995; Herzberg, F., Mausner, B. *et al., 1*959)

The study is based on theory of planned behaviour which is well justified with the findings of the result. The behavioral outcome rational decision making is influenced by self efficacy which is an attitude and mediated by organizational resources which is referred as subjective norms.

Practical Implication and Future Scope

Findings of the study are very significant for the government organizations. Result suggests that managers and practitioners should realize the importance of giving autonomy to the competent and skilled employees. Making decision on rational ground has been the regular feature of every organization and plays a determining role in organizational outcomes. Making irrational decision (intuitive) or delay in making decision could cause serious harm to the organizations. The study also suggests that if an employee is competent and skilled, will have higher self-efficacy and make sound decisions, and mediating role of job autonomy indicates that organizations can also help individuals in making sound decisions by giving them autonomy.

The study opens many avenues for future researchers and academicians. The study has been conducted in only in government organization for more generalization of the findings it needs to be studied in other kind of organizations. Similarly study has considered only one kind of organizational resources mediation role of other organizational resources could also be tested. Theory of planned behavior (Ajzen,

1991) has used as base theory to predict rational behavior. It is suggested thatrole of other behavioral beliefs such as self-esteem and other normative belief could also be tested.

Conclusion

The present study suggests ways to assist rational decision making in digital work environment through self-efficacy and job autonomy. Thefindings of the study suggest that an individual who believes in his self competency and feel confidence tends to make more rational decision. A person high in self-efficacy will have more technical skill and would be able to evaluate the choices which will allow him to make a sound decision. One more significant finding of the study is that the study highlights the role of organizations in helping individuals to make rational decision. Organizations should give autonomy to their employees who are skilled, competent and confident, as giving autonomy will allow them to use their skills in evaluating the choices freely and making rational decision. If employees were empowered to take decision as per the requirements it will help organization in quick redressal of the problem enabling organizations to be in tune with the fast technology.

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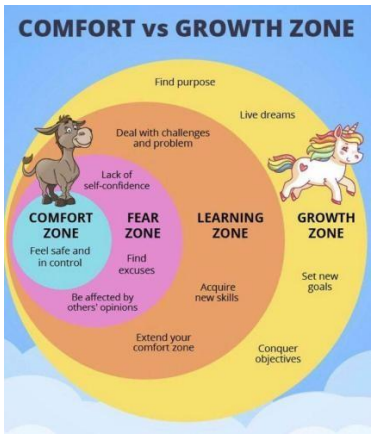

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