

Presenting A for Model of Establishing the Fifth- Generation University with the Foundation Data Approach

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Abstract

Purpose: The purpose of this research is to present and explain the establishment pattern of the fifth-generation university in Islamic Azad Universities. Future thinking and the university system's policy in higher education have become necessary with the effectiveness of virtual and electronic learning. Higher education based on digital developments has entered a new era where competition and quality are its main characteristics. One of the challenges facing universities in the new millennium is the concept of the fifth-generation university

Method: This research was conducted using a qualitative-inductive approach and the Strauss-Corbin grounded theory method. The research tool (data collection) is a semi-structured interview. Using the grounded theory method, the data obtained from the interviews, conducted with 10 professors and

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managers of Islamic Azad University, were analyzed during three stages of open, central, and selective coding

Findings: 20 general categories in the form of a paradigm model including factors including causal conditions (knowledge development; new social needs; internal organizational factors; external organizational factors; mechanisms of first-generation universities, second-generation universities, third-generation universities, and fourth generation universities) central phenomenon (establishment of the fifth generation university), underlying conditions (creating social, cultural and political in the university; economic development of the university; organizational support platforms), intervening conditions (the existence of a dynamic environment and structure in the university) and strategies (changing the educational approach; environmental re-engineering; academic effectiveness; development architecture) and consequences (elite development; comprehensive effectiveness of the university; The emergence of the characteristics of the fifth generation university) is the result of this investigation

Conclusion: The establishment of a fifth-generation university in higher education can lead to the optimization of the resource allocation behavior of different stakeholders and prevent the waste of resources (financial resources, life or time of students, etc.), which leads to the overall effectiveness of the university; The establishment of the fifth generation university and the development of civilization.

Keywords: Fifth Generation University, Higher Education, Foundation Data, E-learning.

Introduction

Searching for competitive advantage and synchronizing with educational developments in the world have become forgotten subjects in the university; in the past few decades, the issue of measuring higher education performance has been increasing (Alach, 2016). The main mission of higher education is to meet the specific educational and professional training needs of people, as well as the needs of society and the economic development of society (Alina Sandu et al., 2014); Also, the development of economic policies provides the basis for cooperation between stakeholders (i.e. universities), government and industry (Abbas et al., 2019). The use of open and closed innovations in the context of digital education the preservation of human values and the growth of science are important principles of the university (Cheng, 2022).

Interactions between the higher education system and the needs of the society (labor market) due to the role that these two play in the comprehensive development of societies, have always been the subject of extensive research. Although the studies conducted in this field are not very extensive, at the same time, they are interwoven with consecutive findings. The first one was a generation university or knowledge transfer, the second one was, a generation university with the production of knowledge, the third one, was a generation university with the production of wealth, and the fourth generation university was the society leadership university. Also, the fifth-generation university is a human-building and civilization-building university, therefore, human-building and civilization-building thinking are considered one of the important goals of the education system. By estimating such a goal, intellectual independence will emerge in the learners and gradually in the members of society, and potential talents will assume real dimensions. (Farasatkhah, 2017) stated that many students do not have an effective experience of liberating learning in the university, the most important reasons are the spread of degree orientation due to incorrect policies, memory orientation in the educational system, and irrational corporate temptations in university management. He mentions the transformation of higher education, our wrong understanding of virtualization, unregulated quantitative growth despite serious deficiencies in quality standards, the institutional weakening of faculty in the country, the effects of centralization, and problems related to academic freedom and academic independence. The correct use of digital education tools in the university leads to personal

and social growth. Production of knowledge and innovation based on electronic communication and the infinite opportunities of the digital age can form the cornerstone of human knowledge.

Even so, continuous improvement of educational quality is one of the critical goals of universities with a civilization approach. Training specialized human resources to achieve sustainable and balanced development requires societies to have dynamic and efficient higher education, and this can only be achieved by the establishment of universities and higher education institutions (Rezaian et al., 2015). Trans-departmental, trans-disciplinary, and trans-regional activities in the communication space cause parallelism and linking of new technology circles in digital platforms in the fifth-generation university. In this way, simultaneous strategies of cross-linking different technologies' life cycles can be developed. Fifth-generation universities are the advanced type of entrepreneurial universities in the digital age. The results of this research can provide a model based on which it will be possible to review and reform the country's higher education system, especially in the understudied Islamic Azad universities.

According to the above-mentioned materials, this research, considering the Islamic Azad University, is looking for an answer to the following question: what is the pattern for establishing the fifth generation university?

Theoretical foundations and research background

Research background

Based on the approaches of structure and executive structures, modern universities can be subsumed under five generations. first-generation is modern universities; These universities are mainly educational and based on educational activities. The purpose of these universities is to educate and train specialized human resources (Entezari, 2019). Second-generation research universities which based on research activities have been nicknamed research-oriented. In these universities, educational processes are defined as a branch and unit of scientific research, and education is guided by a specific field of science (Mehdi & Shafiei, 2016).

Today, according to global developments and changes in the main relationships of national innovation systems (industry, government, university), participation in economic and social development with a scientific and systematic approach along with interaction with the

surrounding environment is characteristic of third-generation universities, which are called entrepreneurial universities (Etzkowitz, 2008). In the third generation of universities, all the activities of the members such as education, research, etc. are managed, administered, and implemented in such a way that the university is considered an economic institution or company. That is, the orientation of these activities should be in the direction of profitability and gaining economic competitive advantages (Dabic, González-Loureiro & Daim, 2015). Then a special function beyond the third generation of universities emerged and the concept of the fourth generation of universities came about in the international literature as a future university whose exact characteristics are at a nascent stage and need further investigation because there is no scientific agreement on its precise definition (Siahpoosh, et al., 2020). This concept refers to the fact that today modern universities face global competition and should have the ability to actively influence the social and economic processes of the region in which they are located. These processes and effects can be affected in the competitive field by direct and indirect complex systems on a diverse scale in various regions with different levels of development. The performance of the fourth-generation universities answers these questions: "What conditions should universities have to develop locally and create and maintain their global presence?" and "How can universities actively influence local economic development in less developed areas?". The most important difference is that these universities have significant up-to-date knowledge and can actively shape their environment (Pawłowski, 2009). In the fourth generation, the value of universities is defined based on strategic partnership, nurturing entrepreneurs, and the amount of income shared from external sources and guidance and leadership, as well as the amount of influence on other factors in societies. Education is carried out based on the needs of society and students, and solving society's challenges is considered the basis of research (Goodarzvand, 2017).

In the contemporary era, there is an obvious tension between technology and human consciousness, in other words, between science and ethics, and this issue can be more crisis-creating and costly in developing countries like Iran, which has a heritage of Iranian culture. (Harandi et al., 2021). In such an environment, there is no other way than to focus on the technological aspect of knowledge in its cultural strategy, instead of focusing on the national culture. Only by

paying attention to both dimensions of knowledge can the human aspect of knowledge be preserved. In other words, research and knowledge production, and ultimately value creation are the main foundations upon which the fourth and fifth-generation universities ought to be erected (Fazel, Kamalian & Roshan, 2017).

This systematic transformation of the institutions of universities from the first generation to the higher generations has occurred during a spiral process, and having new capabilities does not cause a deficiency in quantitative and qualitative approval in the hierarchy of education and research, but as a necessity, it has changed and been strengthened in a dynamic and purposeful process (Habibi Rezaei & Siah Mansouri, 2012). The system of higher education and universities is the basis for intellectual growth and development and causes the maturity and realization of human capacities. It is natural that the holding of university positions, considering its serious missions, requires the possession of qualifications and not abilities that can lead society to its destination by properly exploiting its capacities. The selection and appointment of university chairmen and deans cannot be limited to the possession of practical and experimental abilities, but the possession of specific competencies is assumed as a more complete approach and criterion (Ghorbannejad & Isakhani, 2015). It is worth considering that the competence required for a particular job depends on many factors including social culture, nature of business and business environment, organizational culture, work environment, organizational structure, duties and responsibilities, natural processes, attitude, and motivation of superiors and subordinates. Some of these factors may change over time, as a result, the competency of job characteristics in similar positions in the organization also needs to change (Sharma & Allison, 2015). Therefore, effective communication should be done well, so that external communication and participation can be as favorable as possible (Chatterjee, Nripendra & Yogesh, 2021).

Considering the importance of identifying the establishment patterns of the fifth-generation university, the studies that have been carried out are either different from the current study in terms of approach, or they have been conducted with a limited purpose, which we will mention in the following table (1):

Table 1. Summary of domestic and foreign background

The name of the scholar	Research title	Research results
Parhishkar et al. (2021)	Conceptual model of university value co-creation with emphasis on fourth and fifth-generation universities using meta-synthesis and fuzzy Delphi approach	The university value co-creation model is presented as a proposed model for value co-creation, with 16 factors, 23 components, and 13 consequences, each designed in three categories, with emphasis on value-creating and civilization-building universities.
Abbas et al. (2019)	Studying the relationship between university and government cooperation for the production and commercialization of new knowledge for use in industry	Establishing coordination to create new knowledge and cooperation in setting up universities and creating environmental conditions requires the policies of today's industries.
Sergey, Ekaterina & Pavel (2017)	Production and commercialization of knowledge in the innovation ecosystem of a regional university in the conditions of the establishment of the information economy in Russia	The main problems of the innovation ecosystem of the university are the gap in internal communication and weak communication with the external environment, including the real part of the economy.
Han (2017)	Commercialization of technology through sustainable knowledge sharing between universities and industry	The results of the research showed that the tendency to patent is most likely related to the management strategies of executive managers, not the specific features of the desired technology.
Alach (2016)	Measuring performance and accountability in higher education	The results of data analysis show that different views are obtained from completely different conceptualizations of students: 1) a simple customer of educational services 2) constructive cooperation with the institution
Akbari & Poladian (2021)	Factors affecting the acceptance of fifth-generation technology among Iranian students	Quality has a positive and significant effect on perceived ease, perceived usefulness, and trust in people's willingness to accept this technology, while there is no direct relationship between perceived enjoyment and people's

The name of the scholar	Research title	Research results
		willingness to use 5G technology.
Nabipour (2019)	The fifth-generation university: based on Karayanis and Campbell's five spiral model	The salient features of the fifth-generation university can be conceptualized as a knowledge-based innovation system, which is sensitive to the natural environment of society and produces knowledge.
Pournaqi & Hijazi, (2018)	Studying effective factors in the commercialization of knowledge from the point of view of university graduate students	Economic factors have the most and educational and research mechanisms have the least effect on the growth and success of knowledge commercialization
Hosseinzade, Firouzi & Siahposht Khachaki, (2017)	Moving towards the third generation of medical sciences universities	A new generation of universities was born, which, apart from their educational work, also turned to research and research activities in various fields of knowledge.
Irfan & colleagues (2017)	An analysis of the ethical components of knowledge commercialization in higher education	The results of the research showed that the government plays an important role in the process of creating knowledge and experiences. Also, creating coordination to create new knowledge and cooperation in setting up universities and creating environmental conditions, needs the policies of today's industries.
Ezzati Rad, ,Sakhdari & Musikhani, (2017)	Studies of commercialization of knowledge with an entrepreneurial ecosystem approach	This model provides a more comprehensive understanding of knowledge commercialization based on the entrepreneurial ecosystem by providing organizational preparation mechanisms for knowledge commercialization in seven main fields.

The post-corona person is becoming a forward-thinking or prudent person, and we should also use this opportunity to move to a new style of life and interactions. The change in the institutional and governmental decision-making structures is the main thing that can trigger the social movement. It will speed up the economic development

of our country. The time has come to use the elites and thinkers of the society in the true sense of the word. The trends and developments show that a macro view of the post-Corona world and its main actors and stakeholders indicates the existence of private sectors, organizations, unions, specialized syndicates, influential institutions of future research, and foresight in the power and decision-making centers of the government. It will be the big and developed universities all over the world that will be the main players in this ecosystem and the important thing in developed countries, in addition to paying serious attention to new technologies, will be the production of knowledge and investment in the fifth-generation universities, whose goal is to deal with current challenges and providing logical, sustainable approaches, to think about future challenges and how to face and gain strength in those areas. Planning now, by upgrading its role, it will seek to conquer the future with the idea of playing a serious role and wanting more countries to participate in today's modern world.

According to (Carayannis & Campbell. 2019), knowledge is "the most fundamental resource" and learning is "the most important process" in the modern economy. This statement can be included in a three-element equation:

- Innovation translates knowledge into its application and use;
- Applied knowledge always or often (or at least in a potential form) may be used in line with the economy and for economic purposes;
- Therefore, innovation also (potentially) turns the production of knowledge into economic activities

The goal of the fifth-generation university is to introduce the "natural environment" in the form of a new subsystem for knowledge and innovation models in such a way that nature becomes a basic and consistent component for the creation of knowledge and innovation. The environment is especially important for the process of creating knowledge and producing innovation; Because it has contributed to the survival and revitalization of humanity, and the environment itself may be used in building new green technologies in the future, and the human race itself should learn more from nature.

Method

Considering that the purpose of this research is to present and explain the establishment model of the fifth-generation university in Islamic Azad Universities, the current research is applied in terms of purpose, and in terms of data collection, it is a cross-sectional survey, and as

regards the nature of the data, it is qualitative. Descriptive and inferential statistical methods were used to study the research questions. The most significant goal of the current qualitative research is to discover the variables and structures related to the model of establishing the fifth-generation university to meet the needs of the society in Islamic Azad Universities and develop a suitable model for it. For this purpose, the tool of observing organizational actions related to the research topic and exploratory interviews with experts and managers of Islamic Azad University was used. The ten people were selected to be interviewed using purposeful sampling and the snowball method and semi-structured, in-depth interviews with open questions were conducted with them. The sufficiency of the number of studied samples was obtained through the theoretical saturation method.

In this research, to implement the foundation's data strategy, a systematic approach with three open, axial, and selective coding techniques has been used (Lee, 2001), which include:

A- Open coding: Open coding is an analytical process through which concepts are identified, and their characteristics and dimensions are discovered in the data (Strauss & Corbin, 1998). At this stage, the primary categories of information regarding the causes of organizational rebellion were formed by segmenting the information, and after a regular review of the interviews, the main categories, and sub-categories were identified.

B- Axial coding: Axial coding is the process of relating categories to sub-categories and linking categories at the level of features and dimensions. This coding is called axial because coding is realized around the axis of a category (Strauss & Corbin, 1998).

C- Selective coding: After open and axial coding, the research results from the theory that selective coding is the process of integrating and improving categories (Strauss & Corbin, 1998). In this research, after reaching the saturation and repetition of the concepts, selective coding was done in the interviews, the results of which are presented in the final section "Discussion & Conclusion".

Also, the criterion of acceptability that is mentioned in the evaluation of data-based research of the foundation was used instead of validity and reliability criteria (Glaser & Strauss, 1965). Acceptability means to what extent the findings of the research are reliable and believable in reflecting the experiences of the participants, the researcher, and the audience about the phenomenon under study. Ten acceptance criteria indicators have been introduced, 5 of which were

used in this research to improve scientific accuracy, validity, and reliability. The audit strategies used are researcher sensitivity, methodological consistency, sample proportionality, replication of a finding, and use of informant feedback (Strauss & Corbin, 1990). Kappa index was used to calculate the validity of the model. This index is 0.763, which is confirmed.

For this purpose, to describe and collect data, the tool of observing organizational actions related to the research topic and exploratory interviews with managers, national elites, and higher education management has been used. The interview sample consisted of 10 elites, experts, and chairmen of Islamic Azad University, who were selected using a purposive sampling method and a semi-structured, in-depth interview with open questions. The demographic characteristics of the participants are given in Table (2).

Table 2. Demographic characteristics of the participants

Field of study and level of study	work experience	Position	Gender	Age	
strategic management	PhD	23	Head of the Center for Strategic Studies of Religion and Human Sciences	Man	48
Economical science	PhD	29	Member of the Scientific Association of Iranian Economists	Man	54
Entrepreneurial management	PhD	15	Director of Razi University Skill Training Center	Man	39
Entrepreneurial management	PhD	12	researcher	Man	40
Business Management	PhD	13	Deputy Minister of Mining Industry and Trade	Man	47
Executive Management	PhD	15	CEO of Foulad Company	Man	40
business management	PhD	24	Chairman of the board of National Steel Company	Man	46
Biomedical Engineering	PhD	15	Faculty member/professor	Man	48
System analysis	PhD	28	Associate Professor	Man	52
Business Management	PhD	21	Associate Professor	Man	51

Findings

To answer the research question "What is the conceptual paradigm of establishing the fifth generation university?", the open and axial

codings of each part of the contextual model are presented.

Causal conditions for the establishment of the fifth-generation university: Causal conditions are categories that affect the axial category based on the interviews conducted, the central codes "Scientific development; new social needs; internal organizational factors; external organizational factors; mechanisms of the first generation university; mechanisms of the second generation university; mechanisms of the third generation university; the mechanisms of the fourth generation university" have been identified and they have been linked to another wider selection code called causal conditions, described in Table (3).

Table 3. Axial coding of qualitative data (causal conditions)

Axial coding	Secondary coding	Open coding
Scientific development	Stability and stability of science and knowledge	Training of specialized human resources
		learning process
	The speed of progress of science	Production of knowledge and innovation Generational changes
New social needs	Revival of the spiritual civilization of the university	Identifying the needs of the community
		The position of the university in the social culture
	The position of the university and higher education	How to manage The structure of the fifth-generation university
Internal factors	Academic values	University perspective
		Goals of the fifth-generation university
	Human interaction. University. Technology	Extracurricular communication The relationship between man and technology
External factors	Identification of environmental-social conditions	social factors
		Environmental factors
	Academic independence	Digital policy
		Independence from government and religion
	Funding	University equipment
Economic conditions of fifth-generation universities		
First-generation	Educational and teaching	Scientific education

Axial coding	Secondary coding	Open coding
university mechanisms	mission	teaching method
	The structure of the first-generation university	Goals of the first generation university
		Lack of financial independence
Second-generation university mechanisms	Applied and research training	Changing the function from teaching to research
		Research-oriented science
	Changing the academic function	University attitude
		Student educational methods
	The structure of the second-generation university	Goals of the second-generation university
Providing financial credit		
Utilization of technical knowledge	Development of new businesses	
Mechanisms of the third-generation university	Utilization of technical knowledge	Entrepreneurship education
	Based development	Third-generation university environment
	Expansion of the organizational environment	Increasing the cost of advanced studies
Adoption of a strategic approach		
Mechanisms of the fourth-generation university	Changing the university's approach from duty-oriented to responsibility-oriented	Converting training into action
		community-oriented
	International partnerships	Internationalization of higher education
Providing credit		

Contextual conditions for the establishment of the fifth-generation university: the background or context is a set of special characteristics that indicate the phenomenon in question, that is, the place of events and events related to the phenomenon. The context indicates the set of special conditions in which action and reaction strategies take place. The set of contextual elements in the establishment of the fifth-generation university includes "creating social, cultural and political networks in the university; economic development of the university; organizational support platforms", as outlined in Table (4).

Table 4. Axial coding of qualitative data (contextual conditions)

Axial coding	Secondary coding	Open coding
Creating social, cultural, and political networks in the university	cultural factors	A culture of responsible innovation
		Cultural Revolution
	Political-social factors	Political factors governing society
		social factors
University economic development	Financial growth and equipment	Funds
		Infrastructure development
	Economic factors	Economic conditions
		investment
Organizational support of platforms	Support and participation	participation
		Supporting structure
	Designing a model to identify government expectations and regulations	Terms and conditions
		Supervision

Intervening conditions for the establishment of the fifth-generation university: structural conditions belong to a phenomenon and affect action and reaction strategies. They facilitate or constrain strategies within a particular context. The contributors suggest that the existence of a dynamic environment and structure in the university should be the only interfering conditions for the establishment of the fifth-generation university, as presented in Table (5).

Table 5. Axial coding of qualitative data (intervening conditions)

Axial coding	Secondary coding	Open coding
The existence of a dynamic environment and structure in the university	Creating a global environment and technology	Adapting to technology
		Special conditions of technology
	Academic independence	Attention to the type of management
		Administration of the university by itself

Strategies for establishing the fifth generation university: refer to strategies based on actions and reactions to control, manage, and feedback on the phenomenon under investigation. Strategies are purposeful, that is, they are done for a reason. The strategies of this research include changing the educational approach; environmental reengineering; developing architecture, and academic effectiveness as

represented in Table (6).

Table 6. Axial coding of qualitative data (strategic conditions)

Axial coding	Secondary coding	Open coding
Changing the educational approach	Production of knowledge and innovation	Developer training program A multi-layered approach to the production of knowledge and innovation
	Reforming the educational structure of the university	Empowering staff Recruitment, evaluation, and scientific promotion
Environmental reengineering	The relationship between science and employment	Employment and income generation The connection between the university and the market
	Environmental factors	Attention to the environment Taking advantage of environmental opportunities
Development of architecture	Data management	Transferring the values from one generation to another data transfer
	Creating and promoting sustainable development	Sustainable development Needs assessment by specialized and committed people
Academic effectiveness	Independence of the university in terms of human and scientific manpower	Student independence Independence of university professors
	Creating strategic goals	Changing goals Maintaining goals

The consequences of establishing the fifth generation university:

- Results that emerge once strategies are implemented. Consequences are the results of actions and reactions. Consequences cannot always be predicted and are not necessarily what people initially intended. It is also possible that what is considered an outcome at one point in time may become a part of conditions and factors at another point. Based on the conducted interviews.
- Consequences include elite development; and the comprehensive effectiveness of the university. The appearance of characteristics of the fifth-generation university is reflected in Table (7).

Table 7. Axial coding of qualitative data (consequences)

Axial coding	Secondary coding	Open coding
Elite development	Support and support of the elite	Increasing the number of educated people
		Scientific-applied interactions
	Economic development	Reduce economic recession
		creating jobs
The comprehensive effectiveness of the university	Political and cultural development	Reducing the needs of society
		political development
	Social and environmental development	Cultural development
		Environmental development
The appearance of the characteristics of the fifth-generation university	Improvement of existing conditions	Social Development
		Competitiveness
	Independence of university action	Achieving development and transformation
	Secondary coding	Upgrading the position of the university
		A university independent from the ideology of the government

Among the identified factors, a selective coding paradigm was performed, and accordingly, the linear relationship between the secondary code and the central code of the research, including causal conditions, contextual conditions, intervening conditions, strategies, and consequences, was determined. Figure (1) shows the coding paradigm or in a manner of speaking, the qualitative research process model.

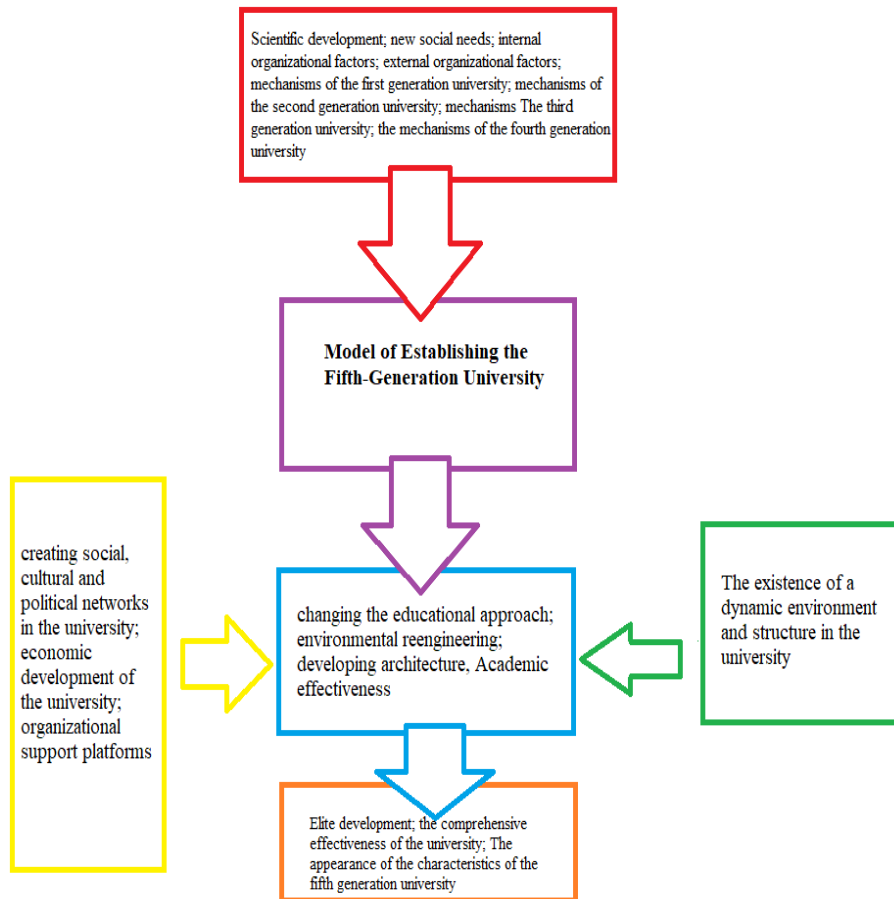


Figure 1. The establishment model of the fifth-generation university

Conclusion

Today's university system is bound to be continuously adapted to the scientific and social environments through the proposed strategies and to be in a dynamic balance with a society that is constantly changing. This research has been carried out under the title “Presenting and explaining the model of establishing the fifth-generation university in Islamic Azad Universities”. Therefore, by using the foundation's data research, identified factors including causal conditions (knowledge development; new social needs; internal organizational factors; external

organizational factors; mechanisms of the first generation university; mechanisms of the second generation university; mechanisms of the third generation university; mechanisms of the fourth generation university), contextual conditions (creating social, cultural and political networks in the university; economic development of the university; organizational support platforms), intervening conditions (the existence of a dynamic environment and structure in the university) and strategies (changing the educational approach; environmental re-engineering; academic effectiveness; development of architecture), the consequences (elite development; comprehensive effectiveness of the university; the emergence of the characteristics of the fifth generation university) and the central phenomenon of the establishment of the fifth-generation university have been identified.

What can be inferred from the analysis of the interviews and the points of view of Islamic Azad University managers regarding the causal conditions is that higher education as one of the sub-systems of the society has a prominent position in the development process. Such an institution, which is self-developing, has an urgent need for internal development. The internal development of higher education requires transformation and the use of tools and solutions that enable higher education to avoid stagnation and enjoy sustainable development by using new digital tools. One of the solutions to digital transformation in higher education is the establishment of the fifth generation university in universities.

Participants of the effective strategies in the establishment of the fifth-generation university to change the educational approach; environmental reengineering, and academic effectiveness are known as development architecture. The issue of the establishment of the generation university in higher education is of special importance, which is partly due to the importance of universities in the training of specialized human resources needed by the sub-sectors of society. Islamic Azad University is transitioning from an education-oriented university to a civilization-building university, and all the efforts of this group are to provide the necessary platform for such activities, in the meantime, it should be noted that the development and performance of research activities and production of rich contents depend on comprehensive planning. Researchers, professors, and students should move towards the development of knowledge-based electronic research programs because the increase of research activities in the country

causes development, progress self-sufficiency, and true independence of the country. One of the main tasks of universities and higher education centers is the production of scientific knowledge, knowledge transfer, (training of specialized human resources), and providing specialized services to society in line with the changes of the digital age. The optimal performance of each of these tasks depends on having basic, applied, and developmental research, as well as preparing researchers who can conduct this research. Most of the participants in this research believed that the activities and research plans of the universities should be directed towards research that fulfills the needs of society and is assuredly feasible, and not those that do not resolve at least one of the current problems of society. This finding has been aligned with the results obtained from the study carried out by (Loi & Di Guardo, 2015; Rad et al., 2017).

The contextual conditions indicate the incorporated and immediate factors that are effective in the process of establishing the fifth-generation university, and in this research, they include the development of social, cultural, and political networks in the university; The economic development of the university is the basis of organizational support. The question of universities responding to social, political, economic, and cultural needs depends on the degree of adaptation of higher education alignment with scientific developments. The degree of adaptation and compatibility of higher education and the university institution with the digital environment is the main component of future research in the higher education system. Also, university deans and higher education officials of a civilizing university should organize and strengthen scientific associations and communities by making solutions such as increasing the efficiency of growth centers and launching scientific-applied startups, making maximum use of information technology, and trying to realize the goals of electronic government, playing the role of scientific authority required by the industry, services, and agriculture sectors, establishing a performance-based budgeting system, creating new sustainable governmental and non-governmental sources for higher education, diversifying sources of income for universities to create a decrease in dependence on higher education centers, and protecting them from financial crises that are caused by sanctions or other economic issues from time to time. This finding has been aligned with the results from the research conducted by (Pournaghi & Hijazi, 2018).

The intervening condition that has been noticed by the interviewees is the presence of a dynamic environment and structure in the university. What many advanced countries in the world are pursuing in their higher education system is to reach the global markets of higher education. The point that should be taken into account is that one should not deal with the challenges of higher education pessimistically, but rather, they should be recognized, and logical and realistic strategies should be developed for them. If these challenges are examined from the perspective of opportunity, they will increase the dynamics of the electronic higher education system. This finding is implicitly aligned with the results of the research done by Carayannis et al., 2019 (Abbas et al., 2019).

Finally, elite development contributors, the comprehensive effectiveness of the university, and the appearance of the characteristics of the fifth-generation university formed the consequences of the establishment of the fifth-generation university. When universities move towards civilization, to cover their expenses, they start to economize educational and research services and figure out their real price, and in this way, they can demand the costs of higher education from the real beneficiaries and minimize public resources. In other words, the establishment of a fifth-generation university in higher education can lead to the optimization of the resource allocation behavior of different stakeholders. It can prevent the waste of resources (financial resources, life or time of students, etc.), which in turn results in the overall effectiveness of the university; the establishment of the fifth-generation university, and the development of civilization. Globalization, competitive markets, internationalization of education, digital learning, commercialization, technical developments, and technological innovations are all realized in the wake of the fifth-generation university establishment. Therefore, it is suggested that:

- The entrepreneurial culture in the field of new technologies in universities through the top entrepreneurs of the country's ICT industry, who are available within the collection of members of the Union and the Syndicate of the Telecommunication Industry of Iran as two specialized mother organizations in the field of ICT should be developed and disseminated.
- The entrepreneurial private sector managers, faculty members, and entrepreneurial employees in universities and industry, by paying the research costs of these researchers from the relevant ministries and

defining national projects with the country's top technology companies should be employed.

- Scientific and educational conferences about entrepreneurship with prominent entrepreneurs abroad should be held and related organizations should transfer its achievements in the field of ICT inside the country.
- The programs and curriculum content of academic courses should be revised with the help of trade unions, exemplary entrepreneurs of the country, as well as private sector industries that somehow have a large contribution to the productive economy of the country.
- Joint training needs assessment studies in the entrepreneurship sector between ICT artisans, startups, and job seekers should be conducted and these trainings should be outsourced to a part of the body of trade unions that have the preparation and potential of this field of activities.

The post-corona world will be an area of tremendous changes and accelerated dynamics. The changes will be so strange and surprising and immensely fast that the lack of proper planning and the slightest carelessness can incur strategic surprise costs in all political, economic, social, and even cultural fields. The future environment will be full of change and instability and fraught with uncertainties. There will be new views on business issues, the emergence of fourth-generation universities, the real use of the knowledge and expertise of the elites, and the removal of the traditional top-down view of the government structure. The effort for future architecture will be made to use the new tools of the Internet of Things, 5G AR, VR, artificial intelligence, etc., although this effort will always be associated with great risk and may affect the behavior of human societies. Anyway, accepting this risk will be much wiser than being a mere spectator of future developments.

In the post-corona era, people will boost their social responsibility towards society, and by entering a new era of behaviors and business models, they will gain a new experience.

CONFLICT OF INTEREST: The authors declare that they have no conflicts of interest regarding the publication of this manuscript.

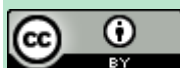
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