



**The Identification of Managerial Factors Influencing in the Creation of Knowledge – Based
Firms in the Universities of Gilan Province**

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**The Identification of Managerial Factors Influencing in the Creation of Knowledge – Based
Firms in the Universities of Gilan Province**

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Abstract:

The present research was conducted to identify effective managerial factors in the creation of knowledge based companies in universities. The statistical community in the qualitative section includes the heads, deputies, heads of colleges, managers of the center for the growth of the universities and the managers of the group and in the small part of the faculty members of Islamic Azad University of Guilan province. For sampling in the qualitative section, a targeted sampling method was used and in a small section, proportional stratified random sampling was used. In the qualitative section, 13 people participated in the interview process and in the small section with a population of 869, participated in a proportional random sampling of 267 people. The data gathering tool was interview and researcher-made questionnaire. Which, after confirmation of validity and reliability ($909 = a$), were distributed in the target population. Descriptive and inferential statistics were used to analyze the data. In the inferential part, exploratory and confirmatory factor analysis was used at the level of 0.95. In the qualitative section, 30 components were identified in the managerial dimension. In the quantitative part, the findings showed that the component of the support of university directors from the founders of knowledge based companies in universities was the highest factor load (0.81) And the component of creating an appropriate incentive atmosphere and encouraging successful projects by university administrators with the least factor load (0.58) of the total variance were explained and other components were also important in the following order respectively. Also, the final pattern of research was confirmed by fitness indexes and standard coefficients. The highest impact factor related to the component of the support of university administrators from the founders of knowledge based companies in universities was 0.81 and the lowest impact factor was related to the creation of appropriate incentive atmosphere and encouraging successful projects by university administrators with 0.58.

Keywords: Knowledge Based Companies, Management Factors, Template, Universities.



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Introduction:

Universities play a major role as the main custodians of the education and training of human resources specializing in society. Social responsibility of universities and higher education institutions in recent decades due to the growth of the number of students and their generalization and the increase of expectations from the university towards the community, have attracted the attention of educational planners in different countries and the higher education system of many countries. They have developed a series of career and professional activities and activities in the academic community (Tetrova and Sabulova, 2010, quoted by Salehi Omran et al., 2012). One of the most basic infrastructures of knowledge economy and the precondition of realizing the strategy of knowledge-based companies is human capital, creative, innovative and knowledge that according to the composition of the population of Iran and the high population of educated youth and manpower as the largest and most valuable capital of the country should be considered. And thus, by empowering and encouraging their activities in the form of knowledgeable companies, the country will be able to face any threats and economic sanctions. With the growing importance of the subject of knowledge-based companies, providing a model for creating knowledge-based companies for strategic planning at universities is essential. Given the strong dependence of universities, especially Islamic Azad universities, on student tuition, the need to establish knowledge-based companies and the creation of economic companies and the movement towards the transformation of knowledge into wealth is felt. Therefore, considering that one of the main factors in the growth of national per capita production is knowledge economy and knowledge economy, one of the main strategies for sustainable self-sufficiency in strategic products is to promote technology and increase the productivity of production factors through knowledge creation. Economics and the development of knowledge-based companies, In order to make the most of existing capacities and capabilities in the universities and to realize the goals of the country's development plan, knowledge based companies are created with the following conditions: Knowledge Foundation is a company that is one percent to one hundred percent of its shares Belonging to a university or research unit, or 51% to 100% of it belong to faculty members of universities or research units. If the university stock is less than 50%, the company is a private foundation and, otherwise, the company is the foundation of knowledge. In the current conditions of our country and its economic problems, it is necessary to pay more attention to knowledge-



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based companies and to help develop and enhance their capabilities, with the aim of eliminating the sale of our natural resources and moving towards knowledge-based production. In other words, the way to boost the economy is through the production of knowledge and the foundation for building knowledge-based companies. This research is based on the newness of the subject of knowledge-based companies and the necessity of developing these companies for the country's economic growth and achieving sustainable economy, and the existence of theoretical deficiencies, especially in the context of conceptual models in the formation of knowledge-based companies, Seeking to identify effective management factors in creating knowledge based companies and presenting a suitable model in the universities of Guilan province. And the fundamental question of research is that what are the effective management factors in creating knowledge-based companies in universities?

An overview of the research background:

Knowledge-based companies are companies that use their knowledge assets as the main source of competitive advantage (Aghajani and Jafari Kenari, 1392). According to Sarento, Jonathon, and Permalinen (2004), knowledge-based firms are based on firms that hire university graduates and constitute the mainstream of their expertise and are the main source of knowledge creation. In other words, the production of wealth in these firms is done through the use of the internal capabilities of the people (the hardware of the device) (Rezvani and Tugraei, 2011). Sipel et al. (2015) explores the factors of human capital, innovation, technology strategy, product type, market positioning and financing, in a research entitled "Effective factors in long-term growth and identifying the factors affecting the survival and performance of knowledge-based companies" have payed. The results show that the existence of human capital including experience and knowledge in both dimensions of entrepreneurs and employees, as well as innovative activities as well as the supply of products at the international level, have a direct impact on the long-term growth of knowledge-based companies, but the provision of foreign capital There is not much financial support from the sponsors, the fossil fiscal, and the risk of capital. Van Ken (2013) In a study entitled "Universities and Incubators" with the goal of establishing entrepreneurial universities, it has been concluded that incubators as the main supporting infrastructure and infrastructure for the formation of birth generations and support for entrepreneurial students Establishing Entrepreneurial Universities. Oshi et al. (2012) in a study entitled "Reviewing the



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determinants and outcomes of generative companies" identified the necessary fields for the creation and success of knowledge-based companies in four levels of personality characteristics, Have been human resources, organizational characteristics, and environmental factors. Raniko (2012) explores the multiplicity and population of knowledge-based companies in the research, "Identifying the Effective Factors on the Growth of Knowledge Based Companies", identifying the employment structure and timing of sales of knowledge-based companies, identifying the internal dynamics of knowledge-based enterprises, and Traditional companies in different fields, identifying the impact of entrepreneurial tendencies and mobilizing forces on the efficiency of knowledge-based companies, the impact of past experiences on the establishment of knowledge-based companies, has concluded that the factors affecting the growth of companies Basic knowledge is: Individual factors include: gender, age, management record, level of education, work experience, applied skills, training, successful and unsuccessful experiences. Organizational factors include: history of the company, legal status, company size, ownership, and management indicators. Environmental factors include: business environment turbulence, heterogeneity, business environment dynamics, customer characteristics, competition and monopoly, corporate location. Colombo et al. (2010) in a study entitled "The Study of the Share of Academic Research on the Growth of Productive Companies" have considered the scientific quality of academic research to be effective in the growth of productive companies. Jalalikhah, Shahriari and Abedini (2016) in a research entitled "Identifying and ranking the factors affecting the establishment and deployment of knowledge based companies with factor analysis on the responses of respondents to four factors and their components were identified as: Environmental factors (investing and supporting ICT) include: government support policies, specific financial resources, ease of absorption of capital, supportive culture and encouragement of commercialization, the use of investors, the existence of reinforcing policies, government laws protecting the right Intellectual property, community economic conditions, business-oriented business planning to convert ideas into products. Individual and human factors (founder characteristics) include: the ability of creativity and individual innovation of the founders and employees, the technical characteristics of the founders, the personality and motivation of the founders and employees, the capital and characteristics of manpower, the educated, skilled and creative workforce, extraversion And the desire for independence, network and organizational social communication, business experience



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in the industry. Creativity and innovation include: science and technology parks, centers for growth, the use of creative and entrepreneurial students, and creative and innovative organizational activities. Fitting-out (necessary infrastructure), existence of advisory groups, product supply capability, efficient organizational structure, knowledge infrastructure, specialized infrastructure. Baba Khanian (1393), in a study entitled "Identifying the Underlying Factors for Establishing Productive Companies", concluded in a qualitative study that the environmental factors affecting the establishment of knowledge-based companies are: Government, economic conditions, political conditions, universities, centers of growth, science and technology parks, risky investment funds, research centers and industry, and the underlying factors include: management skills of knowledge-based companies, individual factors, rules And regulations, culture, identification, recruitment and support of technology elites. Hafezian, Salehi and Enayati (1393) have conducted a research entitled "The role of academic incubators in creating university cultures and modeling them". The results of the research in the qualitative section indicated that in the creation of academic generic companies, 14 components in the dimension of infrastructure, 17 components in the service dimension, 16 components in management and staff dimensions, and 13 components in the dimensions of outcomes. In the quantitative part of the research, the findings showed that in the dimension of infrastructure, the component of existing organizational policies with the highest factor load of 0.95, in the dimension of services, is the component of tax assistance with the highest factor load of 0.84, in terms of management and staff The component of the protection of intellectual property with the highest factor load factor 1, in terms of outcomes, has explained the component of partnership with the local community with the highest factor load of 0.92 of the total variance. Abdollahi, Ghafourian and Hasan Shahi (2014) have conducted a research entitled "The Model of Key Factors for the Success of Knowledge Based Enterprises". In this research, a model for key factors of success for knowledge-based companies is presented. These factors are presented in five main sections as follows: Human Resources (Entrepreneur, Management and Mentoring), Product Technology (R & D, Intellectual Property and Primary Product Knowledge Base), Sales and Marketing (Marketing, Sales, and Strategy), financing dimension (personal capital, bank and risky investment) and government (tax and national innovation system). Moradipour (2014) identified the six characteristics (leaders, recognition and identification of opportunity, innovation, human capital, research and development activities, and market) as the main factors behind the



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success of these companies in the form of a presentation of the success model of knowledge-based companies. The conceptual framework of the research has been investigated. The results of statistical analyzes indicate that the hypothesized factors in the conceptual framework of the research have a meaningful relationship with the success of knowledge-based companies that are: leadership, human capital, entrepreneurial opportunities, innovation, development and development activities, market situation and laws and policies Supportive government of knowledge-based companies that has had an impact on success. Aghajani and Sergei Ashliki (2013) conducted a research entitled "Identification and ranking of effective factors in the commercialization of knowledge based products" that have been implemented in knowledge based companies based in northern Iran. The results show that the technological factors associated with the underlying factor of the innovative timely, the marketing factors with the sub-factor of customer need, management factors with the secondary factor of management expertise and environmental factors with the sub-factor of government support as the most important factors in the commercialization of products Knowledge based companies. Faiz and Malekdar (2012) have conducted a research entitled "Strategic Analysis of the Conditions for the Establishment and Development of Academic Companies and Providing Appropriate Strategies for the University of Semnan". In this research, the importance and priority of this research, by providing strategies such as increasing the number of entrepreneurship training programs and producing innovative ideas among academics, and the formation of seminars and newsletters on entrepreneurship education and explaining the process of commercializing the innovative ideas for faculty members. The subject was taught at Semnan University. By providing strategies, co-operation of university networking with reputable universities inside and outside the country and joint programs and the establishment of the office for the registration and directing of new ideas and new technologies at the university covered these important issues.

Research methodology:

The present research is field research, cross-sectional, applied and in terms of research method, descriptive - correlation research. In this research, according to the purpose and nature of the research, the combined or mixed research method has been used through integration of qualitative and quantitative methods. In the qualitative stage of the research, the aim was to investigate and search effective management factors in the creation of knowledge based companies in universities,



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and to develop a questionnaire for a small section. At first conceptual dimensions were analyzed and analyzed in a specific classification. Then, to identify effective managerial factors in creating knowledge-based companies at universities in the present situation, through in-depth and exploratory interviews with 13 executives, deputies, heads of departments, managers of university development centers and university leaders Islamic Azad University of Gilan Province, which were selected purposefully, Qualitative data was collected and analyzed by using the coding process based on the systematic data theory scheme of Strauss and Corbin (1990), as well as content analysis method. These concepts and categories are the basis for compiling the questionnaire to achieve effective factors and identify the components of the model of creating knowledge-based companies in universities. In a small section of the questionnaires, 267 faculty members were selected as the statistical sample of 869 people selected by proportional random sampling method. Validity of the questionnaire was determined by the opinion of the supervisors and consultants and other experts and its reliability was calculated by calculating Cronbach's alpha (0.990), which indicates a high reliability. In the quantitative section, descriptive and inferential statistics were used to determine the relationship between variables and their desirability. Factor exploratory and confirmation analysis was used to rank the components.

A. Findings in the qualitative research section:

From the analysis of qualitative research data in the open coding stage, 90 initial code concepts were obtained. After reviewing and matching these codes, common codes were obtained.

Table 1. Results analysis of the content of interviews and open coding:

Dimension (main)	Components (sub)
	1. The beliefs of university administrators about the creation of knowledge-based companies
	2. Managers' Viewpoint for Individuals Owning Ideas and Ideas
	3. Practicing promises of managers to the idea owners
	4. The support of university administrators from the founding members of knowledge-based companies at universities



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5. Motivate your teachers and encourage them to establish knowledge-based companies
6. Justifying industry owners to use academic experiences and research
7. Identify the elite and owner of the idea by the university administrators
8. Making managers promises to the idea owners
9. The support of university administrators from the founding members of knowledge-based companies at universities
10. Identify the elite and owner of the idea by the university administrators
11. Managerial and executive experience
12. Realistic expectations and consistent with the academic environment and investors
13. An attempt to find financial investors by managers
14. Familiarity of managers with the potential of the university to create knowledge-based companies
15. The motivation and interest of university administrators in establishing knowledge-based companies
16. Protection of intellectual property by managers
17. Sustainability of managers against their risks and risk
18. Identify precisely the barriers to creating knowledge-based companies in the university
19. Coordinating and organizing appropriate managers
20. Elite financial and intellectual support by university administrators
21. Awareness of academics about the interests of knowledge-based companies by university administrators
22. The existence of management plans at universities is the creation of knowledge-based companies
23. Create an appropriate incentive atmosphere and encourage successful initiatives by university executives
24. Narrow nose and analysis and strategic capability of university administrators



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25. Take initiative and entrepreneurial perspectives on university management
26. The ability of successful managers in the academic and business environment
27. Leadership in implementing entrepreneurial, economic and income generation programs
28. Manage the process of commercializing the idea of a product
29. Understanding the proper functioning of knowledge-based companies by university administrators
30. Management skills of university administrators.

First question: What are the effective management factors in creating knowledge-based companies in universities? As shown in Table 1, based on the analysis of the qualitative data of deep and explicit interviews, the coding and analysis of the content of interview texts and their correspondence with theoretical foundations, according to the participants, constitute effective managerial factors in the creation of companies. Basic knowledge in universities can be classified into 30 components. Figure 1 shows the coding pattern of the creation of knowledge-based companies in universities based on qualitative findings. This conceptual pattern represents the relationships between the main dimensions and the components of the qualitative process. The research's assumption is that the managerial factors and components directly affect the creation of knowledge-based companies at universities.

The beliefs and attitudes of university administrators to the creation of knowledge-based companies, the viewpoints of managers to those who have the ideas and ideas, the implementation of promises of managers to the owners, the support of university executives from the founders, motivating the teachers and encouraging them to establish a company, Justifying industry owners to use academic experiences and research, identify elite people and the owner of the idea, the ability to form a coherent team, Managerial and managerial experience, having realistic expectations and consistent with the academic environment and investors, trying to find financial investor, familiarity of managers with university potentials, motivation and interest of university



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administrators, protection of intellectual property by managers, managers' sustainability Against the risks and risk appetite, the decision makers decide on the formation of a company, Managerial Skills, Managerial Specialist, Narrowing Nose and Analyzing and Having Strategic Capabilities, Entrepreneurship Initiative and Perspectives, The ability of successful managers in academic and business environment, managers' inclination to implement entrepreneurial, economic, and income generation programs , Managing the process of commercializing the idea of the product, recognizing the exact function of knowledge-based companies by managers, The accurate identification of barriers to corporate creation, the coordination and organization of managers, the financial and intellectual support of elites by university administrators, the knowledge of academics about the interests of knowledge-based companies by university administrators, the existence of management plans at universities, the creation of knowledge-based companies Creating an appropriate incentive atmosphere and encouraging successful initiatives by university executives.

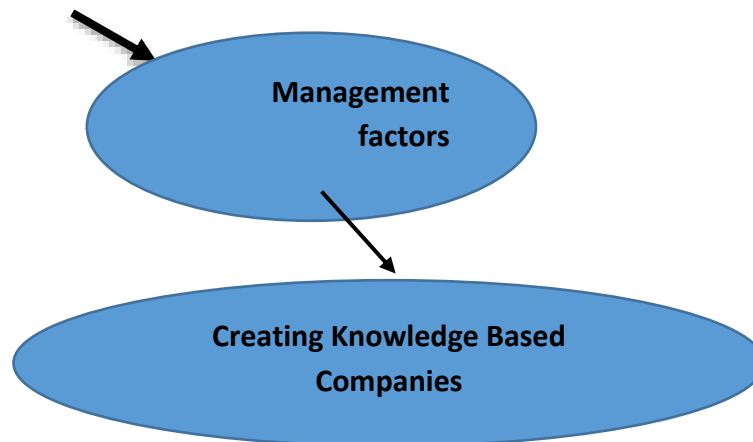


Figure 1. The coding pattern based on qualitative research findings

B) Findings in the quantitative research section:

The Kaiser-Meier and Bartlett tests were used to measure the suitability of the data for the factor analysis.



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Table 2. Kizer-Meyer and Bartlet tests to determine the questionnaire's indexability:

Significance level	Bartlett Test Approximate X- value	The amount of Kaiser- Meyer	
P< 0/001	4940/593	937%	Management factors

As seen in Table (2), the KMO value for managing agents is 9,373, and is acceptable. The significance level of Bartlett's test was more than 0.01 (P <0.05). The results of these two tests indicate that factor analysis is feasible for 30 indicators for management factors and, in other words, indicators are feasible.

Table 3. Results of exploratory factor analysis and determining factor load for each of the identified components:

Coefficient determination	Standard factor load	Components	
0/516996	0/719	1. The beliefs and attitudes of university directors towards creating a company	Management factors
0/5625	0/75	2. The viewpoints of managers to those who own their ideas and ideas	
0/675684	0/822	3. Making promises of managers to the idea owners	
0/568516	0/754	4. Support the university directors from the founding members of the company	
0/483025	0/695	5. Motivate your colleagues and encourage them to start a business	
0/502681	0/709	6. The owners of the industries for the use of academic experiences and research by managers	



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0/599076	0/774	7. Identify the elite and owner of the idea by the university administrators
0/476956	0/676	8.The ability to form a coherent and coordinated team
0/580644	0/762	9. Managerial and executive experience
0/502681	0/709	10. Having realistic expectations and consistent with the academic environment and investors
0/552049	0/743	11. An attempt to find financial investors by managers
0/651727	0/811	12. Managers' familiarity with the university's potential in creating companies
0/514071	0/717	13.Motivation and interest of university administrators towards the establishment of the company
0/573049	0/707	14. Protection of intellectual property by managers
0/497025	0/705	15. Sustainability of managers against their risks and risk taking
0/514079	0/717	16.The power of decision makers regarding the formation of a company
0/715716	0/846	17. Management skills of university administrators
0/597529	0/773	18. Specialists of University Directors
0/620944	0/788	19. Narrowing nose and analyzing and having strategic capability of managers
0/606841	0/779	20.Take initiative and entrepreneurial perspectives on management
0/621541	0/789	21. The ability of successful managers in the academic and commercial environment



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0/534631	0/731	22. Leadership to implement Entrepreneurship, Economics and Income Generation Programs
0/5184	0/72	23. Managing the process of commercializing the idea of the product
0/643204	0/802	24. Understanding the proper functioning of knowledge-based companies by managers
0/620994	0/788	25. Identify precisely the barriers to creating companies
0/5776	0/76	26. Coordinating and organizing appropriate managers
0/660969	0/813	27. Elite financial and intellectual support by university administrators
0/555025	0/745	28. Awareness of academics about the interests of knowledge-based companies
0/662596	0/814	29. Establishment of management plans at universities
0/648025	0/805	30. Create an appropriate incentive atmosphere and encourage successful projects

As can be seen in table (3), factor analysis shows that in general, the extracted indicators have high power in explaining the management dimension, so that all the explanatory factor loads are higher than 0.6.

Second question: What are the priorities of each of the influential factors in the management dimension? To prioritize components, the results of factor analysis and ranking of each of the components in the creation of knowledge based companies are discussed.



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Table 4. Results of Factor Analysis of Management Factors

rank	T Statistics	Correlation with the variable (effective factor	Components
15	11/90	0/69	1. The beliefs and attitudes of university directors towards creating a company
16	12/83	0/69	2. The viewpoints of managers to those who own their ideas and ideas
2	16/15	0/80	3. Making promises of managers to the idea owners
1	16/59	0/81	4. Support the university directors from the founding members of the company
8	13/74	0/73	5. Motivate your colleagues and encourage them to start a business
10	13/54	0/72	6. The owners of the industries for the use of academic experiences and research by managers
5	14/16	0/74	7. Identify the elite and owner of the idea by the university administrators
24	11/42	0/63	8. The ability to form a coherent and coordinated team
19	12/58	0/68	9. Managerial and executive experience
23	11/47	0/63	10. Having realistic expectations and consistent with the academic environment and investors
14	12/97	0/70	11. An attempt to find financial investors by managers
3	15/13	0/78	12. Managers' familiarity with the university's potential in creating companies



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9	13/73	0/73	13.Motivation and interest of university administrators towards the establishment of the company
6	14/02	0/74	14. Protection of intellectual property by managers
12	13/49	0/72	15. Sustainability of managers against their risks and risk taking
7	13/78	0/73	16.The power of decision makers regarding the formation of a company
17	12/78	0/69	17. Management skills of university administrators
4	14/54	0/76	18. Specialists of University Directors
13	13/37	0/71	19. Narrowing nose and analyzing and having strategic capability of managers
11	13/52	0/72	20.Take initiative and entrepreneurial perspectives on management
21	11/80	0/65	21. The ability of successful managers in the academic and commercial environment
20	12/17	0/66	22. Leadership to implement Entrepreneurship, Economics and Income Generation Programs
26	10/88	0/61	23. Managing the process of commercializing the idea of the product
29	10/54	0/59	24. Understanding the proper functioning of knowledge-based companies by managers
27	10/68	0/60	25. Identify precisely the barriers to creating companies
25	11/37	0/62	26. Coordinating and organizing appropriate managers
18	12/74	0/69	27. Elite financial and intellectual support by university administrators



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28	10/75	0/60	28. Awareness of academics about the interests of knowledge-based companies
22	12/03	0/65	29. Establishment of management plans at universities
30	10/32	0/58	30. Create an appropriate incentive atmosphere and encourage successful projects

RMSEA= 0.077& GFI=0.90,NFI=0.92, CFI=0.95

According to Table (4), it is observed that all of the variables related to management factors have significant correlation coefficients with the variable. Because the T-score is above 1.96 and confirmed. And the most influence between the indicators of managerial factors is "the support of university administrators of the founding members of knowledge based companies in universities" with factor load (0.81), and other components of influence are important in the next stages.

Question Three: What kind of model can be used to determine the management factors affecting the creation of knowledge-based companies in universities? The results of the confirmatory factor analysis in the form of direct standard coefficients and t-valued coefficients determine the relationships between the components of the creation of knowledge-based companies in universities. The results of standard coefficients in determining the effect of components in managerial factors indicate that among the components affecting the managerial dimension, the component "support of university directors from the founding members of knowledge based companies in universities" with the coefficient of 0.81 is the highest Has an impact on the creation of knowledge-based companies at universities. The t-valued coefficients show the significance of the coefficients of the influence of managerial factors on the creation of knowledge-based companies in universities. Therefore, it can be said that 30 components affecting managerial factors in this model explain the impact of management factors on the creation of knowledge based companies in universities. Figure 2 illustrates the final model of managerial influential factors in the creation of knowledge-based companies at universities.

Management factors:



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The beliefs of university administrators is that they create knowledge-based companies (0.69), managers' viewpoints toward their own ideas and ideas (0.69), implementation of managers' promises to ideals owners (80%), university directors' support from founders (0.81), motivating teachers and encouraging them to establish a company (0.73), justifying industry owners to use academic experiences and research (0.72), identifying elite and owner of the idea (0.74), The ability to form a coherent and coordinated team (0.63), managers' management experience (0.68), realistic and consistent expectations of the academic environment and investors (0.63), an attempt to find a financial investor (70 / 0), Leadership acquaintance with university potentials (0.78), motivation and interest of university administrators (0.73), protection of intellectual property by managers (0.74), managers' sustainability against their risks and risk taking (0.72) , Decision makers' decision making about company formation (0.73), management skills (0.69), specialist managers (0.76), narrow nose and analysis and strategic ability (0.71), having initiative Entrepreneurship and entrepreneurship perspectives (0.72), successful managers 'presence in the academic and commercial environment (0.65), managers' tendencies to implement entrepreneurial programs, Economic and income generation of the university (0.66), management of the process of commercialization of the product idea (0.61), knowledge of the exact function of the knowledge-based companies by managers (0.59), the exact identification of barriers to establishment of companies (60 / 0), proper coordination and organization of managers (0.62), financial and intellectual support of elites by university administrators (0.69), informing academics about the interests of knowledge-based companies by university administrators (0.66), the existence of plans Managing in universities, creating knowledge-based companies (0.65), creating an appropriate incentive atmosphere and encouraging successful projects by university administrators (0.58).

Question 4: What is your favorite pattern? After presenting the final model, the significance and pattern fit were investigated. Table 5 shows the fitness indicators of the final research model.



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Table 5. Significance and fit indices Final design pattern

Result	Amount obtained in pattern	Grateful if	Abbreviation	Index name	
Confirm	0/056	Smaller than 0.08	RMSEA	Root Mean Squared Error Estimating	Significant indicators
Confirm	1/84	Equal to and smaller than 3	$\frac{\chi^2}{d_f}$	Chi-square to degree of freedom	
Confirm	1/00	Larger than 0.9	GFI	Goodness fit index	Fit indices
Confirm	0/99	Larger than 0.9	NNFI	Unmatched fit index	
Confirm	1/00	Larger than 0.9	NFI	Unmatched fit index	
Confirm	1/00	Larger than 0.9	CFI	Adaptive fit index	
Confirm	1/00	Larger than 0.9	IFI	Incremental fit index	
Confirm	0/97	Larger than 0.9	AGFI	Wellness Index Improved Fitness	
Confirm	0/98	Larger than 0.9	RFI		
Confirm	0/0034	Smaller than 0.08	RMR	The root mean of the remaining squares	

As shown in Table (5), the Chi-square is equal to 1.84 degrees of freedom, which is about acceptable. And other indicators of pattern matching such as goodness index of fit, non-standard fit index, normal fit index, adaptive fit index, incremental fit index, modified fitting index, root mean square error estimator, root index, residual average, Acceptance and show the suitability of the research model. And that regulated relationships of variables based on the theoretical framework of research and the qualitative section are logical and fit and appropriate.



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Discussion and conclusion:

A study of research on creating knowledge-based companies in universities has shown that many dimensions and components can be effective in setting up knowledge-based companies. In the study of research and interviews with 13 academic scholars such as mosques, deputies, faculty directors, university development managers and group managers at Islamic Azad University of Gilan, the results of coding and analyzing the content of the class It showed that components or sub-factors can be classified into 30 components. The results of Taydi's analysis showed that in the managerial dimension, the component of the support of the university directors from the founding members of the knowledge based companies in the universities has the highest correlation coefficient in the creation of knowledge based companies in the universities, with the highest factor load (0.81)) With the results of researches, danesh fard (2017) with emphasis on empowerment (supreme management, skilled and expert manpower), khayatiyan and colleagues (2016) with emphasis on individual factors and characteristics of founders (Individual creativity and innovation), Babakhanian (2014) emphasized on environmental factors (government support) and underlying factors (managerial skills and individual factors), Hafezian et al. (2014) emphasizing infrastructure, services (tax assistance), management and staff , Abdollahi et al. (2014), with emphasis on entrepreneurship and government support, Aghajani and Saravi Ashliki (2012) emphasizing marketing factors (customer or industry needs, management factors (management expertise), environmental factors (government support) , Allahiyari Fard and Abbasi (2011) emphasized on governmental policies, scientific and communication infrastructure, creative and innovative workforce, Fakur (2011), with emphasis on the production of business ideas and the identification of opportunities for it, the support of university administrators and university approval , Talebi and Zare Yekta (2008) emphasize the provision of successful business models, business-related training by experienced professors, the collection and dissemination of company information, monitoring curricula, meeting customer needs (Industry), creating a supportive culture in managers, Mahdavi et al. (2008) emphasized the efforts to shorten the time required for registration of companies, avoidance of ambiguity and individual perceptions, non-discrimination, and Sipl et al. (2015), with emphasis on human capital (experience and Knowledge) and market positioning, Van Ken (2013), with emphasis on supportive infrastructures



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and networks supporting entrepreneurs' students, Oshi et al. (2012) with emphasis on personality traits, human resources, organizational characteristics and factors peripheralraniko (2012) emphasizes on individual factors, management factors and environmental factors, Fini et al. (2010), with emphasis on environmental impacts, university support mechanisms, individual factors, Rasmussen (2010) with an emphasis on commercialization, university capabilities for Facilitation of Entrepreneurship Activities, Kamaryah et al. (2010), emphasize the decision to commercialize the innovative idea and individual characteristics of the owner of the idea.

Offers:

- 1- Managers from the founding members of knowledge-based companies at universities provide the necessary support.
- 2- Make promises to the owners of the ideas.
3. Know about the potential of the university to create knowledge-based companies.
4. To seek financial investors in universities.
5. Encourage university professors to provide their ideas and create the necessary motivations for them.
6. Identify elite individuals and owners of the idea.
7. Entrepreneurial initiative and vision in university management.
- 8- To identify barriers to creating knowledge-based companies at universities.
9. To apply entrepreneurship, economics and income generation programs to the university.
10. Inform academics of the interests of knowledge-based companies at universities.
11. Provide an opportunity for faculty members, staff and students to trust them and university policies.



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