Investigate the relationship between intellectual capital and value creation activities in Isfahan carpet manufacturing companies

Alborz Abbasi\textsuperscript{1,2} and Forough Heirani\textsuperscript{3*}

\textsuperscript{1}Department of Accounting, Yazd science and research branch, Islamic Azad University, Yazd, Iran.
\textsuperscript{2}Department of Accounting, Yazd branch, Islamic Azad University, Yazd, Iran.
\textsuperscript{3}Department of Accounting, Yazd branch, Islamic Azad University, Yazd, Iran.

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\begin{abstract}
The aim of this study was to investigate the relationship between intellectual capital and business models which are different. This research has purpose the methods of collecting and analyzing information and also is a descriptive study and description of the survey and the analysis of correlation assumptions, Also in terms of time, in this study is cross-sectional. The population of this study consisted of 200 senior managers and companies that are producing carpets in Isfahan province. Cochran formula was used to estimate the sample size and eventually 120 students was determined randomly in selected sample. The instrument used to collect data and intellectual capital research variables Bontis questionnaire (1998) respectively. In this study, given subject and nature of the survey is questionnaire to measure intellectual capital, intellectual capital Bontis (1998) that is used. Cronbach's alpha reliability coefficient based on a questionnaire sent 84 percent, indicating a high reputation measurement tools. This study consisted of two main hypotheses and seven hypothesis is that results include the impact of general business models and users is value creation activities. Also there is a significant positive relationship between social capital and intellectual.

\end{abstract}

\textbf{Keyword: } intellectual capital, different business models for value creation

* Corresponding author: \textit{Forough Heirani}

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INTRODUCTION
In today's economy is based on knowledge, humans are the greatest asset of organizations. Companies large part of its resources to invest in their intellectual capital. An integral part of the company's intellectual capital value creation process and it is necessary to create and maintain competitive advantage. In addition, companies that learning and innovation can take on the competition can trade in today's dynamic environment, gain more value (Rahmani and Arefmanesh, 2012).

Enterprises to maintain their competitive position, should their investments in the components of intellectual capital such as human resources, research and development and information technology lead. Intellectual capital is the main factor creating value in companies and Companies are moving towards value creation through intellectual capital of the organization. In fact, recent comments by company managers about creating value physical assets, has changed (Talebian et al., 2012). Definitions and classification schemes have been proposed regarding intellectual capital and intellectual capital in case there is a widely accepted definition. Despite vast differences in existing models, most of these views agree that intellectual capital is a set of knowledge that can be useful for production purposes (Ndrikipulus, 2010) In a knowledge-based organization in which knowledge large part of the value of a product and also makes up the wealth of an organization. Traditional accounting methods based on tangible assets, as well as information about past operations of the organization. To value intellectual capital, the largest and most valuable asset for them are inadequate (Selyia, 2000) The intellectual capital approach for organizations that. Will function well aware of the value of more comprehensive (and Swands Waterhouse, 1998).

According to what was stated, this study seeks to answer the question is how intellectual capital value creation activities are affected? Abbasi and dorstikar (2010) to assess the efficiency of intellectual capital elements of financial performance the Tehran Stock Exchange (2000-2003) began Intellectual capital is calculated with the results of this study showed Pulic. The coefficient of performance of each of the elements of intellectual capital has a significant positive impact on the rate of return on equity. The impact of physical and human capital efficiency coefficient positive impact on earnings per share structural capital efficiency coefficient is negative and significant. Human capital efficiency coefficient significant negative impact on the annual rate of return on physical capital and structural efficiency ratio puts it aims to provide a positive and significant impact. Also, companies that have a higher intellectual capital, better financial performance and the average coefficient of intellectual capital is a significant difference between the seven industry.

Namazi and Abraimi (2009) in the study, the effect of intellectual capital on their current and future financial performance. Pulic was calculated on the basis of intellectual capital model results showed that regardless of company size, debt structure and financial performance of the past, Between intellectual capital and current and future financial performance, both at the level of all companies and industry level, there is a positive relationship. In addition, within all companies and all industries, current and future significant negative relationship between firm size and performance, And between past performance and current performance, and there is a significant positive relationship between past performance and future performance. But the relationship between structure and performance of current and future debt within all significant company and industry level, In the chemical and pharmaceutical industry and in the automotive industry and positive metals and non-metallic mineral was unknown.

Chang and Hsieh (2011) to study the relationship between intellectual capital components and three operational performance, financial and stock markets in Taiwan's electronics industry. To measure the intellectual capital model adjusted value added intellectual coefficient is used. The results show that the relationship positive operating performance used by capital and human capital structure and not related. The intellectual capital components with a negative market performance and financial relationship. Expenditure on research and development are positively correlated with three performance intellectual property, but only with a positive operating performance relationship.

Madetins et al (2011) to study the relationship between intellectual capital components with Greece's financial performance and market exchange. The intellectual capital of the method for calculating the value added intellectual coefficient were used. The results showed no significant relationship between intellectual capital and financial performance of the stock market and Only the relationship between human capital and return on equity has been confirmed.

Research Methodology:
Between the years of the study period is 2015 to 2016 , where research is among the companies producing carpets in Isfahan province. The scope of the topic in relation to the effect of intellectual capital value creation activities. The aim of the present study, functional, the process of research, and the most descriptive correlational data type, is qualitative. Because a bunch of intellectual capital in the companies that they could be very useful achievements are paving companies, The population of this study senior managers and the companies are producing carpets in Isfahan province. The sample using the sample table 120 managers are Morgan The method of collecting data for documentation - Library for chapter one and two, field of study documents, documents in archives (document mining) information required to be collected. Then, by using the resources available in the library consequence of theoretical and research-related information to be collected. It also collected information from the Internet. Also to collect data by visiting Isfahan carpet manufacturing companies collect information takes place. In this study, a questionnaire to measure intellectual capital Bontis (1998) is made with 52 closed questions And large-scale Likert very low = 1, low = 2, 3 = moderate, high and very high = 4 = 5 (used because of the similarity of some questions to ask 42 fell. The structure has three components: human capital, structural capital and relational capital (customer). To analyze the data, descriptive and inferential statistics are used. In descriptive statistics, frequency tables, mean and standard deviation is used. In inferential statistics , and multivariate
linear regression and a t-test is used. Cronbach's alpha reliability coefficient based on a questionnaire sent 84 percent, indicating a high reputation measurement tools.

The results:
The frequency and percentage of subjects responding to questionnaires, to separate variables for each position are given in Table 1.
The data in Table 1 show that 66 of the respondents (managers of companies producing carpets) equivalent (55%) of the respondents were male and 54 were equivalent (45%) were women.
The data in Table 1 show that 5 patients (4.16% of those under 30 years, 32 patients (26.66%) were between 31-40 years, 41 patients (34.16%) and 41-50 years, and 42 patients (35%) were 51 years of age.
The data in Table 1 show that 15 patients (12.5%) had a history of between 1 and 5 years, 20 patients (16.66%) of 6 to 10 years, 52 patients (43.33%) of 11 to 15 years, 21 patients (17.5%) 16 to 20 years and 12 patients (10%) have 21 years work experience.
The data in Table 1 show that 31 equivalents (25.33%) and low literate school diploma, equivalent to 42 (35%) have an associate degree, 25 (20.833%) of education at the Bachelor's level, 19 patients (15.833%) graduate and 3 patients (2.5%) were PhD.

Part II: analytical findings
The main hypothesis: influential intellectual capital value creation activities.
According to the Durbin-Watson statistic that number is 2.2, and between 1.5 to 2.5 as a result of the linear regression fit to the data. Because the value is 0.25, resulting in value creation activities can explain 25 percent of the changes in intellectual capital.
The beta value of 0.21 is due to the number indicates how much of an impact on intellectual capital value creation activities is influenced, because the amount Sig = 0 and from 12.05 error accepted as a result of less influential intellectual capital value creation activities.
First hypothesis: organizational product manufacturing process influential intellectual capital.
According to the Durbin-Watson statistic that number is 1.7, and between 1.5 to 2.5 as a result of the linear regression fit to the data. Because the value of R2 is 0.0441 number as a result of the production process and product is 4.41% of organizations can justify changes in intellectual capital.
Given the amount of 0.054 Beta is the number reflects the impact of the production process and enterprise products, because the amount Sig = 0.01 and from 0.05 error accepted as a result of the manufacturing process and products less influential organizational intellectual capital.
The second sub-hypothesis: channels of communication with customers on influential intellectual capital.
According to the Durbin-Watson statistic that number is 2.1, and between 1.5 to 2.5 as a result of the linear regression fit to the data. Because the value of R2 is 0.1681 number as a result of development of communication channels with customers able to explain 16.81% of changes in intellectual capital. Given the amount of beta is 0.17, indicating that the number of channels to communicate with customers on the impact of intellectual capital. Because the value of sig = 0.02 and from 0.05 Accepted error is less influential as a result of development channels to communicate with customers on intellectual capital.

The third sub-hypothesis: human resource development influential intellectual capital.
According to the Durbin-Watson statistic is 2.08, which number between 1.5 to 2.5 as a result of the linear regression fit to the data. Because the value of R2 is 0.0961 thus growing number of human resources capable intellectual capital account for 9.61% of the changes.
The beta value of 0.17 is due to the number indicates the impact of HR on intellectual capital, because the amount Sig = 0 and from 12:05 error accepted less influential intellectual capital as a result of human resource development.
The fourth sub-hypothesis: the development of local innovation influential intellectual capital.
According to the Durbin-Watson statistic is 2.25, which number between 1.5 to 2.5 as a result of the linear regression fit to the data. Because the value of R2 is 0.1681 number as a result of local innovation Center is able to explain 16.81% of changes in intellectual capital.
The beta value of 0.45 is due to the number indicates the impact of local Innovation Center is intellectual capital. Because the value of sig = 0.03 and from 00:05 local Innovation Center as a result of error has been accepted less influential intellectual capital.

Fifth hypothesis: the establishment of social networks on the influential intellectual capital.
According to the Durbin-Watson statistic that number is 1.9, and between 1.5 to 2.5 as a result of the linear regression fit to the data.

conclusion:
The results of the statistical analysis of data shows that 66 of the respondents (managers of companies producing carpets) equivalent (55%) of the respondents were male and 54 were equivalent (45%) were women.
The results of the statistical analysis of the data showed that 5 patients (4.16%) are under 30 years, 32 patients (26.66%) were between 31-40 years, 41 patients (34.16%) and 41-50 years, and 42 (35%) were 51 years of age.
The results of the statistical analysis of the data showed that 15 patients (12.5%) had a history of between 1 and 5 years, 20 patients (16.66%) of 6 to 10 years, 52 patients (43.33%) of 11 to 15 years, 21 patients (17.5%) 16 to 20 years and 12 patients (10%) have 21 years work experience.
The results of the statistical analysis of the data showed that 31 patients (25.33%) have low literate education and diploma, equivalent to 42 (35%) have an associate degree, 25 (20.833%) of education at the Bachelor's level, 19 patients (15.833%) graduate and 3 patients (2.5%) were PhD.
The results of this study, prayer research results and Abraham (2009) and Chang and Hsieh (2011) is consistent. Prayer and Abraham (2009) in their study to investigate the effect of intellectual capital on their current and future financial performance. Pulic was calculated on the basis of intellectual capital model results showed that regardless of company size, debt structure and financial performance of the past, Between intellectual capital and current and future financial performance, both at the level of all companies and industry level, there is a positive relationship.
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