

Innovation management evaluation and its impact in achieving customer satisfaction: a comparative study between commercial banks in the State of Kuwait and the Kingdom of Bahrain

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Abstract

This research intended to identify the level of using innovation management and its impact on customer satisfaction and the employees' innovation behavior in the commercial banks in the state of Kuwait and the Kingdom of Bahrain. The study instrument represented by the survey was distributed, then the SPSS software was used to analyze the data, and we had the following results:

- There is a medium grade practice of innovation management. It revealed that there is a statistically significant effect and a correlation between innovation management and the innovative climate and between the innovative climate and customer satisfaction and innovative behavior.
- There is a statistically significant effect and a correlation between network theory, innovation management, innovative climate, customer satisfaction, and employees' innovative behavior. There are statistically significant differences, and the statistical differences were for the favor of the commercial banks in Bahrain.

Based on the results mentioned above, our research recommended to:

Take care of innovation management and the innovative climate. Promoting the role of the network theory in the commercial banks in Kuwait and Bahrain.

In addition to that, this research recommended motivating the training and development department in the commercial banks in Kuwait from one hand. On the other hand, commercial banks should focus more on opening opportunities for employees. And finally, building a culture contributing to innovation management.

Keywords: Innovation management, Customer satisfaction, Employees' innovative behavior, Innovative climate, Network theory, Commercial banks, state of Kuwait, Kingdom of Bahrain.

1. Introduction:

Since the 1950s, innovation became an important issue that many countries and business organizations interested to adopt. Demand on innovative and creative activities have increased after the machine replaced the working forces in the framework of scientific and technical revolution (Jeldah & Abwi, 2011: p25).

When looking at the different historical stages and the developments that have taken place in humanity, we notice that the lifestyle, level of life advancements varies from year to year, from generation to another and from one country to another. All the above-mentioned activities are attributed to successive inventiveness, creativity, and innovation in every aspect of life due to the contributions of the human mind (Qandeel, 2010).

The banking sector is one of the most important economic industries seeking for excellence through its actively pursue to obtain knowledge and innovation (Alfeihat, 2013: p2). Organizations within the business environment seeking to meet the market and customers' needs and their objectives are facing severe challenges. So, in this regard, the innovation gains paramount importance as a mean to deal with this environment, keeping the excellent performance and growth as the innovation is considered a valuable key for the organization to ensure its long-term sustainability and growth (Khaledabadi, 2008).

Customer satisfaction has become a strategic competitive advantage because the more satisfied customers are, the less probable to change the supplier that they deal with, or to change the place that they are conducting their businesses and secure their needs. In addition to that, many customers decide their investment choices based on customer satisfaction ration for their suppliers (Alsaad, 2015).

As the administrative process is a social phenomenon that has many factors and variables, it should be a priority to address administrative variables that may impact innovation management and its impact on customer satisfaction, which discussed in this research based on previous studies. Such variables include the innovative climate, network theory, employees' innovative behavior, which should be elaborated through their interaction with each other to have more accurate results and to the ability to control the whole administrative process in the study population's organization.

2. The timeframe of the study:

The current study intended to identify the evaluation of innovation management and its impact on customer satisfaction, a comparative study between commercial banks in the state of Kuwait and the Kingdom of Bahrain, which we distributed in October 2019.

3. Problem Statement:

According to the Kuwait Foundation for the advancement of Sciences' report in 2017, the service sector innovativeness' index in Kuwait-out of which banking sector is considered one of its essential components- gained (6) points out of (10). It turns out that business owners moved their businesses from Kuwait to the United Arab Emirates primarily and Bahrain as the second choice. This issue necessitates updating the economic structure in various degrees for either Kuwait or Bahrain (Kuwait foundation for the advancement of Sciences, 2017).

As a result of that, this research intended to evaluate the innovation management and its impact on customer satisfaction in the banking sector through moderator variables to identify in a holistic view to the most crucial moderator variables in the relationship between the innovation management and customer satisfaction in a comparative study between the state of Kuwait and Kingdom of Bahrain.

Problem statement is represented by answering the following question: **Is there a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the innovation management on customer satisfaction in the commercial banks in the state of Kuwait and Kingdom of Bahrain?**

4. Significance of the study:

4.1 The importance of the study came from:

- 4.1.1 The evaluation of the innovation management and its impact on achieving customer satisfaction in the banking sector through moderator variables to identify -in a holistic view- the most essential moderator variables in the relationship between innovation management and customer satisfaction.
- 4.1.2 Draw the researchers in the administrative subject's attention to study the administrative phenomenon with all its variables and not ignore variables under the pretext of beyond the study periods to have more detailed and accurate results.
- 4.1.3 Reveal weakness and strengthen points in the impact of the innovation management on customer satisfaction from the services provided by the commercial banks in the state of Kuwait and Kingdom of Bahrain to find solutions for the weak points, if any, and enhancing the strengthen points.

5. Study Objectives:

- 5.1 To identify the level of innovation management implementation in the commercial banks in Kuwait and Bahrain and its impact on the innovative climate in the commercial banks in Kuwait and Bahrain.
- 5.2 To reveal the impact of the innovative climate on customer satisfaction and employees' innovative behavior in commercial banks in the state of Kuwait and Kingdom of Bahrain.
- 5.3 To reveal the impact of the network theory on innovation management, innovative climate, customer satisfaction, and employees' innovative behavior in the commercial banks in the state of Kuwait and the Kingdom of Bahrain.
- 5.4 To evaluate the innovation management and its impact in achieving customer satisfaction in the banking sector through moderator variables to identify in a holistic view the most essential moderator variables in the relationship between the innovation management and customer satisfaction.

6. Study hypothesis:

The study aimed to test the primary hypothesis: There is a statistically significant impact at the significant level ($\alpha \leq 0.05$) for the innovation management on customer satisfaction in commercial banks in the state of Kuwait and the Kingdom of Bahrain. The primary hypothesis has the following sub-hypothesis:

First sub-hypothesis: There is a statistically significant low practice degree at the significance level ($\alpha \leq 0.05$) for the innovation management in commercial banks in the state of Kuwait and the Kingdom of Bahrain.

Second Sub-hypothesis: There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the innovation management on the innovative climate in the state of Kuwait and the Kingdom of Bahrain.

Third sub-hypothesis: There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the innovative climate on customer satisfaction and employees' innovative behavior in the state of Kuwait and the Kingdom of Bahrain.

Fourth sub-hypothesis: There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the network theory on innovation management, innovation climate, customer satisfaction, and employees' innovative behavior in the state of Kuwait and the Kingdom of Bahrain.

7. Study Methodology:

The study used the descriptive analytical methodology to clarify what are the study variables (innovation management, innovative climate, customer satisfaction, innovative behavior, and network theory), identify their elements, and clarify their main subjects. The study also used the comparative methodology to reveal the similarities and differences in levels of implementation the innovation management between commercial banks in Kuwait and Bahrain. The study used tools such as books, scientific researches, theses, websites, and other resources to achieve the specified objectives and to build the theoretical aspect of the study. In addition to that, the study used the primary/ main tool represented by the questionnaire to measure the impact of innovation management on customer satisfaction.

8. Previous Studies:

8.1 (AL-freihat, 2013) study aimed to identify the level of innovation in the banking services provided in the Jordanian commercial banks and its impact to achieve the competitive advantage, the result of this study was that there is a statistically proportional correlation relationship between innovation and the competitive advantage.

8.2 (Aboud and Kana'an, 2012) study aimed to identify the level of customer satisfaction for the quality of Islamic banking services in Syria, the results showed that there is a difference between the customer expectations to the aspects and quality of the Islamic banking services provided and their perceive to the actual performance level for that services in the bank subject of the study.

8.3 (Ashok, Day & Narula, 2017) study aimed to identify the impact of innovation operations on customer satisfaction for the Information Technology services companies in the U.K.

The results showed that there is no impact of the innovation on customer satisfaction as customer satisfaction connects to other variables such as how to deal, service provision, and level of customer dissatisfaction of that deal. Finally, the study recommended to conduct surveys to identify the impact of the innovation operation on customer satisfaction and internal variable that mediate the relationship between the innovation and customer satisfaction.

8.4 (Fouroudi, Jin, Gupta, Melewar & Foroudi, 2016) study aimed to identify the impact of the ability of innovation and customer experience to create loyalty and reputation in the U.K. Results showed that the ability of innovation have an impact on the organization's reputation and loyalty of its customers as it increases customer's loyalty.

- 8.5 (Thurlings, Evers & Vermelen, 2014) aimed to identify the innovative behavior among employees by revising the previous studies, results of this study showed that the individual competency plays a vital role in the innovative behavior which is not less than the other individual and organizational factors.
- 8.6 (Naveed, Akhtar & Cheema, 2012) aimed to identify the impact of the innovation on achieving customer satisfaction for the services of mobile phone companies in Pakistan. The results showed that there is positive relationship between innovation and achieving customer satisfaction and then to achieve the customer loyalty to the brand.
- 8.7 (Danjuma & Rasil, 2012) study aimed to identify the innovative service and its impacts on the quality of service and achieving the competitive advantage in the high education market in Malaysia. The results showed that innovation has a positive impact on the quality of the service's aspect, which then leads to customer satisfaction.
- 8.8 (Kleysen & Street, 2001) the study aimed to identify the innovative behavior for employees working for a different organization in Canada. It revealed that there is a high correlation between the existence of the innovative behavior and innovations existed in the organization itself.

9. Discussion:

The studies mentioned above used different methodologies comparing to this study to achieve their objectives, as some studies used descriptive method rather than analytical. In contrast, other studies used quantitative analytical descriptive methods which depend on the quantitative change level in the indexes within the period (Historical context), not the descriptive-analytical methodology, which depends on the questionnaire. While the studies that used the descriptive-analytical methods based on interview. The studies mentioned above did not use the comparative method -the current study's choice- as they depended on a population, they did not study it in a comparative way to identify the similarities and differences with other populations such as this study.

9.1 Innovation Management

As the importance of management and its objectives and roles' expansion in the few last decades, this led to management evolvement and emerging of various types such as creative or innovative management. Creativity or innovation refers to the genius or to the extraordinary status of thinking, behavior, production, or problem-solving acceptably or satisfyingly (Pope, 2005).

Innovation or creativity is nothing but creating a new product or establishing and executing new operations using fresh ideas that lead to utility or gaining competitive advantage, sustainable potential, improving the organization's performance, and getting customer satisfaction. In contrast, creativity is more how to providing ideas, but innovation is how to implement such ideas (Naveed, Akhtar Cheema, 2012).

Management innovation is the implementation and conversion of ideas offered by managers and employees into practice, which leads to finding managerial operations and more competitive and productive methods to achieve organizations' goals and more services for the society. Management innovation defines as utilizing the available resources by the employees in the various levels of management field using an extraordinary way characterized by innovation, authenticity, flexibility, and sensitivity to the problems. So, it drives the managerial employees to conduct their assigned roles effectively to achieve the organization's objective and maximizing its productions.

9.2 Customer satisfaction concept:

The customer satisfaction concept became one of the vital interests that organizations take into consideration to develop and improve their products or quality. It is also crucial in their efforts to maintain customer loyalty in an environment characterized by changing and extreme competition. So, organizations should find a suitable environment and embed an organizational culture through which the best method could be reached to meet clients' needs and wishes (Simon & Yaya, 2012). This concept defined as a positive emotional response for the client "customer" toward experiences provided by or linked to specific products or services purchased. So, it is the assessment process conducting by customer to his purchase experience which he considers good based on what he was expected. Thus, customer satisfaction is the process of the customer response to the evaluation of the variation perceived among previous opinions "expectations" with the actual performance of the product/ service after consuming the same. That means customer satisfaction refers to the enjoyment and saturation achieved by customers of consuming such products or services (Sharmin, 2012).

9.3 Employees' innovative behavior

Innovative behavior is the behavior practiced by the individual in the workplace for the first time; it is not necessary to have a new service or product (Al Shanti and Abo Amrah, 2019).

It also defined as the unique behavior of individual or group in the organization that leads to new ideas and concepts which may be translated to new commodities or services in within organization (Qataweh and Abu Tayeh, 2016).

Innovative behavior can be measured by directing the behavior to change toward better situation to serve the objective of the organization through measures taken by to employees to find ways that shortcut time and effort, which finally lead to improve productivity and efficiency for the organization's work. It is not about success, as there may be existed many failed cases, so this the role of the superior management to support these ideas and not to suppress them in terms of the inability of implementation or failure. This means continued support for the innovative behavior to encourage employees to provide new ideas serving their work. This situation can be done by developing ideas, working methods, products, or providing service as an aiding technology in the workplace. So, it is not limited to something specific but the most important thing that this should be reflected on the work efficiency and effectiveness and the organization work as a whole (Kleysen, Street, 2001), the innovative behavior products are divided into:

- Groups of services or products provided to customers
- Groups of relationships with the external environment through marketing or connection with the suppliers.

9.4 Administrative operation or productivity that provides products or services.

9.5 Innovative climate

It is defined as the internal environment in the organization or the administrative unit that ensures successful spread for the innovative activities and morale among the organization's social system members. It also refers to the psychological and social process which provide the existence of drivers for the innovative behavior and thinking for the organization members (Kriengsak, Rodney & Sherif, 2008).

Innovative climate should include all organizational aspects in terms of individual and administration as the organizational environment exists in all aspects of the organization, and it is a reflection for the reality within the organization. It also can create what is intended to create. Organizational environment for the work teams is parallel to the organizational environment of the individual as it should direct the work teams toward innovation through practicing their work by using the innovation's pillars in these works. The leadership role in the innovative climate is encouraging innovation through a clearly defined shared vision that helps workers to do their tasks. There also should be room for freedom to participate in the decision without fearing of embarrassing situations as a result of racist practices that harm the expressed ideas and directing workers roles toward what is suitable for the innovative stage nature and the organization work. Finally, when the organization leadership provides support for employees and workgroups to offer and develop new methods to handle tasks (Kriengsak, Rodney, Sherif, 2008).

9.6 Network theory

It is the facilitation procedures of information flow between the organization's departments within the organization. It is an innovation and organization growth factor because it enables the workers to understand the nature of the relationships that connect the tasks between each other in addition to the policies that encourage the growth in the organization, which is reflected on the interaction among employees (Huggins, Thompson, 2015).

Network theory is based on identifying and differentiate between the relationships that existed between individuals and tasks themselves. If there are relationships between employees, this will lead to exchange information, and the work can be steered by utilizing those relationships. On the other hand, if there are no relationships between employees and there is no flow of information, the network theory can be characterized as weak based on networks existed between jobs not based on the relationships existed among employees. So, the nature of information and its flow based on the relationship with clients, marketers, or suppliers is considered an essential mark in the organization's work. As the relationship nature existed and its reflection on the individual relationships will also reflect on the innovation, which facilitates the communication between employees and provide information exchange in addition to create an atmosphere of calm and friendship between the employees, which means work as one team to achieve organization's objectives. The historical development can see the nature of relationships existed that elaborates that some of the departments cooperated in their works while others are not (Leydesdorff, Ahrweiler, 2013).

Network theory is based on taking into consideration the nature of available resources in jobs and the relations among individuals because the communication among them is controlled by the nature of the available resources and their ability to communicate efficiently. The availability of human resources that opens access for communication is critical through the running of jobs and hierarchies. Based on the above, Network theory can be defined as a process that takes the interaction of heterogeneous individuals in terms of their work and ability to connect all of them with information flow systems (Young, Borland, Coghill, 2010).

10. The validity of the instrument:

We sent the study's instrument to a group of reviewers to ensure the face validity and the suitability of its formulation, to ensure the validity of the instrument. It was also modified based on reviewers' comments.

11. Reliability of the instrument:

the internal consistency was calculated based on Cronbach's alpha equation, to ensure the reliability of the instrument. Table (1) below shows these coefficients; these ratios were considered suitable for the objectives of this study.

12. Study population and sample:

The commercial banks in Kuwait and Bahrain represent the study population of this study. 5 banks in Kuwait: National Bank of Kuwait, Burgan Bank, Kuwait Finance House, Boubyan Bank and Warba Bank, and (5) banks in Bahrain: Future Bank, Bank of Bahrain and Kuwait, Ahli United Bank, and al baraka bank represent the study sample. We took several customers' opinions to measure their customer satisfaction in each bank of the study population in a percentage parallel to the number of study instruments that were distributed in the banks. These surveys were for customer service employees and the Human resources management department. This ratio is suitable for the objective of the study.

13. Testing Hypotheses:

13.1 Testing first sub-hypothesis: There is a statistically significant low practice degree at the significance level ($\alpha \leq 0.05$) for the innovation management in commercial banks in the state of Kuwait and the Kingdom of Bahrain.

Table (2) shows that means ranging from (3.18-3.37) as the technical innovation is in the first place with the highest mean (3.37), while the innovative operations is in the last place with a mean of (3.18). The mean for innovation management as a whole is (3.28).

13.2 Testing the second sub-hypothesis: There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the innovation management on the innovative climate in the state of Kuwait and the Kingdom of Bahrain.

The results shown in table (3) suggest that there is a statistically significant impact of the innovation management on the innovative climate as the correlation coefficient R was (0.935), which refers to a statistically significant correlation between innovation management and innovative climate. In addition to that, the determination coefficient R^2 was (0.874), which also means that innovation management has explained 87.4% of variation occurred in the innovative climate. F value was 1238.129 at a confidence level equal to 0.000, which ensure the significance of the regression at the significance level ($\alpha < 0.05$).

Coefficients column shows that (B) value of innovation management was (0.95), and (t) value was (35.187) with a significance level of (0.000), which means that this impact is significant.

13.3 Testing the third sub-hypothesis: There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the innovative climate on customer satisfaction and employees' innovative behavior in the state of Kuwait and the kingdom of Bahrain.

The results shown in table (4) suggest that there is a statistically significant impact of the innovative climate on customer satisfaction, as the correlation coefficient R was (0.590), which indicated a statistical correlation relationship between innovative climate and customer satisfaction. The determination coefficient R^2 was (0.348), which means that the innovative climate explained

37.8% of variation occurred in customer satisfaction. F value was 95.587 at the confidence level=0.000, which means that the regression is significant at the significance level ($\alpha < 0.05$).

The coefficient column shows that (B) values for the innovative climate was (0.583) and (t) value was (9.777) with a statistical significance of (0.000), which means that this impact is significant.

The results shown in table (5) suggest that there is a statistically significant impact of the innovative climate on employees' innovative behavior. The correlation coefficient R was (0.927), which indicated statistically correlation relationship between innovative climate and employees' innovative behavior, the determination coefficient R^2 was (0.858) which means that the innovative climate explained 85.8% of variation occurred in employees' innovative behavior. F value was 1085.728 at the confidence level=0.000, which means that the regression is significant at the significance level ($\alpha < 0.05$).

The coefficient column shows that (B) values for the innovative climate was (0.920) and (t) value was (32.950) with a statistical significance of (0.000), which means that this impact is significant.

13.4 Testing fourth sub-hypothesis: There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the network theory on innovation management, innovation climate, customer satisfaction, and employees' innovative behavior in the state of Kuwait and the Kingdom of Bahrain.

The results shown in table (6) that there is a statistically significant impact of network theory on innovation management. The correlation coefficient R was (0.921), which indicated a statistical correlation relationship between network theory and innovation management, the determination coefficient R^2 was (0.848) which means that the innovative climate explained 84.8% of variation occurred in innovation management. F value was 1002.472 at the confidence level=0.000, which means that the regression is significant at the significance level ($\alpha < 0.05$).

The coefficient column shows that (B) values for the innovative climate was (0.898) and (t) value was (31.662) with a statistical significance of (0.000), which means that this impact is significant.

The results shown in table (7) suggest that there is a statistically significant impact of network theory on the innovative climate. The correlation coefficient R was (0.916), which indicated a statistical correlation relationship between network theory and innovative climate, the determination coefficient R^2 was (0.839) which means that the network theory explained 83.9% of variation occurred in an innovative climate. F value was 935.776 at the confidence level=0.000, which means that the regression is significant at the significance level ($\alpha < 0.05$).

The coefficient column shows that (B) values for the innovative climate was (0.908), and (t) value was (30.590) with a statistical significance of (0.000), which means that this impact is significant.

The results shown in table (8) suggest that there is a statistically significant impact of network theory on customer satisfaction. The correlation coefficient R was (0.605), which indicated a statistical correlation relationship between network theory and customer satisfaction, the determination coefficient R^2 was (0.366) which means that the innovative climate explained 36.6% of variation occurred in customer satisfaction. F value was 103.338 at the confidence level=0.000, which means that the regression is significant at the significance level ($\alpha < 0.05$).

The coefficient column shows that (B) values for the innovative climate was (0.593) and (t) value was (10.166) with a statistical significance of (0.000), which means that this impact is significant.

The results shown in table (9) suggest that there is a statistically significant impact of network theory on employees' innovative behavior. The correlation coefficient R was (0.934), which indicated a statistical correlation relationship between network theory and employees' innovative behavior, the determination coefficient R^2 was (0.873) which means that the innovative climate explained 87.3% of variation occurred in employees' innovative behavior. F value was 1225.520 at the confidence level=0.000, which means that the regression is significant at the significance level ($\alpha < 0.05$).

The coefficient column shows that (B) values for the innovative climate was (0.919) and (t) value was (35.007) with a statistical significance of (0.000), which means that this impact is significant.

After conducting a “t-test for the impact of the country on the study variables.” The results show that there are statistically significant differences ($\alpha < 0.05$) attributed to the impact of the country in all fields as a whole, the differences were for the favor of Bahrain.

14. Results:

There is a medium degree of practice for innovation management in commercial banks in the state of Kuwait and the Kingdom of Bahrain, and it was revealed that there is a statistically significant impact and a correlation between innovation management and innovative climate. There is also a statistically significant impact and a correlation between innovative climate and customer satisfaction. There is also a statistically significant impact and a correlation between innovative climate and innovative behavior in commercial banks in the state of Kuwait and the Kingdom of Bahrain.

Moreover, there is a statistically significant impact and a correlation between network theory, innovation management, innovative climate, customer satisfaction, and employees' innovative behavior in commercial banks in the state of Kuwait and the Kingdom of Bahrain. Finally, the study shows that there are statistically significant differences in all fields as a whole, and the differences were for the favor of commercial banks in Bahrain.

The results of this study were compatible with the results of (Naveed, Akhtar & Cheema, 2012) study, which referred to that there is a positive relationship between innovation and achieving customer satisfaction. This study also agreed with the results of (Foroudi, Jin, Gupta, Melewar & Foroudi, 2016) study, which suggested that the ability of innovation affects the organization's reputation. Finally, this study agreed with (Kleysen & Street, 2001) study, which showed that there is a correlation between the existence of the innovative behavior and innovations existed in the organization. Apart from that, this study disagrees with the results of (Ashok, Day & Narula, 2017) study, that there was no statistically significant impact of the innovation operation on customer satisfaction. Customer satisfaction connects with other variables such as, how to deal, services provision, level of customer dissatisfaction of that deal.

15. List of tables

Table (1): Internal Consistency coefficient (Cronbach's alpha)

| Field | Internal consistency |
|--------------------------------|----------------------|
| Innovation management | 0.93 |
| Innovation climate | 0.91 |
| Employees' innovative behavior | 0.91 |
| Network theory | 0.91 |
| Customer satisfaction | 0.93 |

Table (2): Means and standard deviations for the degree of innovation management practice in commercial banks in the state of Kuwait and the Kingdom of Bahrain in descending order based on their means.

| Rank | Number | Field | Mean | Standard deviation | Level |
|------|--------|------------------------------|-------------|--------------------|---------------|
| 1 | 2 | Technical innovation | 3.37 | 0.716 | Medium |
| 2 | 1 | inventors (individuals) | 3.30 | 0.693 | Medium |
| 3 | 4 | Innovative products | 3.27 | 0.702 | Medium |
| 4 | 3 | Innovative operations | 3.18 | 0.741 | Medium |
| | | Innovation management | 3.28 | 0.668 | Medium |

Table (3): Simple linear regression results for the impact of innovation management on the innovative climate in commercial banks in the state of Kuwait and the Kingdom of Bahrain.

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|--------------------|---------------------------|--|----------|-------------------|--------------|-----------------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement | B | Standard error | Calculated T | Sig. t |
| Innovative climate | 0.935 | 0.874 | 1238.129 | 1 | 0.000 | Innovation management | 0.950 | 0.27 | 35.187 | 0.000 |

Table (4): Simple linear regression results for the impact of the innovative climate on customer satisfaction in commercial banks in the state of Kuwait and the Kingdom of Bahrain.

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|-----------------------|---------------------------|--|--------|-------------------|--------------|--------------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement | B | Standard error | Calculated T | Sig. t |
| Customer satisfaction | 0.590 | 0.348 | 95.587 | 1 | 0.000 | Innovative climate | 0.583 | 0.060 | 9.777 | 0.000 |

Table (5): Simple linear regression results for the impact of innovative climate on employees' innovative behavior in commercial banks in state of Kuwait and kingdom of Bahrain.

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|--------------------------------|---------------------------|--|----------|-------------------|--------------|--------------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement | B | Standard error | Calculated T | Sig. t |
| Employees' innovative behavior | 0.927 | 0.858 | 1085.728 | 1 | 0.000 | Innovative climate | 0.920 | 0.028 | 32.95 | 0.000 |

Table (6): Simple linear regression results for "the impact of network theory on innovation management in commercial banks in the state of Kuwait and the kingdom of Bahrain".

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|-----------------------|---------------------------|--|----------|-------------------|--------------|----------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement | B | Standard error | Calculated T | Sig. t |
| Innovation management | 0.921 | 0.848 | 1002.472 | 1 | 0.000 | Network theory | 0.898 | 0.028 | 31.662 | 0.000 |

Table (7): Simple linear regression results for “the impact of network theory on the innovative climate in commercial banks in the state of Kuwait and the Kingdom of Bahrain.”

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|--------------------|---------------------------|--|---------|-------------------|--------------|----------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement | B | Standard error | Calculated T | Sig. t |
| Innovative climate | 0.916 | 0.839 | 935.767 | 1 | 0.000 | Network theory | 0.908 | 0.030 | 30.590 | 0.000 |

Table (8): Simple linear regression results for “the impact of network theory on customer satisfaction in commercial banks in the state of Kuwait and the Kingdom of Bahrain”.

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|-----------------------|---------------------------|--|---------|-------------------|--------------|----------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement | B | Standard error | Calculated T | Sig. t |
| Customer satisfaction | 0.605 | 0.366 | 103.338 | 1 | 0.000 | Network theory | 0.593 | 0.058 | 10.166 | 0.000 |

Table (9) Simple linear regression results for “the impact of network theory on employees’ innovative behavior in commercial banks in the state of Kuwait and the Kingdom of Bahrain.”

| Dependent variable | Model Summary | | ANOVA | | | Coefficients | | | | |
|--------------------------------|---------------------------|--|----------|-------------------|--------------|----------------|-------|----------------|--------------|--------|
| | Correlation coefficient R | Determination coefficient R ² | Sig. f | Degree of freedom | Calculated F | statement t | B | Standard error | Calculated T | Sig. t |
| Employees’ innovative behavior | 0.934 | 0.873 | 1225.520 | 1 | 0.000 | Network theory | 0.919 | 0.0026 | 35.007 | 0.000 |

16. Recommendations:

- The necessity to take care of innovation management, innovative climate, and enhancing the role of network theory in commercial banks in Kuwait and Bahrain.
- To motivate the development and training department in the commercial banks in Kuwait and Bahrain.
- To Focus on employees’ opportunities to build a culture that helps innovation management for its benefits on the organization as a whole.
- Experience exchange between Bahraini and Kuwaiti banking sector to utilize the advanced experience of the Bahraini business in the field of innovation management.

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