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IMPACT OF CONTINUOUS IMPROVEMENT ON CUSTOMER  
ORIENTATION: ANALYTICAL STUDY OPINIONS FROM A SAMPLE OF  
NSS/CSD STAFF

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**Keywords: Continuous Improvement, Customer Orientation.**

**ABSTRACT:**

The aim of current research is to highlight the impact of continuous improvement on customer orientation. The research adopted resolution as a basic measurement tool for collecting data from the eye in question, which reached 141 out of approximately 150 members of the cyber security department of the Iraqi National Security Service, where it was employed to test the main and sub-research assumptions by using a number of statistical methods, most notably (SPSS VR). 24, AMOS VR. The results of the research have proved that most of the hypotheses are valid, and the research has reached a series of conclusions, most notably that there is an important role for continuous improvement in the principle of customer orientation in the NSS/CSS.

**INTRODUCTION:**

Adopting concept of continuous improvement in organizations is one of the strategies that aim at delivering high quality outputs with unique advantages that enable them to face the obstacles they face, and this is done through continuous development by management. It contributes to improving the interactive relationship between the customer and the management of the organization in a way that enables the organization to head toward its

customers and provide high quality services to them. The expectations and behavior of customers should be taken into account not only in the final stages but also throughout the processes required to provide value-added

products and services, as the orientation toward the customer is a strategic approach that reflects the organization's ability to create and present superior value to customers through processing market information. The definition of customer orientation as referring to the vision and neediest of the organization or the sum of values and beliefs of the organization which places the customer among its priorities.

## **PART ONE: RESEARCH METHODOLOGY**

### ***Research Problem***

The problem of research is the nature of the role that continuous improvement plays in the orientation of the organization toward its customers and the nature and size of the relationship and the impact on it.

- a. Does the research organization seek to apply elements of continuous improvement?
- b. How well do cyber security staff understand the importance of continuous improvement processes?
- c. What is the level of customer orientation in the research department and are people in this department aware of the importance of this topic?
- d. Is there an impact of continuous improvements in the orientation toward the customer?

### ***Importance Research***

- a. The importance of research lies in measuring the nature and type of relationship between continuous improvement and customer orientation.
- b. The scientific significance of this research stems from the fact that research subjects are important subjects that have received the attention of a large number of researchers.
- c. The practical importance of this research is highlighted by the contribution of its results to helping the sample in the application of continuous improvement processes and directing its attention toward adopting the principle of customer orientation in order to develop its potential and build a positive reputation among the customers.

### ***Research Objectives***

- a. Identify the level of continuous improvement in the sample cyber security department.
- b. To learn about the quality of security services offered in the research department.

c. Provide a comprehensive picture of current customer orientation trends by identifying which areas need improvements in the cyber security requirements of the research department.

**Data And Information Collection Tools**

In theoretical aspect of research, relied researcher on Arab and foreign references, including books, studies, letters, scientific literature, publications, periodicals and research related to research, in addition to making use of the international information network (Internet). In the field, researchers have relied on field research to collect eye data by using the survey as the main means of collecting data and information, and as the most consistent means of current research..

**Research Hypotheses**

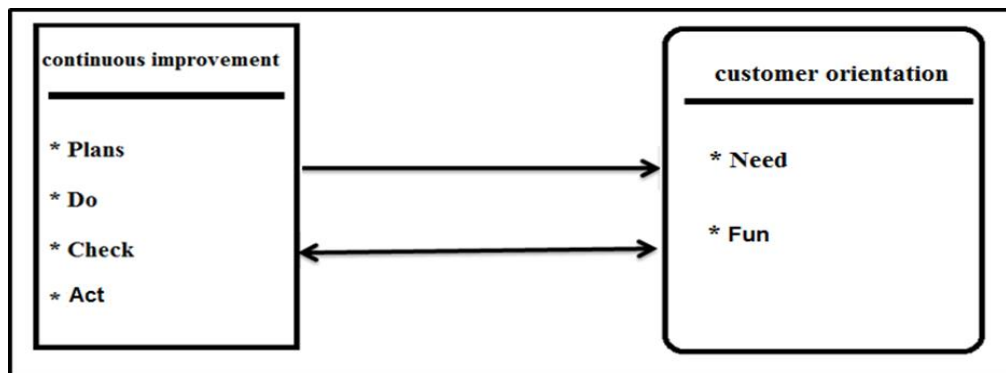
In order to complete the research requirements and to answer their questions, the following hypotheses were developed:

- a. There is a statistically significant correlation between continuous improvement and customer orientation.
- There is a direct statistically significant effect between continuous improvement and customer orientation

**Research Community and Sample**

The target community consists of all 150 members in the cyber security department of the Iraqi National Security Agency, as the number of questionnaire forms distributed on the research sample reached 150, of which 141 were approved only for analysis and left the rest either not returned or there is a shortage.

**Research Outline**



**Figure (1)** Hypothetical Diagram for Research

## PART TWO: THEORETICAL ASPECT

### *First. Continuous Improvement Concept of Continuous Improvement*

Continuous improvement has emerged in Japan in the sense of Kaizen after the Second World War and Kaizen means "continuous improvement," a system used in quality, technology, processes, organizational culture, productivity, safety and leadership. It is derivative of the Japanese words Kai, which means "change" or "Action" and Zen, which means good, and Kaizen at the organization level is directed toward the organizations themselves and extends to the personal and social life of the individual, (Charantimath,2017:183). (Ho et al., 2017:219)) refers to continuous improvement as the philosophy that comprehensive quality management needs to improve every aspect of the process to target "never-ever" perfection but organizations seek to achieve it. Continuous improvement is an integral part of quality improvement and no one can deny its importance at the present time. There is an urgent demand to generalize a culture of continuous improvement more than ever, ensuring consistent quality and reliability of analytical results, creating high quality products that comply with standard specifications, and also reducing waste in time, personal effort and raw materials (Kolif et al., 2018:1). (Kovach et al., 2011:819) emphasizes that today, regardless of the business area, organizations must focus on speed, efficiency and customer value to be global, and the long-term health of an organization depends on its commitment to continuous improvement.

### *Dimensions Of Continuous Improvement*

We represent the dimensions of continuous improvement, which was unanimously agreed upon by most writers and researchers, as follows:

- a. **Plans:** At this stage, the principle and purpose were defined and a plan developed (Shyng, 2021:208).
- b. **Do:** The purpose of this phase is to implement Action Plan Chakraorty,2016:16)
  - 1- Perform optimization.
  - 2- Collect and document data.
  - 3- Document problems, unexpected observations, lessons learned and knowledge gained.
- c. **Check:** In this phase, the effectiveness of the updated process is checked, and gaps in the updated process are identified (Arias, 2020:4)
- d. **Act:** This is the stage at which the process is improved with the resolution of problems in the specific, recorded process from the (do and check) stages, the investigation of the root causes of problems, if any, and their elimination by modifying the process repeats the test to collect new data and revalidate; Or give up the project and start it last (Silva et al., 2017:325).

### *Importance Of Continuous Improvement:*

The importance of continuous improvement lies in activities aimed at achieving customer satisfaction, improving the organization's operations and

the performance of suppliers, which can be designed and implemented by collective action, (Gunawan, 2018:301). There are many benefits to be gained from continuous improvement, as organizations can increase quality, reduce time limits and reduce errors, which in turn reduce costs and improve quality. This can increase organizations' competitiveness in the market and satisfy customers (Karlsso & Mohammed,2015:6). (Soita, 2016:14) argues that the importance of continuous improvements lies in preventing waste, which includes time and cost waste and underutilization of proper thinking, or other resources, that have been spent in producing a product or service. Through continuous improvement, organizations are improving their operations and programs and enhancing their skills to develop high-quality products and services in a profitable manner in order to achieve competitive advantages, which is why continuous improvement has become one of the most interesting structures for operational and quality management investigation (Ravé et al., 2020:1).

### ***Objectives Of Continuous Improvement***

From the point of view (Stelson et al., 2017:43) continuous improvement is the principle of improving a simple process, which is intended to maximize the benefit of the customer by reducing the elements that are harmful to the goals of the service. Actions that increase the benefit of the customer are seen as adding value; Such harmful substances are considered waste. In most CI continuous improvement projects, the goal is to identify and recommend improvements to waste-free processes and create plans to maintain changes that maximize value.

Lizarelli et al., 2021:3)) believed that the overall goal of continuous improvements was to focus on reducing waste and eliminating activities that did not add value to operations.

Today, many continuous improvement practices have been developed on LEAN, six Sigma, and Lean six Sigma and other methodologies such as balanced scorecard based on process concepts or quality improvement. The goal can be to reduce waste, improve quality, and an effective line of production among many other needives, and by using many of the features of continuous improvement CI, it can be used to solve production and process-based problems and also to help organizations grow in the organization world.(Ritamaki,2017:19)

### ***Second: Customer Orientation***

#### ***Concept Of Customer Orientation***

believes (Raie *et al.*, 2014) that there are two dimensions to customer orientation: Needs and enjoyment of the needs associated with employee beliefs about their ability to meet customer needs. The fun dimension is correlated to the ability of the employees to enjoy interaction and service with the customer's requirements. This two-dimensional vision allows me to suggest this point that the employee's orientation toward the customer is not

only about meeting the customer's needs, but also, I am personally pleased to serve the customer.

### ***Aspects Affecting Customer Orientation:***

believe (Farlane *et al.*, 2016:5) there are three main aspects that influence the customer orientation:

- a. Proximity: The readiness of the supply chain to keep in touch and communicate effectively with customers.
- b. Customer flexibility: Awareness and intent of organizations to respond to changing customer expectations.
- c. Accessibility: The readiness of the supply chain to allow customers to access the information necessary to meet their multiple requirements.

### ***Importance of Customer Orientation***

explains (Hebles *et al.*, 2020:2) that through Customer Orientation actions, employees are expected to gain valuable resources that lead them to successful customer interactions and communications, and to use all their skills and capabilities to meet customer needs. Furthermore, just as employees feel more engaged in their work and organization, they are expected to make an extra effort to satisfy customers. In the eyes of the customer (Arief *et al.*, 2021:357), it is essential in a competitive environment to improve business performance, as its main focus is on the organization's relationship to the market, which aims at defining customers' desires to achieve sales performance. (Jahankhah & Hermez, 2021:31), the customer orientation is directly focused on marketing activities to meet their needs. Through customer-focused organizations with a mission of creating value, they generate higher levels of satisfaction, loyalty, innovation, and performance. Customer satisfaction is seen as a direct agent of customer loyalty and will later increase shareholder value.

### ***Objectives Of Customer Orientation***

considers (Eiland,2015:12) that the ultimate goal of a Customer Orientation service organization is that there are no defects. This does not mean that everything must be ideal from the moment the customer enters the door to his departure, but rather that the guest comes out completely satisfied with all the services he received while at the organization. (Park & Lee, 2018:77) believes that customer orientation brings high quality value to customers, by showing interest, creating value, making regular assessments of their satisfaction, delivering services, and understanding their needs as the main need of the organization.

### PART THREE: PRACTICAL ASPECT

#### *First: Encoding and Characterization*

Easy and reliable analysis of data and accurate results require a set of symbols that facilitate statistical analysis of the data involved, and table (1) illustrates the description, code and dimensions of the research variables

**Table (1)** Encoding and Characterization of Research Variables

variables		No.	Cod
Continuous improvement	Plan	5	<b>PL</b>
	Do	5	<b>DO</b>
	Check	5	<b>CH</b>
	Act	5	<b>AC</b>
Customer Orientation	Fun	6	<b>EN</b>
	Need	6	<b>NE</b>

#### *Second: General Statistics*

Some general statistics have been identified to reveal their characteristics such as the calculation of mean, standard deviation, and variance factor.

#### *Continuous Improvement Variable*

The continuous improvement variable is made up of four variables

**Table (2)** *Continuous improvement variable descriptive statistics results*

dimension	mean	S.D	%	order of importance
Act	4.3177	0.48407	86	4
Check	4.2255	0.58400	85	3
Do	4.2113	0.64043	84	2
Plan	4.1177	0.83873	82	1
<b>Total</b>	4.2180	0.6368	84.25	

Table 2 shows the results of the descriptive statistic of the continuous improvement variable, which is measured in four dimensions is (**plans, do, check, Act**) where the total mean of this variable was (4.2180), the standard deviation (0.6368), and in relative importance (84.25). These statistical results indicate that an integer variable has been highly significant based on the answers of the research sample, indicating that department management works in the event of a mismatch by Acting anomalies and developing policies.

*Customer Orientation Variable*

<b>dimension</b>	<b>mean</b>	<b>S.D</b>	<b>%</b>	<b>order of importance</b>
<b>Need</b>	4.6043	0.34063	92	1
<b>Fun</b>	4.5748	0.36248	91	2
<b>Total</b>	4.5895	0.35155	91.5	

Table 2 shows the results of the descriptive statistic of the Customer Orientation variable, which is measured in two dimensions is (Need, Fun) where the total arithmetic mean of this variable was (4.5895), the standard deviation (0.35155), and the relative significance (91.5). These statistical results indicate that the variable need has been highly significant based on the responses of the research sample, indicating that department management motivates the employee to believe that he has sufficient capacity to meet the needs of his or her customers and at the level they expect.

*Third: Test hypotheses*

*Test Correlation Between Continuous Improvement and Customer Orientation*

The researcher used (SPSS V. 20) statistical program. in the process of establishing the values of correlations between the independent variable (continuous improvement) and the dimensions of the dependent variable (cyber security), the results are summarized in the following table:

**Table (4)** Correlations between the two variables and their dimensions

Continuous improvement	Act	Check	Do	Plan	
.316**	.382**	.344**	.255**	.173*	<b>Fun</b>
.295**	.350**	.272**	.240**	.200*	<b>Need</b>
.350**	.421**	.354**	.283**	.214*	<b>Customer Orientation</b>

The zero hypothesis is formulated as follows:

**H0: There is no statistically significant correlation between continuous improvement and customer orientation**

Vs. the following alternative hypothesis:

**H1: There is a statistically significant correlation between continuous improvement and customer orientation**

The results in the previous table indicate that the value of the correlation between the continuous improvement and customer orientation variables was This is the first time that the company has been able to offer a new service to the company, and that the company has been able to offer a new service to the company's customers To meet their customers' needs.



*Test the impact between continuous improvement and cyber security***Table (5) SEM structural Modeling equation criteria**

path		estimate	S.E.	C.R.	P
continuous improvement	---> Customer Orientation	.350	.044	4.422	***

**Source:** Preparation of researcher based on AMOS VR.24 results

The results indicate a direct moral and direct 5% moral effect of the continuous improvement variable in the customer orientation variable (0.350) at a critical value of 4.422, thus concluding that a 1-unit continuous improvement value leads to a rise in the customer orientation by 0.350.

**PART FOUR: CONCLUSIONS & RECOMMENDATIONS***Conclusions*

- 1- The results showed a statistically significant correlation between continuous improvement and customer orientation, which contributed to the increased orientation of the department toward its customers, which requires that the department's management be concerned with developing continuous improvement programs and developing its staff in a way that improves the service of its customers.
- 2- The Department's interest in improving and developing its employees' capabilities through training and development courses, which contributed to improving the quality of its services efficiently and effectively.
- 3- Continuous improvements are a key factor in modern and successful organizations, a key factor for excellence and ability and an important resource for creating a competitive advantage for organizations. Continuous improvement therefore has an important role in National Security Service/Cyrillic Security Division.
- 4- The results showed a moral impact of continuous improvement and customer orientation, which contributed to improving the department's ability to deliver higher quality services to its customers.

*Recommendations*

In the light of the findings of the research, the following recommendations may be made:

1. The Department's management must ensure that employees are motivated to develop their capabilities, which requires them to provide appropriate programs, tools and mechanisms to improve their reception and service skills to their customers.
2. The Department's management should endeavor to implement continuous improvement in order to ensure the quality of its strength and the ability to meet the needs of its customers.

3. The Department's management must provide various programs, information and knowledge for the development of the staff, which requires the development of new methods and methods that encourage the employees to innovate at work and to motivate them to enjoy the service of their customers.
4. The Department's management should encourage staff to develop their security and technical ability, which requires the provision of a special database.

## REFERENCES

- Alt, R., Ehmke, J. F., Haux, R., Henke, T., Mattfeld, D. C., Oberweis, A., ... & Winter, A. (2019). Towards customer-induced service orchestration-requirements for the next step of customer orientation. *Electronic Markets*, 29(1), 79-91.
- Baber, R., Kaurav, R. P. S., & Paul, J. (2020). Impact of individual market orientation on selling and customer orientation. *Journal of Strategic Marketing*, 28(4), 288-303.
- Chakraborty, A. (2016). Importance of PDCA cycle for SMEs. *SSRG International Journal of Mechanical Engineering*, 3(5), 30-34 .
- Charantimath, P. M. (2017). *Entrepreneurship development and small business enterprise*. Pearson Education India.
- Edalatkhah, S. (2019). CUSTOMER-DRIVEN B2B MARKETING STRATEGIES FOR A SOFTWARE COMPANY: Case: Statzon
- Eiland, K. M. (2015). Factors Affecting Guest Satisfaction in the Restaurant Industry of South Mississippi.
- Gunawan, I. P. (2018). Perancangan Continuous Improvement Program–Suggestion System untuk Membantu Pencapaian Key Performance Indicator Pada PT. X. *Jurnal Titra*, 6(2), 301-308.
- Ho, K. L. P., Nguyen, C. N., Adhikari, Heizer, Jay & Render, Barry & MUNSON ,Chuck , (2017)," *Operations Management*" 12thed : Prentice Hell New Jersey, USA.
- Jahankhah, P., & Hermez, R. (2021). The Role of Integrating Customer-Orientation View in product Development to Sustain Competitive Advantage. A case study in the digital healthcare industry.
- Jodlbauer, H., & Strasser, S. (2019). Capacity-driven production planning. *Computers in Industry*, 113, 103126.
- Karlsson, M., & Mohammed, G. (2015). How to evaluate and sustain continuous improvements (Master's thesis.)
- Kholif, A. M., Abou El Hassan, D. S., Khorshid, M. A., Elsherpieny, E. A., & Olafadehan, O. A. (2018). Implementation of model for improvement (PDCA-cycle) in dairy laboratories. *Journal of Food Safety*, 38(3), e12451
- Kovach, J. V., Cudney, E. A., & Elrod, C. C. (2011). The use of continuous improvement techniques: A survey-based study of current practices. *International Journal of Engineering, Science and Technology*, 3(7), 89-100.
- Li, W., Pomegbe, W. W. K., Dogbe, C. S. K., & Novixoxo, J. D. (2019). Employees' customer orientation and customer satisfaction in the public utility sector: The mediating role of service quality. *African Journal of Economic and Management Studies*.

- Lizarelli, F. L., de Toledo, J. C., & Alliprandini, D. H. (2021). Relationship between continuous improvement and innovation performance: an empirical study in Brazilian manufacturing companies. *Total Quality Management & Business Excellence*, 32(9-10), 981-1004.
- Makkonen, M. (2019). *Renewing the sawmill industry: studies on innovation, customer value and digitalization*.
- McFarlane, D., Giannikas, V., & Lu, W. (2016). Intelligent logistics: Involving the customer. *Computers in Industry*, 81, 105-115.
- Mediano, J. M., Ruiz-Alba, J. L., Villas, I. P., & Ayestarán, R. (2019). Customer Orientation in Family Business. *European Journal of Family Business*, 9(1), 21-28.
- NURFARIDA, I. N., SARWOKO, E., & ARIEF, M. (2021). The Impact of Social Media Adoption on Customer Orientation and SME Performance: An Empirical Study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(6), 357-365.
- Park, E. H., & Lee, I. H. (2018). The effect of Servicescape on the Customer Orientation of Beauty Professionals. *Journal of Fashion Business*, 22(3), 75-88.
- Pérez Rave, J. I., Fernández Guerrero, R., & Correa Morales, J. C. (2020). Critical thinking and continuous improvement: a scientific text mining approach. *Total Quality Management & Business Excellence*, 1-27.
- Pham Thi Phuong, L., & Ahn, Y. J. (2021). Service climate and empowerment for customer service quality among Vietnamese employees at restaurants. *Sustainability*, 13(3), 1172.
- Raie, M., Khadivi, A., & Khdaie, R. (2014). The effect of employees' customer orientation, customer's satisfaction and commitment on customer's sustainability. *Oman Chapter of Arabian Journal of Business and Management Review*, 34(2361), 1-13.
- Ritamaki, A. (2017). *Applying Continuous Improvement in Order to Reach Operational Excellence*.
- Shyng, J. H. (2021). The Practice of Deming Cycle Improvement Mechanism in Climate Change Environmental Education. *Journal of Contemporary Educational Research*, 5(8), 205-214.
- Silva, A. S., Medeiros, C. F., & Vieira, R. K. (2017). Cleaner Production and PDCA cycle: Practical application for reducing the Cans Loss Index in a beverage company. *Journal of cleaner production*, 150, 324-338.
- Soita, J. J. (2016). *Continuous improvement practices and product quality performance at TATA chemicals Magadi limited (Doctoral dissertation, University of Nairobi)*.
- Stelson, P., Hille, J., Eseonu, C., & Doolen, T. (2017). What drives continuous improvement project success in healthcare?. *International journal of health care quality assurance*.
- Trincado-Munoz, F., Valenzuela-Fernández, L., & Hebles, M. (2020). The role of organizational justice in the customer orientation–performance relationship. *Academia Revista Latinoamericana de Administración*.
- Vélez Arias, S. A. (2020). *Effective Work Order Requests And Scheduling Tool Design for Maintenance Jobs. Manufacturing Engineering*.