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EVALUATION OF TRAINING PRACTICES AT THE CENTRAL BANK OF IRAQ CASE STUDY OF THE BUSINESS CONTINUITY MANAGEMENT TEAM

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A B S T R A C T

This study aims to evaluate the effectiveness of the training provided to the Business Continuity Management (BCM) Team at the Central Bank of Iraq through a case study assessing the team's performance before and after the training. The scientific and technical knowledge of the team members was measured using a checklist based on the requirements of the international standard for Business Continuity Management (ISO 22301:2019) and the foundational knowledge necessary for its implementation. The evaluation results demonstrated a significant improvement in the team's knowledge level after the training, reflecting the positive impact of the training programs on their competence and ability to effectively apply the standard. The study concludes that investing in building employee capacities is a fundamental pillar for enhancing the effectiveness of business continuity management. Such investments contribute to achieving the bank's strategic objectives and ensuring its financial and operational stability in the face of potential challenges.

1. INTRODUCTION

The development of personal skills has become essential in today's world, where intense competition exists among individuals to seize opportunities (Hitt et al., 2011). Consequently, many individuals across various levels, ages, and specializations have turned to public courses to acquire the necessary skills to enhance their work performance, find employment, or positively impact their current career paths (Lynch, 2000; Ng & Feldman, 2009). However, in many organizations within the Arab world, training for skill development is often regarded as supplementary rather than fundamental (Malik & Awadallah, 2013). It is sometimes seen merely as a motivational or recreational tool rather than being recognized for its real impact on employee development and, consequently, organizational improvement.

A review of scientific research and human resources literature highlights the importance of training courses and programs in the workplace (Schloemer-Jarvis et al., 2022). These have become modern tools and activities contributing effectively to the growth and development of organizations and individuals. One of the primary responsibilities of management is to develop the skills employees need for their jobs and assist them in using advanced methods and techniques to accomplish their tasks (Soubjaki & Kamaleddine, 2020). Administrative and technical tasks are integrated into the training process. Training must include clear policies and objectives, adequate human and material resources and

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an effective system for monitoring and continuous evaluation (Daily & Huang, 2001).

The evaluation phase of training program outcomes is considered the most critical and final stage in the training process. This evaluation should ideally be based on the objectives set for the training program, whether partial or final. However, the difficulty of measuring training outcomes often poses challenges in evaluating the overall training process. Without adequate evaluation, it is impossible to assess the quality of training programs or confirm the effectiveness of training systems. Naturally, training programs are rarely perfect; instead, they are designed to undergo continuous review and improvement based on information provided by the evaluation process, which relies on realistic and accurate metrics (Lanza & Marinescu, 2007).

Many studies have examined training evaluation as a fundamental step in the management of the training process, emphasizing its importance alongside the training itself. For instance, Castro et al. (2020) evaluated training programs to support the application of quality management systems in Malaysian companies. The study found high levels of positive feedback in areas such as interaction, knowledge, and attitudes, but less positive feedback regarding skill levels. Similarly, Imran and Tanveer (2015) assessed the impact of training on employee performance in the Al-Buraimi Governorate Directorate of Education. His study demonstrated a relationship between the skills and abilities acquired by trainees and the actual performance improvements training aims to achieve. Imran and Tanveer (2015) recommended creating annual training plans based on practical employee training needs, conducting comprehensive surveys of individual annual performance requirements, and aligning training programs with employees' capabilities, needs, and roles. He also emphasized the importance of monitoring and evaluating training during and after the process.

Al Azmeh (2019) revisited the impact of training on employee performance in the General Company for Homs Refinery, examining the effect of various training dimensions (needs assessment, training programs, and evaluation) on performance. The study revealed a moderate positive effect of training needs assessment and program evaluation on employee performance and a weaker positive effect of training tools. It also found no significant differences in the training dimensions and employee performance across demographic variables, except for performance variations by age.

Additionally, Sabella et al. (2015) explored the evaluation of training programs in local organizations in Palestine's southern governorates. The results showed that these organizations conduct evaluations to a moderate extent.

Despite the abundance of studies addressing training evaluation and its impact on human resource performance, research on the state of training within this particular bank is scarce. Therefore, this study aims to evaluate the current state of training by focusing on the Business Continuity Management (BCM) team at the Central Bank of Iraq. The study assesses the training process before and after implementation and evaluates its outcomes.

2. LITERATURE REVIEW

Training is the means through which employees acquire the necessary knowledge and ideas to perform their work using new methods effectively (Elnaga & Imran, 2013). Training involves learning experiences aimed at continuous individual improvement, enhancing their ability to perform job duties. It is associated with changes in skills, knowledge, attitudes, behavior, or actions, as any change in what employees know about performing their tasks, their attitudes towards their work, or their interaction with colleagues or supervisors focuses on their current roles, immediately enhancing the specific skills and abilities required for their jobs (Al Masoudi, 2023).

Others define training as an organized and continuous process through which individuals acquire the knowledge, skills, abilities, ideas, and opinions necessary to perform a specific task or achieve a defined goal (Salas et al. 2012). The human element is one of the most critical resources that keep organizations alive. It is the primary driver of all organizational activities and a significant source of its effectiveness, particularly when it is characterized by skills, knowledge, abilities, and capabilities that align with the nature of the work performed (Ho, 2008). Furthermore, it requires individuals to possess initiative and the ability to face challenges (Mciver et al., 2013).

The importance of training lies in addressing and resolving weaknesses in both current and expected performance. Training significantly contributes to implementing organizational plans and maintaining competitiveness and productivity. Training is essential for sustaining high competitiveness levels, increasing organizational productivity, and improving performance. Furthermore, changes in the work environment, workforce dynamics, legal requirements, the increasing use of technology, the ongoing shift from manufacturing-based to service-based economies, and the growing globalization of the business world require organizations to subject all their employees to effective training programs (Barcelona, 2014).

To achieve training goals, several requirements must be met (Ali et al., 2021):

- Training Planning: Proper planning is the foundation of successful training. The absence of effective planning can lead to deviations in the process from achieving the organization's and employees' objectives. Planning should rely on a prior realistic study that considers the organization's culture and surrounding environment (Taskiran & Zhang, 2017).
- Identifying Training Needs: Identifying training needs ensures the program's relevance and purpose. The need for training arises when

expanding business operations, hiring new employees, or training existing employees to improve their performance (Du Mont, 2018).

- Designing Training Programs: Designing programs involves identifying needs, setting objectives, selecting trainers and appropriate training tools, and preparing training facilities. Programs should be distinguished based on efficiency and quality standards to ensure the organization's continuity without deficits (Kaur et al., 2017).
- Implementing Training Plans: Once the training plan is approved, it is implemented in coordination between the planning and implementation teams to ensure achieving the final goal and overcoming obstacles (Huang et al., 2019).
- Evaluating Training Programs: Evaluation involves verifying the implementation of the plan as outlined, by measuring the program's efficiency, its impact on employees' performance, and trainers' competence. Proper implementation is enhanced through evaluation, and any deficiencies can be addressed and prevented from recurring (Ye et al., 2018).

Providing training programs is not a simple task, as it requires measuring relevant changes in human behavior and linking these changes to the objectives of the programs (Jasim & Farhan, 2024). Organizations must periodically assess the training methods they use to determine whether they achieve the intended goals and meet the pre-determined training needs. Many organizations conduct various training courses without measuring their outcomes or evaluating the success of these programs, despite the significant investments in terms of capital, time, effort, and resources. Therefore, evaluating training programs is equally important as training itself, as it helps identify the need to expand, adjust, or discontinue training programs and reformulate them to align with the aspirations of various organizations (Al-Awawdeh & Kalsoom, 2022).

The main objective of training is to ensure the availability of skilled and qualified personnel equipped with the best knowledge and skills to serve the organization. Additionally, there are four other objectives: individual goals, organizational goals, functional goals, and societal goals (Soubjaki & Kamaleddine, 2020). Training evaluation aims to provide decision-makers with information that can serve as a basis for deciding whether to modify, cancel, or continue a training program, assist training specialists in improving their programs to be more effective in achieving desired goals, and identify the strengths and weaknesses of training (Al Hadrami, 2022).

3. METHODOLOGY

This research employed a case study approach to evaluate the training practices at the Central Bank of Iraq, focusing on a specific training program provided to the Business Continuity Management Team. The team comprised eight members from the Total Quality Management and Institutional Development Department and the Investment and Foreign Transfers Department. The study aimed to assess the impact of training on the team.

To achieve this, the scientific and technical knowledge of the team was measured before the training using a checklist consisting of 30 multiple-choice questions. These questions were designed based on the requirements of the international standard for Business Continuity Management (ISO 22301:2019) and the foundational knowledge necessary for implementing the standard. The checklist was developed leveraging accumulated expertise in applying international systems and standards, drawing on my role as one of the bank's leaders in this field and as the head of the Total Quality Management and Institutional Development Department. The questions were crafted to comprehensively cover all aspects of business continuity management.

The evaluation process involved identifying correct and incorrect answers for each question, calculating the average number of correct and incorrect responses. The same set of questions was then administered to the team after they participated in an advanced training program. The average correct and incorrect responses were recalculated to determine the training's effectiveness and its impact on the team.

4. DISCUSSION AND ANALYSIS

This section is divided into three main stages, as outlined below:

- Stage One: Pre-Training Assessment. To evaluate the initial scientific and technical knowledge of the Business Continuity Management Team at the Central Bank of Iraq prior to their enrollment in the training program, a preliminary assessment was conducted. A checklist consisting of 30 questions was utilized, specifically designed to cover all essential aspects of business continuity management. These aspects included fundamental concepts of business continuity management, planning, implementation, evaluation, risk management, internal and external auditing, and the certification process. The structure and coverage of the checklist are presented in Table 1 below.

Table 1. Pre-Training Assessment

N	checklist questions directed to the team before training	The answers	
		correct answers	incorrect answers
1	What is the primary purpose of a Business Continuity Management System (BCMS)?	7	1
2	What are the requirements of a Business Continuity Management System (BCMS)?	7	1
3	What is a Business Continuity Policy?	2	6
4	What are the key roles and responsibilities of top management in a Business Continuity Management System?	6	2
5	What are the key roles and responsibilities of Business Continuity Management System coordinators?	4	4
6	What resources are required to implement a Business Continuity Plan?	5	3
7	What are the mandatory documents to be retained in a Business Continuity Management System according to ISO 22301?	5	3
8	How can risks be assessed in a Business Continuity Management System (BCMS)?	1	7
9	What factors should be considered when determining the scope of a Business Continuity Management System?	5	3
10	What elements should be included in a Business Continuity Policy?	4	4
11	What information should be included in Business Continuity procedures?	6	2
12	What elements should be included in a Business Continuity Plan?	5	3
13	When is it preferable to review and update a Business Continuity Management System (BCMS)?	4	4
14	What is the difference between a threat and an incident?	7	1
15	What types of risk analyses can be used in a Business Continuity Management System (BCMS)?	6	2
16	What are the components of a Business Continuity Management System (BCMS)?	7	1
17	What does the communication process in a Business Continuity Management System (BCMS) include?	5	3
18	What is Business Impact Analysis (BIA)?	0	8
19	What are the main reasons for conducting Business Impact Analysis periodically?	3	5
20	How can priorities be determined in Business Continuity?	4	4
21	What is a non-essential step in preparing a Business Continuity Plan?	4	4
22	What information should not be included in a Business Continuity Plan?	4	4
23	What factors should not be considered when testing a Business Continuity Plan?	5	3
24	How is performance evaluated in a Business Continuity Management System (BCMS)?	4	4
25	What is the international standard for Business Continuity Management?	4	4
26	What is the first step in the business recovery process?	1	7
27	What are the best practices when restoring operations after a disruption?	1	7
28	ISO 22301:2012 has been replaced by ISO 22301:2019. Which clause has been restructured to provide a clearer understanding of key requirements?	5	3
29	In ISO 22301:2019, what does the term "should" indicate?	3	5
30	Clause 5.2.2 outlines the communication details regarding the Business Continuity Policy. The Business Continuity Policy must be...?	7	1
Answer rate		**4.37**	**3.63**

The above assessment results indicate that the average number of correct answers was 4.37 out of 8, while the incorrect answers averaged 3.63, translating to a correct response rate of 55% and an incorrect response rate of 45%. The evaluation further revealed that question 18, which pertains to Business Impact Analysis (BIA), had all responses marked incorrect. Additionally, question 8 related to assessing system risks (BCMS), question 26 regarding the first step in the business recovery process, and question 27 concerning key practices during business recovery received 7 incorrect responses out of 8. On the other hand, five questions achieved 7
correct responses each. Based on these findings, the team's knowledge in the assessed areas is weak and falls below the required standard.

- Stage Two (Training): An advanced training program was conducted for the Business Continuity Management (BCM) team in the United Arab Emirates, aiming to enhance their scientific and technical knowledge and skills. The training program lasted for 40 hours and was delivered using diverse educational methods. The program was facilitated by a specialized trainer in the field of Business Continuity Management.
- Stage Three (Post-Training Evaluation): Following the completion of the advanced training program for the Business Continuity Management team at the Central Bank of Iraq, a post-training evaluation was conducted using

the same assessment tool and the same set of questions utilized in the pre-training evaluation. The purpose was to measure the improvement in the team's scientific and technical knowledge, as outlined in Table 2 below.

Table 2. Post-Training Evaluation

N	checklist questions directed to the team after training	The answers	
		correct answers	incorrect answers
1	What is the primary purpose of a Business Continuity Management System (BCMS)?	7	1
2	What are the requirements of a Business Continuity Management System (BCMS)?	7	1
3	What is a Business Continuity Policy?	6	2
4	What are the key roles and responsibilities of top management in a Business Continuity Management System?	7	1
5	What are the key roles and responsibilities of Business Continuity Management System coordinators?	6	2
6	What resources are required to implement a Business Continuity Plan?	8	0
7	What are the mandatory documents to be retained in a Business Continuity Management System according to ISO 22301?	7	1
8	How can risks be assessed in a Business Continuity Management System (BCMS)?	6	2
9	What factors should be considered when determining the scope of a Business Continuity Management System?	7	1
10	What elements should be included in a Business Continuity Policy?	6	2
11	What information should be included in Business Continuity procedures?	7	1
12	What elements should be included in a Business Continuity Plan?	8	0
13	When is it preferable to review and update a Business Continuity Management System (BCMS)?	6	2
14	What is the difference between a threat and an incident?	8	0
15	What types of risk analyses can be used in a Business Continuity Management System (BCMS)?	7	1
16	What are the components of a Business Continuity Management System (BCMS)?	7	1
17	What does the communication process in a Business Continuity Management System (BCMS) include?	6	2
18	What is Business Impact Analysis (BIA)?	5	3
19	What are the main reasons for conducting Business Impact Analysis periodically?	5	3
20	How can priorities be determined in Business Continuity?	6	2
21	What is a non-essential step in preparing a Business Continuity Plan?	7	1
22	What information should not be included in a Business Continuity Plan?	6	2
23	What factors should not be considered when testing a Business Continuity Plan?	7	1
24	How is performance evaluated in a Business Continuity Management System (BCMS)?	7	1
25	What is the international standard for Business Continuity Management?	8	0
26	What is the first step in the business recovery process?	6	2
27	What are the best practices when restoring operations after a disruption?	6	2
28	ISO 22301:2012 has been replaced by ISO 22301:2019. Which clause has been restructured to provide a clearer understanding of key requirements?	7	1
29	In ISO 22301:2019, what does the term "should" indicate?	6	2
30	Clause 5.2.2 outlines the communication details regarding the Business Continuity Policy. The Business Continuity Policy must be...?	8	0
Answer rate		**6.67**	**1.33**

The post-training evaluation results, as shown above, indicate that the average number of correct answers increased to 6.67 out of 8, while the incorrect answers decreased to 1.33. This means the percentage of correct answers rose to 83%, compared to 55% before the training, while incorrect answers dropped to 17%, compared to 45% prior to the training. This demonstrates that the training had a positive impact on the team, improving their performance by 28%.

The purpose was to measure the improvement in the team's scientific and technical knowledge, as outlined in Table 2.

The results also reveal a significant increase in the team's knowledge in areas that previously showed notable weaknesses before participating in the training program, such as business impact analysis, evaluating system risks (BCMS), steps in the business recovery process, and best practices for business recovery.

5. CONCLUSION

The study aimed to assess the state of training in the Central Bank of Iraq through a case study of the Business Continuity Management Team before and after training. The results revealed a weakness in the team's knowledge prior to training, particularly in areas such as risk assessment and business impact analysis. This was attributed to the continuous changes in international standards for business continuity management.

Furthermore, the results indicated a positive impact of the training, demonstrating its effectiveness in enhancing the team's knowledge based on the pre- and post-training evaluations. The study recommends implementing more training programs in this field due to their significant role in developing employees' skills and knowledge. It also emphasizes the importance of selecting high-quality programs that benefit both employees and the bank. Additionally, the study underscores the need for continuous evaluation of all training programs and highlights the importance of keeping pace with ongoing changes in the work environment, particularly in the area of training. Finally, it recommends involving employees in other specialized programs related to the team's work, such as business impact analysis, evacuation practices, emergency response, and others**.**

References:

Al Azmeh, S. G. (2019). The relationship between e-learning service and student satisfaction a case study at the Syrian Virtual University (SVU). *Business, Management and Education*, *17*(1), 49-71.

Al Hadrami, A. B. S. (2022). The competences of managing educational crises for principals of basic education schools in Sultanate of Oman. *JETT*, *13*(4), 37-50.

Al Masoudi, L. J. H. (2023). Ethical Behavior of Senior Management and Its Impact on Enhancing Guest Satisfaction: A Case Study of the Opinions of a Sample of Managers of First-Class Hotels in the Holy City of Karbala. *Czech Journal of Multidisciplinary Innovations*, *24*, 60-91.

Al-Awawdeh, N., & Kalsoom, T. (2022). Foreign languages e-learning assessment efficiency and content access effectiveness during Corona pandemic in university context. *Theory and Practice in Language Studies*, *12*(10), 2124-2132.

Ali, H. H., Khalil, S. S., & Khalil, R. J. (2021). The role of lean marketing in achieving sustainable competitive advantage: An analytical study at Al-Mosul dairy manufactory. *Journal of Techniques*, *3*(2), 61-72.

Barcelona, K. (2014). 21st century curriculum change initiative: A focus on STEM education as an integrated approach to teaching and learning. *American Journal of Educational Research*, *2*(10), 862-875.

Castro, A., Phillips, N., & Ansari, S. (2020). Corporate corruption: A review and an agenda for future research. *Academy of Management Annals*, *14*(2), 935-968.

Daily, B. F., & Huang, S. C. (2001). Achieving sustainability through attention to human resource factors in environmental management. *International Journal of operations & production management*, *21*(12), 1539-1552.

Du Mont, J., Solomon, S., Kosa, S. D., & Macdonald, S. (2018). Development and evaluation of sexual assault training for emergency department staff in Ontario, Canada. *Nurse education today*, *70*, 124-129.

Elnaga, A., & Imran, A. (2013). The effect of training on employee performance. *European journal of Business and Management*, *5*(4), 137-147.

Hitt, M. A., Ireland, R. D., Sirmon, D. G., & Trahms, C. A. (2011). Strategic entrepreneurship: creating value for individuals, organizations, and society. *Academy of management perspectives*, *25*(2), 57-75.

Ho, L. A. (2008). What affects organizational performance? The linking of learning and knowledge management. *Industrial management & data systems*, *108*(9), 1234-1254.

Huang, Y., Huang, J., Xia, H., Shi, Y., Ma, H., & Yuan, Z. (2019). Networking for training Level 3/4 biosafety laboratory staff. *Journal of Biosafety and Biosecurity*, *1*(1), 46-49.

Imran, M., & Tanveer, A. (2015). Impact of training & development on employees' performance in banks of pakistan. *European journal of training and development studies*, *3*(1), 22-44.

Jasim, A. H., & Farhan, W. A. R. (2024). Examining Organizational Values in Iraqi Colleges of Physical Education and Sports Science. *Fitness, Performance and Health Journal*, *3*(1), 39-53.

Kaur, J., Stone, P. W., Travers, J. L., Cohen, C. C., & Herzig, C. T. (2017). Influence of staff infection control training on infection-related quality measures in US nursing homes. *American journal of infection control*, *45*(9), 1035-1040.

Lanza, M., & Marinescu, R. (2007). *Object-oriented metrics in practice: using software metrics to characterize, evaluate, and improve the design of object-oriented systems*. Springer Science & Business Media.

Lynch, R. (2000). High school career and technical education for the first decade of the 21st century. *Journal of vocational education research*, *25*(2), 155-198.

Malik, A., & Awadallah, B. (2013). The economics of the Arab Spring. *World Development*, *45*, 296-313.

Mciver, D., Lengnick-Hall, C. A., Lengnick-Hall, M. L., & Ramachandran, I. (2013). Understanding work and knowledge management from a knowledge-in-practice perspective. *Academy of management review*, *38*(4), 597-620.

Ng, T. W., & Feldman, D. C. (2009). How broadly does education contribute to job performance?. *Personnel psychology*, *62*(1), 89-134.

Sabella, A. R., Kashou, R., & Omran, O. (2015). Assessing quality of management practices in Palestinian hospitals. *International journal of organizational analysis*, *23*(2), 213-232.

Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological science in the public interest*, *13*(2), 74-101.

Schloemer-Jarvis, A., Bader, B., & Böhm, S. A. (2022). The role of human resource practices for including persons with disabilities in the workforce: A systematic literature review. *The International Journal of Human Resource Management*, *33*(1), 45-98.

Soubjaki, M., & Kamaleddine, K. (2020). The Impact of public training programs outcomes on the development of the trainee personal and technical skills–from trainees' perspective in Lebanon. *AAU Journal of Business and Law*, *4*(1), 1-25. DOI:10.51958/AAUJBL2020V4I1P2

Taskiran, G. K., & Zhang, X. (2017). Mathematical models and solution approach for cross-training staff scheduling at call centers. *Computers & Operations Research*, *87*, 258-269.

Ye, J., Xiao, A., Yu, L., Guo, J., Lei, H., Wei, H., & Luo, W. (2018). Staff training reduces the use of physical restraint in mental health service, evidence-based reflection for China. *Archives of Psychiatric Nursing*, *32*(3), 488-494.

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