5 Critical success factors in ERP implementation

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# Introduction

In the growing modern society and competitive business environment, the success of the business now depends on the Enterprise Resource Planning system (Morris, 2021). The ERP system is developed for an organization to manage and integrate the business processes of the company, which allows the organization to access business data, and manage the use of resources in functional silos (Nah & Lau, 2001). If the ERP system is successfully implemented, it will bring huge benefits to the enterprise (Motwania et al., 2002), but in 2000, Nike's faulty ERP system implementation made them lose more than 100 million in sales and caused class-action lawsuits (Koch, 2004), which shows the ERP system failure can be detrimental to the enterprise. The aim of this essay is to identify 5 factors for the success of ERP based on the cases.

# Success Factors in ERP

## Selection of system

The selection of a system is important for the implementation of an ERP system. The mistake of Nike in 2000 is that they installed the I2 system into their old system, but I2 system was complex and used different business rules. As a result, the I2 program needed to adopt heavy customization to fit Nike's system and the data became out of sync in the end (Koch, 2004). The ERP selected needs to be compatible and flexible, with excellent integration, adaptability and upgradeability, which can provide a good system capability during the implementation of ERP (Al-Salti, 2008). The selection steps include planning, researching, evaluation and negotiation. Organisations must be very careful with decision making and software solution adoption has important implications in the whole system development (Mihalca et al., 2007). Based on the research, ERP selection significantly influences the system quality, which further influences the information quality. These two aspects of quality are crucial for the success of ERP implementation (Yang et al., 2010).

## Employee training

In the case of Nike, they did not train their employees on how to use the system well, and the employee made mistakes when processing the orders’ data (Koch, 2004). According to the spokesman of SAP, a change of the system means a lot to the employees during work, and it can be difficult for employees to change the way they work (CNET, 2002). Employees need to be trained to understand how the system will improve business processes, and the user behaviours of the system make an impact on the performance of the company, so user training should be emphasised for the organisation (Nah & Lau, 2001). The high level of user knowledge about the ERP system can lead to the success of ERP implementation (Al-Salti, 2008), and the difference between successful and unsuccessful organisations is their attitude toward employee training (Roberts & Barrar, 1992).

## Business process reengineering

Nike ignores the ERP system provider’s suggestions, and the system lacks integration with I2's supply-chain prediction system (Koch, 2004). The reengineering of the process takes time and fund, but it is essential to achieve good results in all management levels (Sridharan et al., 2005). This is because the reengineering process can provide new ideas, reduce the errors of the system and enhance the integration level of the system by fitting into the customising business processes (Nah & Lau, 2001). Many companies make deep customisations of ERP and make the system complex because they do not understand their business processes, and ERP implementation often requires a specific skill (Al-Salti, 2008).

## Support from top management

Getting support from the management is the most important factor for the system's success, without which the project cannot get the user training and re-engineering of the business processes, which can lead to the organization not accepting the system (Al-Salti, 2008). ERP implementation involves huge changes to existing business processes as well as substantial fund investments (Wong& Caines, 2005). The higher managers need to be determined to make changes with a commitment to achieve the higher business goals (Roberts & Barrar, 1992), and they need to put highest priority on the implementation (Nah & Lau, 2001, pp. 291). The managers should make sure the project team members have enough time to work on the implementation and ensure that they have the corresponding ERP system implementation knowledge (Roberts & Barrar, 1992). This also requires communication between managers and team members, and management should provide development direction and constantly monitor the implementation (Al-Salti, 2008).

## Effective project management

During the planning stage of ERP in Nike, they planned to build separate databases in the system, which was hard in project management because it required a mutual agreement on business practices and common data definitions (Koch, 2004). ERP system implementation is complex and requires an organisation to have effective project management to monitor and control the project implementation (Al-Salti, 2008). It points to the direction of the project and ensures the ERP project can be implemented on time (Wong & Caines, 2005). The project management of ERP can affect project planning and control, and it should determine the project size and structure, and the manager should identify the scope time and cost goals of the ERP project (Al-Salti, 2008). If the organisation does not work well in this part, it will be too late to discover that project planning and implementation are not comprehensive or that the obvious potential pitfalls have not been considered (Weston, 2001).

# Conclusion

Based on the error of Nike's ERP system and ERP literature research, we summarised and determined five key factors for the success of ERP implementation. From ERP suppliers to ERP users, they all need to emphasise on ERP implementation. In addition, excellent communication and cooperation are needed between the company and its employees. ERP covers a wide range of functions, so it is important to have a well-informed, cross-functional project team. In the end, the factors that have to be considered in ERP implementation include the selection of system, employee training, business process reengineering, support from top management and effective project management.

# Reference:

Andy, Morris,. (2021). Critical factors for successful implementation of enterprise systems. Retrieved From: ERP and Business Intelligence: [ERP and Business Intelligence: Why Your Business Needs Both | NetSuite](https://www.netsuite.com/portal/resource/articles/erp/erp-business-intelligence.shtml)

A, UŢĂ,. &I, Intorsureanu,.& R, Mihalca,. (2007), Criteria for the selection of ERP software. Retrieved From: [Criteria for the selection of ERP software](https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.516.2726&rep=rep1&type=pdf)

W,-H, Tsai,. P,-L, Lee,. Y,-S, Shen,. C,-C, Yang,. (2010) The relationship between ERP software selection criteria and ERP success. Retrieved From: [The relationship between ERP software selection criteria and ERP success | IEEE Conference Publication | IEEE Xplore](https://ieeexplore.ieee.org/document/5373085)

Fiona, Fui‐Hoon, Nah,.& Janet, Lee‐Shang, Lau,. Jinghua, Kuang,. (2001). *Critical factors for successful implementation of enterprise systems*. Retrieved From: [Critical factors for successful implementation of enterprise systems | Emerald Insight](https://www.emerald.com/insight/content/doi/10.1108/14637150110392782/full/html?skipTracking=true)

Jaideep, Motwania,. & Dinesh, Mirchandanib,. & Manu, Madanc,. A, Gunasekarand,. (2022). Successful implementation of ERP projects: Evidence from two case studies. Retrieved From: [Successful implementation of ERP projects: Evidence from two case studies (isiarticles.com)](https://isiarticles.com/bundles/Article/pre/pdf/12147.pdf)

Christopher, Koch,. (2004).Nike Rebounds: How Nike Recovered From Its Supply Chain Disaster. Retrieved From: [Nike Rebounds: How Nike Recovered From Its Supply Chain Disaster (cio.com)](https://www.cio.com/article/264637/enterprise-resource-planning-nike-rebounds-how-nike-recovered-from-its-supply-chain-disaster.html)

CNET,. (2002). i2-Nike fallout a cautionary tale. Retrieved From: [i2-Nike fallout a cautionary tale (cnet.com)](https://www.cnet.com/tech/tech-industry/i2-nike-fallout-a-cautionary-tale/)

Zahran, Al-Salti,. & Tillal, Eldabi,. (2008). Critical success factors in ERP implementation: A review. Retrieved From: [(PDF) Critical success factors in ERP implementation: A review (researchgate.net)](https://www.researchgate.net/publication/49401950_Critical_success_factors_in_ERP_implementation_A_review)

Uma, V, Sridharan,. & W, Royce, Caines,. & Cheryl, C, Patterson,. (2005). *Implementation of supply chain management and its impact on the value of firms*. Retrieved From: [Implementation of supply chain management and its impact on the value of firms | Emerald Insight](https://www.emerald.com/insight/content/doi/10.1108/13598540510612785/full/html?skipTracking=true)

Bernard, Wong,. & David, Tein,. (2003). Critical Success Factors for ERP Project. Retrieved From: [Critical Success Factors for ERP Projects](https://opus.lib.uts.edu.au/bitstream/10453/6918/1/2003001727.pdf)

H, J, Roberts & P, R, N, Barrar,. (1992). MRPII implementation: key factors for success'', Computer Integrated Manufacturing Systems. Retrieved From: [MRPII implementation: key factors for success - ScienceDirect](https://www.sciencedirect.com/science/article/pii/0951524092900166)

F.C. Weston,.( 2001). ERP implementation and project management. Retrieved From: [ERP implementation and project management - Document - Gale Academic OneFile](https://go.gale.com/ps/i.do?id=GALE%7CA86054366&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=08978336&p=AONE&sw=w&enforceAuth=true&linkSource=delayedAuthFullText&userGroupName=monash)