

The Importance of Enterprise Resource Planning (ERP) in Increasing Intellectual Capital in Organisations (ICO)

Manhar Arora^{1*} Dr. Devesh Kumar²

¹ Research Scholar

² Supervisor

Abstract – ERP stands for enterprise resource planning, which is the integrated management of key business operations, which is typically done in real time and mediated by software and technology. Enterprise resource planning (ERP) is a type of business management software that consists of a set of integrated applications that allow a company to gather, store, manage, and understand data from a variety of business processes. Local or cloud-based enterprise resource planning (ERP) systems are available. Because information is accessible from any location with internet connection, cloud-based apps have gained in popularity in recent years. Using shared databases managed by a database management system, enterprise resource planning (ERP) gives an integrated and continually updated picture of fundamental business activities. ERP systems track business resources such as cash, raw materials, manufacturing capacity, and the status of business obligations such as orders, purchase orders, and payroll. The system's applications distribute data among the many departments that provide it (manufacturing, purchasing, sales, accounting, and so on). Enterprise resource planning (ERP) handles links with external stakeholders and enables information flow across all corporate units. In this paper discuss the Enterprise resource planning (ERP), Intellectual Capital and Importance of Enterprise Resource Planning (ERP) in Increasing Intellectual Capital in Organisations.

Keywords – Enterprise Resource Planning (ERP), Intellectual Capital in Organisations (ICO), Technology Acceptance Model (TAM)

-----X-----

1. INTRODUCTION

Companies around the world have been encouraged to improve their ability to create and offer more value in order to control and maintain the market since the dawn of the globalisation era, as a result of rapid technological development and numerous and varied changes in customer demand. As a result, companies today are constantly looking for ways to gain more profit than their competitors. The correct management control system may help businesses become more efficient and adaptable in the face of competitive rivalry. The notion of a management control system is currently forming. A management control system is described as a system that provides managers with meaningful information for decision-making in the performance management process while also being efficient and effective in achieving the organization's objectives.¹

In order to strengthen the competitive edge, firms need business support elements that are anticipated to help integrate the information system and aid

management in decision-making. Using an Enterprise Resource Planning (ERP) system is one approach to do this. Enterprise resource planning (ERP) is a corporate software system that provides an integrated solution for businesses' information processing needs while managing resources, such as materials, human resources, and finance, efficiently and effectively. The Technology Acceptance Model is one of the methods for assessing technology's ease of use (TAM). Davis was the first to introduce and describe TAM, which is based on the Theory of Reasoned Action (TRA) paradigm. TAM is one of the most commonly used models to explain behavioural intention and actual usage, which is the intention and behaviour toward the satisfaction of system information, and it could help to improve understanding of how influences on actual usage could help improve Enterprise resource planning implementation (ERP). Enterprise resource planning is a major economic force in many sectors, and it is thought to be

capable of improving the effectiveness of an organization's operational processes.²

As Markus pointed out, enterprise resource planning is seen as a technological innovation that brings changes to the organisation by making it easier to integrate the organization's data and assisting in the decision-making process. Researchers will concentrate on two aspects of the management control system, namely the belief system and the boundary system, as well as several TAM factors developed by Davis, namely perceived ease of use, perceived usefulness, actual use, and intellectual capital, as well as several TAM factors developed by Goganet et al.

1.1 Enterprise Resource Planning (ERP)

Enterprise resource planning (ERP) is a management and integration technique used by organisations to manage and integrate the many aspects of their operations. Many firms benefit from enterprise resource planning (ERP) software because it allows them to execute resource planning by unifying all of the activities required to manage their businesses into a single system. Planning, buying, inventory, sales, marketing, finance, human resources, and other functions may all be integrated with an ERP software system.³

An enterprise resource planning system may be thought of as the glue that holds a huge company's many computer systems together. Each department's system would be optimised for its specialised responsibilities if there was no Enterprise resource planning (ERP) application. Each department still has its own system, but with ERP software, all of the systems can be accessible through a single application with a single interface.

Enterprise resource planning (ERP) software also makes it easier for various departments to collaborate and exchange information with the rest of the organisation. It gathers data on the activity and status of various divisions and makes it available to other portions so that it may be used profitably.

By connecting information about manufacturing, finance, distribution, and human resources, enterprise resource planning (ERP) solutions may help a company become more self-aware. An Enterprise resource planning (ERP) programme can minimise costly duplicate and incompatible technology by connecting multiple technologies utilised by different parts of an organisation. Accounts payable, stock control systems, order-monitoring systems, and customer databases are frequently integrated into one system.

Over time, enterprise resource planning (ERP) software has progressed from traditional software models that rely on physical client servers to cloud-

based software that allows for remote, web-based access.

1.2 Benefits of Enterprise Resource Planning (ERP)

Enterprise resource planning (ERP) is used by businesses for a variety of objectives, including increasing their business, lowering expenses, and enhancing operations. Although the advantages sought and attained by one firm may differ from those sought and accomplished by another, there are a few that are worth highlighting.⁴

Integrating and automating corporate operations reduces redundancy, increases accuracy, and boosts output. Departments with interconnected processes may now coordinate their efforts to obtain better results sooner.

Some companies benefit from improved real-time data reporting from a single source system. Accurate and thorough reporting enables businesses to plan, budget, predict, and convey the status of their operations to internal and external stakeholders, such as shareholders.

Enterprise resource planning (ERP) enables firms to swiftly access information for customers, vendors, and business partners, resulting in higher customer and employee satisfaction, faster reaction times, and more accuracy. As a corporation becomes more efficient, associated expenses frequently fall.

Departments are more capable of collaborating and sharing information. Employees are better able to perceive how each functional group contributes to the company's objective and vision, therefore a newly synergized workforce can boost productivity and employee happiness. Menial, manual duties are also avoided, allowing staff to focus on more important responsibilities.

1.3 Examples of Enterprise Resource Planning (ERP)

Fulton & Roark, a manufacturer of men's grooming products, has effectively adopted enterprise resource planning to better manage inventory and financial data. The firm in North Carolina, like many others, utilised spreadsheets to keep track of inventories and accounting software to keep track of financial data.⁵

The company's procedures slowed as it grew. Their out-of-date inventory monitoring system failed to account for fluctuating expenses, and their accounting software failed to record important financial statement parameters. These failures resulted in manual processes, which squandered even more time and money.

They used the Oracle Netsuite Enterprise resource planning (ERP) solution to minimise inefficient procedures and concentrate work. Fulton & Rourke was able to quickly discover inventory accounting problems, cut expenses associated with hiring third-parties to review their financial records, and better disclose financial conditions.

Cadbury, the world's largest confectioner and creator of the renowned chocolate Cadbury egg, has also successfully deployed an ERP system. It employed inadequate warehouse management systems and ran hundreds of systems that couldn't keep up with its fast development. It had previously installed a disastrous SAP Enterprise resource planning (ERP) system, which led to product overproduction.

It reformed warehouse management systems, breaking down silos for a smooth, integrated coordination of work, and created a system that integrated hundreds of applications, standardised procedures across 16 sites, and restructured enterprise resource planning systems, to mention a few.

Many case studies demonstrate the importance of well-executed enterprise resource planning. The system should be tailored to the company's needs and objectives.

1.4 Intellectual Capital

The worth of a firm's personnel expertise, skills, business training, or other proprietary information that may give the company with a competitive advantage is referred to as intellectual capital.⁶

Intellectual capital is a type of asset that may be roughly defined as a company's collection of all informational resources that can be utilised to increase profitability, attract new consumers, develop new products, or otherwise enhance the firm. It is the total of a company's staff skills, organisational procedures, and other intangibles that contribute to its profits.

Although quantifying intellectual capital is a subjective endeavour, it is a valuable commercial asset. It is not recorded on the balance sheet as "intellectual capital," but rather as part of intellectual property (as part of intangibles and goodwill on the balance sheet), which is difficult to assess in and of itself.

Companies devote a significant amount of time and money to acquiring managerial knowledge and educating their personnel in business-specific areas in order to boost their company's "mental capacity." Although difficult to quantify, this capital used to improve intellectual capital delivers a return to the corporation that can contribute to many years of corporate value.

1.5 Measuring Intellectual Capital

There are a variety of ways for calculating intellectual capital, but no industry-wide standard or consistency exists. For example, as part of its efforts to quantify intellectual capital, the balanced scorecard, an industry performance tool, examines four viewpoints of an employee. Financial, customer, internal processes, and organisational capability are the viewpoints.⁷

The Danish corporation Skandia, on the other hand, believes the transition of human capital into structural capital to be the intellectual capital's role. Financial focus is the ceiling, customer focus and process are the walls, human focus is the soul, and renewable and development focus is the platform to assess intellectual capital, according to the firm.

1.6 Types of Intellectual Capital

- Human capital, relational capital, and structural capital are the three most frequent types of intellectual capital.
- Human capital refers to all of an organization's employees' expertise and experience. It is made up of their educational background, personal experiences, and professional experience. It may be boosted by offering training.
- Relationship capital refers to an organization's whole network of relationships, which includes its workers, suppliers, customers, shareholders, and so on.
- An organization's underlying belief system, such as its mission statement, corporate rules, work culture, and organisational structure, is referred to as structural capital.

1.7 Examples of Intellectual Capital

A production line worker's expertise, a specialised manner of promoting a product, a means to save downtime on a key research project, or a strange, secret formula are all examples of intellectual capital. Hiring competent personnel and process specialists who contribute to the bottom line may also help a company's intellectual capital.⁸

A mechanic, for example, graduates from technical school and begins working for a car manufacturer. Their intellectual capital is made up of the skills they acquired in school. Their intellectual capital has grown after a year on the job as a result of the experience they've obtained and the precise application of their knowledge. The mechanic is enrolled in a training programme that focuses on

new technologies and efficiency after two years. The intellectual capital of the mechanic, and hence the firm, has grown even more.

Intellectual capital is becoming a more important aspect in obtaining success in a competitive marketplace as technology and process improvements become more of a differentiating feature inside modern firms.

2. IMPORTANCE OF ENTERPRISE RESOURCE PLANNING (ERP) IN INCREASING INTELLECTUAL CAPITAL IN ORGANISATIONS

ERP (enterprise resource planning) software is now used by almost all sorts of enterprises. Typically, each company's motives for using an Enterprise resource planning (ERP) solution are unique. In general, businesses strive to improve their efficiency and effectiveness in order to boost production and profitability. A well-designed Enterprise resource planning (ERP) system boosts productivity in a variety of ways: By evaluating firm data across all divisions, enterprise resource planning (ERP) software may simplify business operations, automate tedious chores, and discover improvements. Because each firm uses its own set of procedures, the manner Enterprise resource planning (ERP) delivers these gains will vary from one organisation to the next.⁹

Scale issues must also be taken into account. Enterprise resource planning (ERP) will play a different role in small businesses than it would in larger companies with larger workforces and more sophisticated procedures. This is one of the reasons for the increasing expansion of SMB-focused Enterprise resource planning (ERP) systems, particularly those delivered via cloud computing infrastructures.

1. Managing Your Business with One System

One of the most significant advantages of Enterprise resource planning (ERP) systems is that you may manage many main business sectors with only one ERP system setup.¹⁰

Let's look at a manufacturing Enterprise resource planning (ERP) system as an example. These primary functional groups make up the conventional framework of a manufacturing Enterprise resource planning (ERP) solution:

- Financials
- Human resources
- Manufacturing management
- Inventory management

- Purchasing management
- Quality management
- Sales management

If your company doesn't have an enterprise-wide solution in place, such as an ERP system, it's likely that each of these functions is handled by a distinct programme. Many challenges might develop when corporations handle many operations individually.¹¹ These include:

- Data errors
- Duplication of functions or records
- Lack of visibility into the business as a whole
- Lack of communication between different areas of the business

An enterprise resource planning (ERP) solution unifies and connects all of these different corporate processes into a single system. When your sales team confirms an order, for example, your ERP system will create a transaction for the finance department, a work order for the production floor, update your inventory, and alert the buying department to refill the relevant stock.

If your firm uses a single system of record to handle its data and operations, all of its functional departments may make choices and take actions based on the same data. This implies that all departments use the same data to operate the business, resulting in a single version of the truth.

2. Newer ERP Systems Are Upgrade-Friendly

Because technology evolves at a rapid pace, older enterprise systems are no longer capable of supporting firm development. Many of them may even obstruct development. Furthermore, the expense of replacing an ageing system's code can soon add up. Companies eventually realise that keeping an outdated system in place isn't cost-effective. Migrating to a contemporary, integrated solution is more feasible and cost-effective.¹²

Modern software systems allow technologies such as machine learning, data analytics, the Internet of Things (IoT), and other cutting-edge capabilities. These cutting-edge technologies can detect trends and patterns, as well as provide functions that help businesses make better decisions and achieve a competitive advantage. Businesses must employ current technology to stay competitive and position themselves for development. They require solutions that enable them to be adaptable and scale their operations.

ERP (enterprise resource planning) software is meant to provide growth with flexibility, adaptability, and scalability. One of the most essential advantages of an enterprise resource planning system is that it may help you manage your customers, partners, and suppliers more effectively. You'll be able to effortlessly satisfy the newest reporting needs with a contemporary Enterprise resource planning (ERP) system. Customers will have a more seamless experience with items like one-click online buying if they use the e-commerce module of an Enterprise resource planning (ERP) system. Among the numerous advantages of ERP system support, fully automated electronic data exchange (EDI) may make your supply ordering a piece of cake.

3. ERP Systems Streamline Business Processes

Companies are required to analyse (or reassess) their business processes and workflows when selecting and deploying an Enterprise resource planning (ERP) solution. It's the ideal time to consider what makes sense, what works, what's vital, and what may be improved. Your corporation may gain speed, efficiency, and accuracy in its business operations by using an Enterprise resource planning (ERP) system, especially because most ERP systems are intended to meet current industry best practises.¹³

One of the advantages of employing an Enterprise resource planning (ERP) system is that it boosts your organization's efficiency while decreasing time and labour expenses through automation and integration. An ERP system may help you satisfy the needs of your company partners and external stakeholders while also keeping your staff happy and productive by removing them from dull, repetitive duties.

4. Enterprise resource planning (ERP) Systems Help You Better Analyze Your Business' Data

The advantages of enterprise resource planning include the ability to revolutionise the way you acquire and analyse data from throughout your organisation, allowing your data teams to swiftly find accurate insights into your whole operation.¹⁴ They do this in two general ways:

1. **By accessing data from one repository through many devices:** These solutions enable stakeholders to access cross-business data from a single source on a variety of devices (including phones and tablets) and from anywhere. This enables for more efficient and precise data analysis than if the data were spread over numerous systems, with one of the most important software serving as the central hub. Data

analysts will have an easier time identifying company patterns and possible difficulties.

2. **By using real-time data:** ERP (enterprise resource planning) provides real-time information on company operations, resource availability, and task status. Users can be certain that the information they see is current and relevant, which is not always the case with outdated systems. Most ERP systems now include extensive business intelligence (BI) capability or connectors. This might assist a corporation in extracting even more value from its data and gaining business insights. However, before you invest in any extra BI software, you should determine how much business information your organisation need and how critical it is to your business objectives.

5. Meeting Customer Expectations

Whether they are individual consumers or other businesses, your customers have high expectations. Many consumers today anticipate a seamless multichannel experience, such as browsing a product catalogue in-store, placing an order online, receiving the item at the nearest retail location, and having it picked up for repairs from their house.¹⁵

Your clients also want consistent service regardless of the department of your business they deal with. Businesses must ensure that their many departments connect with one another in a seamless manner so that, at any one moment, every department has access to important customer information and can effectively interact with a customer via any channel. To achieve these expectations, businesses frequently make modifications. Businesses have substantially invested in technology to modify their operations and fulfil these high expectations.

3. CONCLUSION

Because of the current global competitive climate, supply chain performance has become increasingly important. Businesses search for methods to enhance their performance in a variety of ways. The literature on Intellectual Capital in Organizations (ICO) and Enterprise resource planning (ERP) has gotten increased attention in recent years. Because of the potential advantages that these management tools offered, the effects of these management tools on performance are prominent study subjects. Many models have been developed to assist different Intellectual Capital in Organizations (ICO) tasks such as identification, measurement, valuation, acquisition, and reporting Intellectual Capital in the literature. However, in many nations and organisations, the use of these models appears to be a relatively new issue.

Turkey is one of those countries with which they have just recently become acquainted. Enterprise resource planning (ERP) software, on the other hand, offers a lot for its high purchase price and significant chance of installation failure. As a result, gains from both Intellectual Capital in Organizations (ICO) and Enterprise resource planning (ERP) should be highlighted by assessing organisations according to some performance indicators, so that businesses may better grasp the benefits they contribute to market competitiveness..

4. REFERENCES

1. Shaul, L.; Tauber, D. (2012). "CSFs along ERP life-cycle in SMEs: a field study". *Industrial Management & Data Systems*. 112 (3): pp. 360–384.
2. Ruhi, Umar (July 1, 2016). "An experiential learning pedagogical framework for enterprise systems education in business schools". *The International Journal of Management Education*.
3. Shafqat, Enhong and Faisal (2012), "Enterprise Resource Planning - 'real blessing' or 'a blessing in disguise': an exploration of the contextual factors in public sector"
4. Pelphrey, M.W. (2015). *Directing the ERP Implementation: A Best Practice Guide to Avoiding Program Failure Traps While Tuning System Performance*. CRC Press. pp. 92–111.
5. Fryling, Meg (2010). Total Cost of Ownership, System Acceptance and Perceived Success of Enterprise Resource Planning Software: Simulating a Dynamic Feedback Perspective of ERP in the Higher Education Environment. pp. 403.
6. Eid, M.I.M.; Abbas, H.I. (2017). User adaptation and ERP benefits: Moderation analysis of user experience with ERP. *Kybernetes*, 46, pp. 530–549.
7. Dwivedi, Y.K.; Papazafeiropoulo, A.; Esteves, J. (2009). A benefits realisation road-map framework for ERP usage in small and medium-sized enterprises. *J. Enterp. Inf. Manag.*, 22, pp. 25–35.
8. Nah, F.F.-H.; Tan, X.; Teh, S.H. (2004). An Empirical Investigation on End-Users' Acceptance of Enterprise Systems. *Inf. Resour. Manag. J.*, 17, pp. 32–53.
9. Li, Y. (2011). ERP adoption in Chinese small enterprise: An exploratory case study. *J. Manuf. Technol. Manag.*, 22, pp. 489–505.
10. Ifinedo, P.; Nahar, N. (2009). Interactions between contingency, organizational IT factors, and ERP success. *Ind. Manag. Data Syst.*, 109, pp. 118–137.
11. Park, J.-H.; Suh, H.-J.; Yang, H.-D. (2007). Perceived absorptive capacity of individual users in performance of Enterprise Resource Planning (ERP) usage: The case for Korean firms. *Inf. Manag.*, 44, pp. 300–312.
12. Ittner, C.D.; Larcker, D.F. (2001). Assessing empirical research in managerial accounting: A value-based management perspective. *J. Account. Econ.*, 32, pp. 349–410.
13. Hair, J.F.; Anderson, R.; Black, B.; Babin, B.; CBlack, W. (2010). *Multivariate Data Analysis*; Pearson: London, UK; Upper Saddle River, NJ, USA.
14. Miranda, M.Q.; Farias, J.S.; Schwartz, C.D.A.; De Almeida, J.P.L. (2016). Technology Adoption in Diffusion OF innovations perspective: Introduction of an ERP system in a non-profit organization. *Rev. Adm. Innov. RAI*, 13, pp. 103.
15. Davenport, T.H.; Cantrell, J.G.H.S. (2004). Enterprise systems and ongoing process change. *Bus. Process Manag. J.*, 10, pp. 16–26.

Corresponding Author

Manhar Arora*

Research Scholar