THE IMPORTANCE OF HAVING THE RIGHT ERP SYSTEM IN THE AGE OF DIGITALISATION

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Swedish conditions, cost comparison, and trend monitoring

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The report was produced by Radar on behalf of Jeeves in January 2022. The data and information presented in this report are, unless otherwise specified, obtained through quantitative and qualitative surveys carried out by Radar and derived from analyses of the Nordic IT ecosystem conducted by Radar on an ongoing basis, or, alternatively, taken from other reports published by Radar. Radar collects data and other information in strict confidentiality, and Radar never discloses information about individual activities collected through quantitative surveys. Other data and information are collected from open sources and are explicitly referenced in the report.

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Authors

Richard Werner E-mail: richard.werner@radareco.com Beatrice Soderberg E-mail: beatrice.soderberg@radareco.com

Cover photo by Kelly Sikkema

DIGITALISATION AND ERP SYSTEMS

The need for digitalisation and the opportunities created by new technologies are changing the way we manage our ERP systems. As the hub of the business, ERP systems are a vital part of IT and a critical component of operations. The right ERP system is therefore a prerequisite for survival in a fast-changing world. As digitalisation, automation and new technologies are changing or even replacing business processes, it is crucial to have the right ERP system and the right digitalisation partner. To succeed, Nordic companies must also evolve their methodology for choosing business systems and change their business models in partnerships.

In order to maintain competitiveness in the long term, we must maintain a high rate of digitalisation and innovation. Three out of four companies still focus on the "lesser" **digitisation** of customer interfaces and investments in, for example, forms, e-services, e-commerce, websites and various apps.¹ This is despite the fact that **digitalisation** produces higher value by changing entire business processes, enabling new business models, or creating new products and revenue sources in something more like "end-to-end digitalisation". This leads to the digital transformation we are striving for. When digitalisation takes place end-to-end, it affects the entire business and greatly affects the ERP system, which becomes the carrier of our critical business processes.

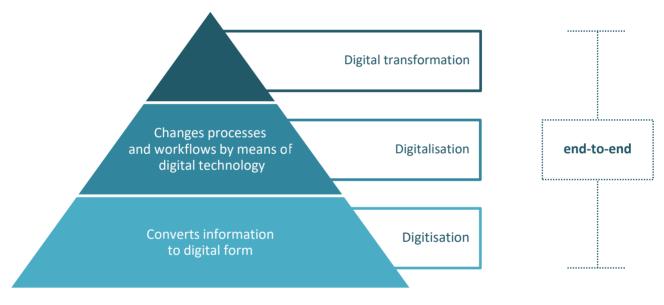


Figure 1. Foundations of digital transformation

Choosing the "right" ERP system can facilitate operational changes, whereas making the wrong choice can impede the implementation of new and innovative solutions, incur significant costs, or hamper the ability of a company to adapt to new conditions.

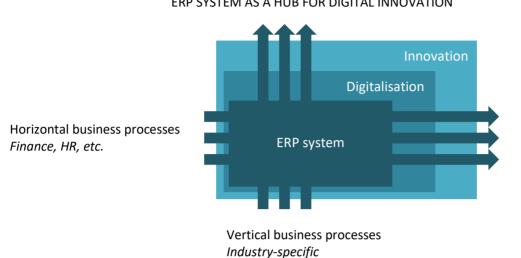
Hub for digital innovation

For the ERP system to be a competitive advantage rather than act as a hindrance, it must support the architecture of the business, be able to manage both horizontal (general) and vertical (industry-specific) processes and have a high rate of change. Furthermore, it must be adaptable to new technologies, processes, business models, and revenue sources. For most companies, managing all perspectives by developing proprietary solutions in an ERP system is essentially impossible. Instead, it is necessary to find an ERP system

¹ Radar Research, Digitalisation in operations, ongoing.



that suits the needs of the business in terms of functionality, and which allows for fully developed, vertical and local solutions to be added by a supplier.



ERP SYSTEM AS A HUB FOR DIGITAL INNOVATION

Both fully developed and adapted ERP systems must have a steadily high rate of development, enable the use of new technologies, and facilitate transition to digital business processes and business models. Such a structure also enables cost-effective development of proprietary adaptations or smaller modules to support specific elements of the general process, which previously required considerable efforts and costs.

Systems in focus

As interest in expense control and IT-driven innovation increase, it becomes natural for ERP systems to play a central role. The ERP system is the application that binds the bulk of costs in an IT budget, and, at the same time, it is the platform that regulates processes facing increased automation, digitalisation and innovation. Managing digital business support – which accounts for the greatest proportion of IT costs – while also being the system that provides most value for the entire core business, entails a great responsibility.

For a company to overcome its IT challenges, there must be greater focus on processes from an end-to-end perspective, while also managing flows of transactions and associated data. The combination of increased focus on digitalisation through flows and a flexible and adaptable ERP system can be crucial for driving IT costs as well as value creation in the right direction.

A crucial decision

The choice of ERP system will be crucial for the ability of a company to survive in a world undergoing an accelerating rate of change. This change is being driven by worldwide digitalisation, which relates to processes and process transformation. An organisation's process support is therefore imperative, and the ERP system, as the carrier of our processes - both horizontal and vertical - determines whether we succeed or fail.

Considering how central and important the ERP system is to our business, we cannot turn a blind eye to the importance of the choice of system, or to the choice of partner, if the partnership shall contribute to the business. We need to get better at cultivating partnerships between ourselves and our suppliers. Instead of a technically oriented system integrator and operations provider, it is wise to focus on a long-term partner –



Figure 2. How the ERP system supports digitalisation and innovation through our processes.

a partner that focuses on digital business development over technical development. Prioritising partnerships that match our business strategically and culturally increases our chances of getting an ERP system that has been further developed and adapted to our vertical processes.

From failure to the core of digital innovation

Common reasons for limited success in projects include shortcomings in the preparatory work involved with mapping the internal capabilities and needs of the business, or a disproportionate focus on costs when choosing a system and supplier. A common trap we fall into is that we underestimate how much time and resources will be required. Time for mapping our business needs and the time required for selection, procurement and implementation. We already know that more than half of all ERP projects significantly exceed their budget, and it takes, on average, 2,5 times longer than planned to implement a new ERP system.² When an ERP system does not achieve the expected effect, it is common that it has been adapted according to out-of-date conditions, our history and legacy. Instead, possibilities for rapid implementation, adaptations, and high flexibility to changing business needs must be prioritised.

As we are heading towards a future where the ERP system is at the core of digital innovation, especially for organisations operating in industry, commerce, and logistics, it is becoming increasingly important to have a system that will not need to be replaced. A system that can be continuously updated and modernised according to our rapidly changing world. There is simply no time or room in the budget to replace systems in the short intervals required, which makes the cost of operation, administration, updates and new adaptations increasingly important if the value is to be maintained.

² Radar, The Importance of the Right ERP System, 2019.



WHY COST OF OWNERSHIP

Cloud services have been seen as the solution to many of the problems that arise when organisations need to innovate or modernise their IT solutions. The utilisation of cloud services in Sweden is high and increasing every day where automation and digitalisation are prominent drivers. The initial focus on cost alone rather than other parameters is, for most, a thing of the past. The main reasons for using cloud services are that they enable greater focus on the core business and contribute to increased flexibility, cost efficiency, and have positive effects on innovation capacity. Cloud services have become synonymous with enabling digital innovation, and the ERP system is no exception.

Cloud services as driving forces

Opting for a cloud service instead of on-premises systems has, in many cases, been a way to more quickly and easily obtain new functions and innovations. Cloud services are therefore one of the major driving forces of why cost, and especially the cost in relation to what you get, has become such a central part of our strategic IT thinking.

However, it is rarely the form of delivery itself that is the decisive factor, but rather it is an organisation's capacity for change or lock-in effects, which are created through on-premises solutions, that act as the major limiting factors. This is partly shown in the fact that only about one in three companies have an ERP system in the cloud, while more than 60 percent say that they would prefer something other than an on-prem solution. Although the majority today still do not have their ERP system in the cloud, almost half have inhouse or legacy systems that they want to move away from into a modern cloud service.

Impact on ERP systems

The ERP system is an increasingly important part of IT, and in the digital transformation, IT is an increasingly important part of the entire business. The ERP system serves as the backbone of our increasingly digitalised businesses, and the pace of digitalisation is largely due to cloud services, since they have allowed wide access to new technologies and technological innovations. Technological innovation is no longer a privilege of the few.

We usually know the initial cost of an ERP system in terms of money or resources. Consistently undervalued aspects of the total cost over a system's valuable lifespan are the hidden costs relating to administration, updates, security and other elements necessary for a fully functioning, secure and flexible system that actually supports the business instead of the other way around. In short, the ERP system not only needs to do more, but it also cost less over the entire valuable lifespan.

By understanding the running costs of the most vital part of the business, the foundation can be laid for understanding future margins. With constant need for improvements, new functions, and innovation based on data, the initial cost becomes less interesting, and the focus shifts instead to the running cost, i.e. the cost of ownership.



COST OF OWNERSHIP

The cost for the operation, administration, security and maintenance of an ERP system over its lifespan is affected by the business model, operating model and, above all, by the costs incurred when upgrading or changing the system. With an accelerating pace of change, we have noted that the need for upgrades and adaptations is also increasing. In general, it has been shown that the greater the adaptation/development in an operational ERP system, the greater the cost of managing an upgrade. The difference now is the way different ERP systems handle this and how much new functionality is already "included" during the development of the platform without us having to adapt or program modules ourselves.

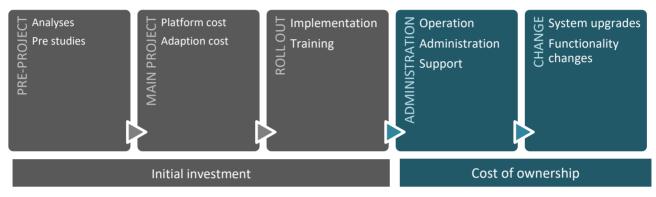


Figure 3. Cost of ownership definition model.

It is therefore a question of analysing the costs incurred after implementation. In other words, the interesting cost is the often difficult-to-define cost of operation, administration, upgrading and necessary changes associated with these.

Comparison of suppliers

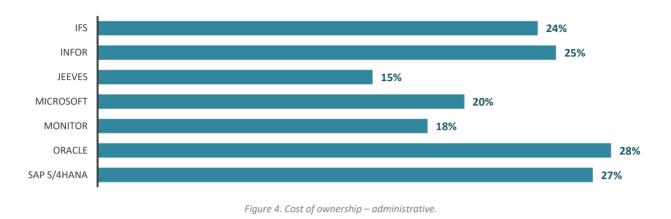
Radar continuously conducts various benchmark studies and cost comparisons in Nordic IT organisations. Since 2010, we have studied and analysed the cost implications of ERP systems in depth. Supported by Radar's previous analyses, it was more natural to focus on the lifespan phase rather than the project phase, since this is where the bulk of costs is generated.

As is customary, we have chosen to share the results of those systems with the largest market share (in the Nordic region). To keep the results at a manageable level, the focus of the selection was on ERP systems with customer adaptations and with 200 or more employees. The ERP systems included are IFS, Infor, Jeeves, Microsoft (Dynamics), Monitor, Oracle and SAP (S/4Hana).

The average annual administrative cost (operation, administration, support) is 22% of the initial investment. This means that, approximately every four years, it costs an equal amount to have the system up and running as it does to launch it. Furthermore, in the traditional model, the initial investment also exceeds the initial budget three- to fourfold on average. Cloud services therefore not only have a lower initial cost, but also a lower probability of significantly exceeding the budget.

Administration and changes

There are large differences in cost between the different compared options. We have two different groups where Jeeves, Monitor and Microsoft are better placed in the administrative cost of ownership. The other four, on the other hand, stand out by having a way to go to reach the first three.



The costs as a percentage of the initial investment associated with a major change or upgrade vary even more between the different ERP systems. However, here we do not have a simple grouping in the same way as above, but it is quite similar for many while Oracle is clearly the worst in the class followed by SAP and IFS who have fallen a little behind.

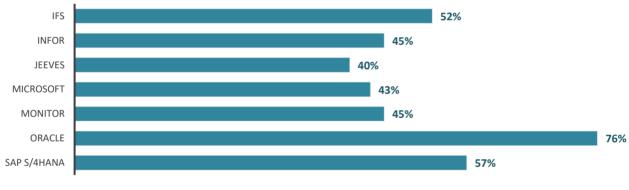


Figure 5. Cost of ownership – changes.

Carrying out necessary changes is expensive and provides an indication of the ERP system's real cost. Today, our employees are our most important assets, closely followed by the ERP system. However, it is not entirely unlikely that the most important element in some of our industries is the ERP system, and this is likely to increase as automation increases with the help of IT within the framework of full digitalisation of operations.

Results of cost of ownership

By averaging the number of upgrades to all systems as well as each system's unique operating cost and upgrade cost, we get an index as a percentage of the original investment for the different ERP systems. Without going into the detail, this index includes the support for innovation, the number of upgrades, cost per upgrade, and value per upgrade. A lower bar means a lower cost for value delivered from a total perspective of cost of ownership.

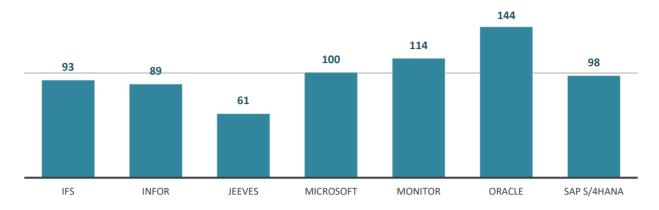


Figure 6. Cost of ownership, cost in relation to value.

The different ERP systems analysed have different rates of cost increase over their lifespan. Oracle has the greatest cost increase, while Jeeves offers the lowest cost increase according to average system and lifespan. An important parameter that we have not included in the analysis is the relatively large differences in initial investment between traditionally procured and administered systems.

We also see major differences in complexity and flexibility. When value is also factored in, some of the traditionally large and complex systems regain some of the loss solely in terms of cost. Even if this is not wholly sufficient, the cost is not as severe for all systems when delivered value is also included.



DRIVING FORCES FOR FUTURE ERP SYSTEM CHOICES

For the foreseeable future, digital transformation will have a major impact on how we value our ERP systems. The digitalisation of society is also accelerating some societal trends that affect how we interact with information and thus what is expected of the systems. The core of Swedish development of ERP systems revolves around industrial trends as well as what is happening in our other major industries, such as retail and the related logistics industry.

Business operations will become increasingly digital. This is a development that has accelerated with the 2020 pandemic, since our preferences have shifted to the digital, which has also served as a catalyst for a change in how we consume IT in general. The move away from physical environments means that dependence on data, and new aspects such as sustainability, are becoming parameters for the external impact – both how we work with, and what requirements we have for, our ERP systems.

Contactless processes. The design of contactless processes also produces experience and structural capital that can be translated into automation, efficiency improvements, and more rational solutions, regardless of industry.

Stronger supply chains. Our supply chains need to become less vulnerable to unforeseen risks. Through system support, supply chains can be made less vulnerable by means of better forecasting, planning and supply chain management.

Sustainability and product lifecycle management. There is interconnection between the production chain, environment and sustainability. A business model is emerging with a focus on "climate-positive operations", instead of just being climate neutral. Financial incentives help us accelerate the circular transition. Previously isolated islands of information made it difficult to access the information at all stages, which the modern ERP system helps us overcome.

Real-time flows. When our ERP systems allow for open data along the production line, problems can be detected and remedied before they occur, or at least before they cause damage. For example, a container with products standing still; an alternative means of transport or a warehouse in closer proximity with the same product may be the solution. Investing in things that enable early insight means that a company can save time and money.

Costly but profitable automation. The exchange of data between product and production chain is essential for achieving maximum flexibility and productivity. By automating processes that have been time-consuming, time is freed up that can be spent on innovation, for example. The goal is to use the ERP system as an engine to create a production chain as data driven as possible.

The cloud continues to enable innovation and automation. From a general perspective, it is almost always best to run your business solutions in the cloud. Flexibility and innovation are freed up at a whole new level compared to having solutions on-premises, which is important at a time when skills are in serious short supply. In addition, we get access to new technologies, new functions, and security through automatic updates that are continuously rolled out. Never having to stand still is important in our digital innovation, where the ERP system plays a natural, central role.



CONCLUSIONS

Choosing the right ERP system can facilitate operational changes, whereas making the wrong choice can impede, incur significant costs, or even hamper the ability of a company to adapt to new conditions. In other words, the choice of ERP system will be crucial for the ability of a company to survive in a world undergoing an accelerating rate of change – a change driven by digitalisation. Because digitalisation involves processes and process change, an organisation's process support is therefore imperative, and the ERP system, as the carrier of our processes – both horizontal and vertical – can determine whether we succeed or fail.

As the ERP system becomes the core of digital innovation, it becomes increasingly important to have a system that can be continuously updated and modernised according to our rapidly changing world. There is simply no time or room in the budget to replace systems in the short intervals required, which means the cost of operation, administration, updates and new adaptations will be increasingly important if the value is to be maintained. The classic investment calculation is becoming increasingly important. What value do we get from the ERP system, and does it outweigh the current cost?

The cost for the operation, administration, and maintenance of an ERP system over its lifespan is affected by the business model, operating model and, above all, by the costs incurred when upgrading or changing the system.

Conclusions from Radar's analysis of different ERP systems Cost-of-Ownership 2022:

- The average annual cost of operation, administration and support is 22 percent of the initial investment.
- In the traditional model, the initial investment exceeds the initial budget three- to fourfold, and cloud service-based systems afford better opportunities to keep to the set budget.
- Jeeves, Monitor and Microsoft are better placed in the administrative cost of ownership.
- The different ERP systems analysed have different rates of cost increase over their lifespan.
- Oracle has the greatest cost increase, while Jeeves offers the lowest cost increase according to average system and lifespan.
- We also see major differences in complexity and flexibility.

The different systems support key processes and industry-unique processes with varying success, which also affects the needs for changes. The choice of ERP system will be crucial for the ability of a company to survive – and win – in a world undergoing an accelerating rate of change. Cost of ownership must be part of the evaluation criteria used in the choice and procurement of ERP systems, since decisions made on a poor basis may otherwise affect the operational capacity and competitiveness of a business. The right ERP system can serve as an engine in our digital transformation.



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ABOUT RADAR

The work carried out by Radar is based on data, key performance indicators, and analyses from the respective Nordic markets, which also serves as the basis for the fact-based advice provided by the company on IT governance, strategy and business development. The focus is on creating value, and thanks to satisfied and loyal customers, Radar has become the independent consultancy operator with the most customers in the local market.

Radar's services give you opportunities as an IT decision-maker to govern the business based on locally collected facts about how Swedish and Nordic IT managers deliver, plan and execute their IT operations. Using thousands of data points in the ecosystem and its proximity to and knowledge of the local market, Radar is a leader in the delivery of value creation at both operational and strategic levels. Radar offers products and services both to IT providers and buyers, creating a unique position to be able to follow a single krona through the ecosystem. Radar can therefore offer a unique level of detail for an IT company, and by using our various products and services, Radar's customers' ability, profitability and efficiency can be strengthened in line with local conditions.

Leading provider of fact-based insight. Radar provides insight based on local information. Radar's insight is built up through thousands of key performance indicators and strategy and prioritisation comparisons, which IT decision-makers and providers allow Radar to conduct and analyse every year in each market. By analysing these data points and owing to its proximity to and knowledge of the local market, Radar is a leader in the delivery of value creation at both operational and strategic levels. Radar monitors the many underlying regulatory, market, and technology trends that are changing conditions for IT companies and provides advice and insights concerning the inevitable changes.

Database of key figures. Since its inception, Radar has developed proprietary Intellectual Property (IP) in the form of databases and models for various benchmarks related to IT operations, price and cost comparisons, as well as different quality parameters. The databases are developed through customer commitments and through ongoing collection of data from IT decision-makers via, among other things, online models included in subscriptions, surveys, cost analyses, contract analyses, and in-depth interviews. By having continuously updated data and experienced consultants, costs, prices and efficiency are compared and optimised within an IT business. Unlike many other operators, Radar does not need to start a process of fact-gathering or supplementation, since local relevant comparison information is often already in our data warehouses.

Consulting and decision support. Radar offers advanced consulting in IT management, sourcing and key performance indicators linked to IT production and effect mapping. Radar's consultants have referenced assignments in IT strategy, CIO support, skills supply, sourcing strategy, etc. with customers all over Sweden in both the private and public sectors. All advice is based on fact-based insight, i.e. Radar's data and measurement points for costs and effect on the Nordic IT market.

Radar supports its customers with a unique combination of experience and substantiated facts in all consulting assignments.

Contact us Address +46 (0)81 220 Hammarby allé 47 00 www.radareco.se 120 30, Stockholm