ERP system: cloud based or on premise? (1/49/19)

When it comes to setting up an enterprise resource planning (ERP) system, companies cannot avoid the question of choosing between on-premise or cloud-based. This is not an easy choice because companies should assess the pros and cons of each option to satisfy their needs.

Advantages of on-premise ERP

- *Security* – A company storing a lot of sensitive data needs to observe security principles. On-premise ERP keeps third-party cloud service providers out of the company's data flows. The company is interested in minimising data leakage risk so on-premise ERP could be a better choice when sensitive company and customer data is stored.
- *Reliability* – On-premise ERP does not rely on an internet connection. If the connection breaks, the company may safely continue both production and accounting. This may be a crucial factor for producers of perishables, such as foodstuffs or medicines.
- *Using the skills of your staff* – Setting up on-premise ERP needs a server for maintaining the system and skilled people to set it up. If the company already employs experienced IT professionals, involving them in the process of implementation can save a considerable amount of money as there is no need to engage an external service provider.

Disadvantages of on-premise ERP

- *Cost* – On-premise ERP is an expensive system to set up. It needs a server for the set-up and maintenance, and the initial outlay to buy a system (software), a server, and server interfaces, as well as staff training and maintenance costs. Cloud-based ERP comes out substantially cheaper because a fixed monthly fee replaces the initial outlay.
- *Required skills* – If the company does not employ IT professionals who can set up and maintain on-premise ERP, these processes will need to be outsourced from a third-party service provider.
- *Growth potential* – As the company expands, so do the requirements for its ERP. The company needs to buy a newer or better version of the system and a newer server infrastructure. Expanding and improving the system is a complex process, and cloud-based ERP means the service provider will take care of everything.

Cloud-based ERP

This system involves a virtual server maintained by a third-party service provider who often develops the software and maintains the server, as well as providing technical support and making routine system improvements.

Advantages of cloud-based ERP

- *Smaller initial outlay* – Cloud-based ERP is usually a subscription service with a fixed monthly fee. The price includes maintenance costs, technical support, software improvements and updates.
- G*rowth potential and scalability* – Small producers do not need a fully-fledged ERP system with a local server and a staff of IT professionals. Cloud-based ERP is scalable so if the company needs some extra access or a new user, this can be easily requested from the service provider for an extra

fee. Compared to on-premise ERP, this process is a lot easier because there is no need to manually add to the server infrastructure – this is done on the cloud.

- *Flexibility* – Cloud-based ERP is flexible and allows the company to choose only the required functions, which minimises the total cost. For example, if the company does not need a project management system or a customer relationship management system, this can be omitted so the subscription fee for the entire product goes down. If the company expands and its requirements change, then any new functionality can be easily added on for an extra fee.

Disadvantages of cloud-based ERP

- *Security* – With cloud-based ERP, all of the company's business data is held by a third-party service provider who is responsible for protecting it. This may have many producers concerned about data security, in particular if the company stores sensitive data about its customers. Despite such concerns, most cloud-based ERP suppliers have demonstrated data security at a level that a small company would be hard pressed to maintain locally with its own resources.
- *Reliability* – Cloud-based ERP fully relies on an internet connection. While it may seem that today's internet connections are reliable, there is a risk that the connection will break because of a technical fault or natural disaster interrupting both production and accounting.

When it comes to choosing the right type of ERP, we need to consider not only the size of company but also the volume and characteristics of production, as well as the company's structure. There is no clear answer about the best type of ERP so producers need to evaluate the pros and cons of each system and its impact on their business.