Legacy modernisation is crucial to business survival

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When considering application modernisation and management, corporates face the challenge of striking the right balance between cost, quality and time to market.

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The fundamental aim of application modernisation is to create new business value from existing applications, which were designed to perform a specific function either directly for the user or for another application program.

An application modernisation process seeks to address the migration of legacy systems to new applications or platforms, including the integration of new functionality for the business.

In essence, the need for application modernisation and management is driven by changing customer expectations, which is compelling corporates to consider implementing digital transformation strategies. The modern customer expects, applications and websites that allow them to directly interact with an organisation.

The challenge is how to modernise legacy systems to enable digital transformation. It is important to keep in mind that many legacy systems are still crucial to business operations, as they contain a lot of historical information. Furthermore, in many cases, they are inherited by larger corporates that have acquired smaller companies, who in turn face the need to undertake a digital transformation journey.

Modernisation becoming a market trend

The enablement layer for digital transformation consists of Agile project management, DevOps and cloud – this is also where modernisation fits in.

To a large extent, application modernisation has become a market trend and many corporates assume their problems are unique. Yet this is not the case, as currently, every business faces the same challenges in terms of modernisation.

Corporates should be looking at solutions that are already available and they'll find that often the solution to their problems is part of the application.

Ultimately, modernisation is about enabling business processes. Therefore, it is crucial to conduct a proper assessment and understand the needs, costs and what can be done. Organisations that are considering modernisation must complete a detailed analysis report, before embarking on this process.

Different approaches to modernisation

Modernisation options include rearchitecting, refactoring, rehosting, rebuilding and replacing. Refactoring or recoding essentially sets the base for digital transformation. This approach can be used for setting the standard for how to perform modernisation in future.

As corporates have to cater to ever-changing customer needs, they have to be able to respond quickly. Thus, coding should be done in a piecemeal manner, which then allows for a quick change and minimal impact on the entire system.

Rehosting is what is also called “lift and shift” and basically involves moving the application to the cloud. This is fairly easy and painless to implement.

Rearchitecting an application works best for applications that are still business-relevant and provide differentiation. This approach can increase IT efficiency with agile architectures that allow for continued growth.

Application rebuilding is often a good approach when a company has bought an application and complicated it to such an extent that it has created its own problems. In this case, rebuilding or even replacing could be the best option.

Replacing or decommissioning applications is seldom the most cost-effective approach to modernisation and could often prove to be a costly mistake. The application may still have relevance and functionality left in it and could simply benefit from being refreshed.

However, in the case where the application, for example, a CRM system, is so complex that it cannot be changed, the best approach would be to decommission and replace it with a new system.

Choose the right migration approach

Before embarking on a legacy modernisation journey, it is important for an organisation to choose the migration approach that best fits its budget, timeframe and goals.

For example, a leading South Africa insurer is currently undergoing a modernisation process, following the acquisition of several smaller entities. The challenge for the group is to integrate all these separate systems that have already been changed and heavily customised.

In the case of its CRM system, the company is looking to replace it with an off-the-shelf industry-agnostic solution. However, it is also looking at ways to modernise its legacy mainframe, which will require upgrading and recoding of certain elements of the system.

Another example is one of the country's big banks, which is looking to enhance its customer experience through digital transformation. It is looking at ways to efficiently manage their customer experience while maintaining costs. As part of this process, it is closing physical branches and developing a mobile app that will take over most of the branch functions.

In terms of its modernisation approach, the bank is looking at how it can reuse and optimise its existing systems to enhance the digital experience. In this case, digital transformation is the end agenda and the bank cannot wait for modernisation to be completed, it needs to continue trading during this process.

Application modernisation is crucial for businesses to survive. Those that are not ready to change and not quick enough to respond to changing customer expectations will struggle to remain relevant and will eventually cease to exist.

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