SURVEY INSIGHTS: THE ROUTE TO DIGITAL TRANSFORMATION THROUGH BUSINESS PROCESS OPTIMISATION

velocity

Executive Summary

Computing Research, in association with Mendix, surveyed 100 IT decision-makers in the UK, at companies ranging in size from 100 to 5000+ employees. The survey gauged approaches to digital transformation and identified the challenges experienced along the way. This paper summarises the research findings.

Every organisation has a unique transformation strategy. One common approach is the introduction of software applications that optimise and automate key business processes. Beyond the efficiency gains, applications enable these companies to streamline their resources, manage data more effectively and become more responsive to customer needs. These benefits work together to elevate performance across the board.

For these reasons, the use of business process applications is the chief focus area for the Computing Research and Mendix survey; and therefore, the respondents all have expert knowledge of application planning, development and management.

Let's explore their application development strategies – and the extent to which these approaches are meeting business needs.

> Well-built applications can also integrate with existing systems to avoid an expensive and disruptive rip-out-and-replace of the IT architecture. With applications, enterprises can innovate processes without losing the legacy systems that their core operations rely on.

KEY FINDINGS

Time to value

Most of the organisations surveyed agree that efficiency is a vital component of the digital transformation process. Respondents were asked to rate the importance of speed when deploying and updating applications. A clear majority (78%) gave this a 4 or 5 rating out of 5. With 5 being "business critical", these organisations clearly understand the need to keep pace with changing business needs, evolving customer demands and rapidly advancing technology.

However, while efficient application management is important to this group, the survey revealed that this is not always the reality. When asked how long it takes to get an application from concept to production, over half (55%) of respondents said it routinely took six months or more. A further 13% said their development cycles lasted years. The downside of longer development cycles is that digital assets are in danger of growing out of synch with business needs.

Of course, it's difficult to compare the development cycle of one solution to another, given that every business process differs in its complexity. That said, the findings do suggest that many of these organisations are not set up for rapid application development. A mere 4% said they were rolling out applications within weeks; and only 13% were achieving development cycles of 1 to 2 months.

Solution relevance

When asked whether they have ever had to delay, re-work, recommission or cancel a development project that was danger of being out of date before completion, only 9% of the respondents said that the applications they delivered were always relevant and on time.

A staggering 67% answered that their applications were in danger of being out of date before going live. Even more concerning is the finding that many believe this to be acceptable. This could suggest a lack of awareness of – or perhaps trust in – agile application development technologies, which provide organisations with the flexibility to modify, update and adapt applications swiftly to keep pace with shifting business requirements.

Shifting business requirements

With only 9% of organisations saying they're able to bring

applications online while they're still relevant, it's not surprising that the majority of respondents are struggling to transform at the pace of business change.

When asked to rate a list of common issues that impact application development in their organisations, managing changing business requirements topped the list, followed closely by a lack of specialist skills and the challenge of supporting existing applications. These issues suggest that many of these organisations' IT functions are either under-resourced or under constant pressure in the modern business context.

Resource constraints

When asked what percentage of their development resources were devoted to reworking applications due to shifting business requirements, more than a quarter (28%) said they devoted 21-40% of their resources to this task, and a further 14% said they devoted a substantial 41-60%. Reworking applications to keep them relevant certainly seems to be an area that is draining these organisations' resources.

However, this doesn't have to be the case going forward. With an agile development approach to designing, deploying and updating business process applications, it's possible to reduce application development cycles – so that digital solutions deliver value more swiftly and organisations can keep pace with changing business and customer demands.

Agile development roadblocks

The survey results unveil several challenges that are preventing and limiting the adoption of agile development. For almost a quarter (24%) of respondents, a lack of understanding or training are the key issues holding them back. A further 21% are limited primarily by a lack of management buy-in or commitment. Other road-blocks include skill shortages (for 19%) and dependence on legacy applications or platforms (for 18%).

When asked how they plan to overcome these obstacles, close to half (47%) of respondents aim to phase in agile development methods carefully, when new projects begin. A quarter (25%) plan to focus on training, while a further 22% want to hybridise agile with older methodologies.

Interestingly, only 6% plan to inject more agility into the application development through low-code or similar technologies.

Low-code approaches gain traction

Low-code development platforms are designed to enable organisations to custom develop their own applications using graphical, drag and drop interfaces rather than coding these from scratch. This makes it easier for developers to design, deploy and update applications swiftly.

> This is ideal for quick wins, because companies can automate lightweight business processes quickly and efficiently to keep pace with market demands and business needs. However, some low-code platforms offer process optimisation at an enterprise scale – making it possible to transform both simple and sophisticated processes on one platform.

Given the strong business case for the low-code approach, it's surprising that 44% of the respondents had never heard of this type of technology. Encouragingly, however, more than half of the organisations surveyed had already adopted a low-code mindset – with 42% looking into it, 11% piloting it and 3% actively rolling it out across their organisations.

Low-code is certainly one way to alleviate the development

burden that so many of these companies seem to be experiencing. While specialised developer skills will still be required for the more complex application builds, the everyday grunt work can be handled by less experienced junior developers in the user-friendly low-code environment. Companies can therefore make more strategic use of their highly skilled IT resources, leading to greater productivity – and fewer backlogs – across the board.

Attitudes towards citizen development
Another benefit of introducing low-code technology is that it opens up application design and development to tech-savvy users outside of the IT department, often called "citizen developers". These business users can collaborate with IT to refine the solutions they need to their business problems. They can also quickly learn how to roll out applications for simple processes using templates, for example.

Reassuringly, more than half of the organisations interviewed viewed the citizen developer capabilities of low-code positively – with 8% saying they're all for it and 48% saying it's a good idea, but needs to be closely managed.

Fortunately, there are low-code solutions available that make it possible for IT to supervise, secure and manage all process applications on one platform. This means that citizen developers have the tools to refine or roll out the solutions they need to their business problems – but this is done in a way that is sanctioned and closely supervised by IT.

Among the respondents, a quarter say that citizen development through low-code is "not ideal", but they do appreciate that developers can be liberated from rote work, so they can focus on higher value tasks. 16% say it's a "bad idea all around". These less positive responses could point to a lack of understanding of modern low-code technologies and the fact that they enable citizen development in an environment that provides the guard rails to prevent "shadow IT", as well as smart tools that guide citizen developers through the application development process.

CONCLUSION

One lesson that many of these organisations are still learning is the fact that application development need not be a costly and long-drawn-out process.

With an application management platform that focuses on business optimisation through agile, low-code technologies, it's possible to both accelerate digital transformation and empower more people to contribute to the process – which helps to support its success across the enterprise.

For the full survey results visit www.mendix.com

ABOUT THE SURVEY SPONSOR

Mendix empowers enterprises with an application platform that allows everyone in the organisation to develop and continually optimise mobile and web applications – swiftly, at scale. More than 4,000 enterprises use the Mendix platform to improve operational efficiency and enhance the customer experience.

ABOUT THE AUTHOR OF THIS PAPER

Velocity IT provides business optimisation expertise. We partner with enterprises in a range of industries, taking a vendor agnostic approach to advising organisations on the most strategic digital transformation strategies and technologies. Our guidance and support are always in line with realistic delivery costs and timescales, focusing on both current goals and future needs.

+44 (0) 1908 545 770
contact@velocity-it.com
www.velocity-it.com

Technology House
151 Silbury Boulevard
Milton Keynes, MK9 1LH
United Kingdom