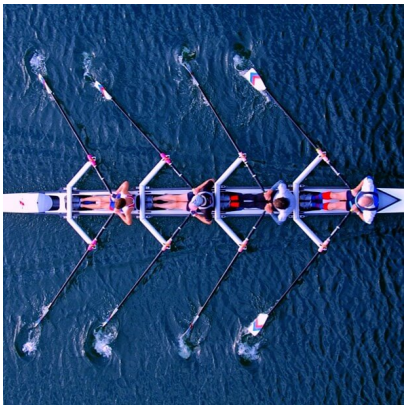


Engineering change to accelerate digital transformation

Description

Engineering Change â?? Accelerating Digital Transformation

- ATMECS â?? Content Team

Industry 4.0 offers several possibilities to todayâ??s modern society. It promises valuable data, lower waste, and higher visibility into the comprehensive value stream for change leaders. New tools and sources of information are available to make processes efficient and profitable. Research and Markets estimate that the digital transformation market will increase by 23% to $3.3 trillion by 2025 (CAGR). However, implementing a digital transformation needs consensus across all levels. Though change leaders are open to new technology engineering, they may have to face a lot of resistance, albeit justified, along the way.

For change leaders, efficiently implementing a digital transformation requires exhibiting value and building harmony throughout the hierarchy. The process from identifying a technological need for solving a business problem to efficient deployment is long. Change leaders convert it into a reality when they state their position effectively.

Future Themes for Digital Transformation

Based on industry data, Gartner research and our experience enabling deep tech solutions and services for our clients, here are some common themes of the best digital transformations that will shape the future.

Process Automation and Virtualization

A big part of the workforce, across all industry verticals, is seeing a rise in the use of technology to enable process efficiency and promote automation. With better process automation and virtualization, companies are gearing up for the next wave of transformation in their enterprise.

AI-based, self-learning robots using assisted technologies like IoT etc., present development opportunities for humans to communicate better by adding granular information. With enhanced simulations and 4D printing, development processes have sped up while improving safety and operational practices. The proliferation of emerging technologies has helped companies navigate tricky labour-related issues and redefine their work methods.

Total Experience â?? Breaking through silo thinking

Understanding the voice of the customer is a critical success factor for any business. However, the role of â??customerâ?• has expanded to include every individual a company or a brand interacts with.

Total experience refers to a blend of customer experience, employee experience, and user experience to state all possibilities and experiences for both customers and employees. With customers and employees going digital, â??listeningâ?• to the total experience is the next big thing to enhance and improve the sustainability of transformational initiatives.

Data Fabric to Enhance Decision Intelligence

Companies notice a rising requirement for deeper insights and analytics through data generated by three sources â?? people, machines, and organizations. Decision Intelligence and Data Fabric are two significant trends that enhance data use effectiveness while easing human-driven data handling jobs.

Data fabric integrates data across platforms and users and develops a central source that allows data accessibility anywhere needed. Decision Intelligence, on the other hand, enhances organizational decision-making by implementing Artificial Intelligence and Data Analytics to develop an intelligent platform that automates and enhances AI-based decision-making.

Software 2.0

With improved hardware, businesses require programs using AI structures and automation to unravel better use cases such as machine-supported simulations and autonomous vehicles to do more without needing manual interference.

Software 2.0 replaces programmers with neural networks that use ML to develop software and will remain on trend as its popularity is consistently rising. No-code or low-code setups are already seeing citizen developers take on roles that sophisticated developers once held. Modularized, repurpose-able product featuresâ?? engineering will enable companies to achieve greater speed to market.

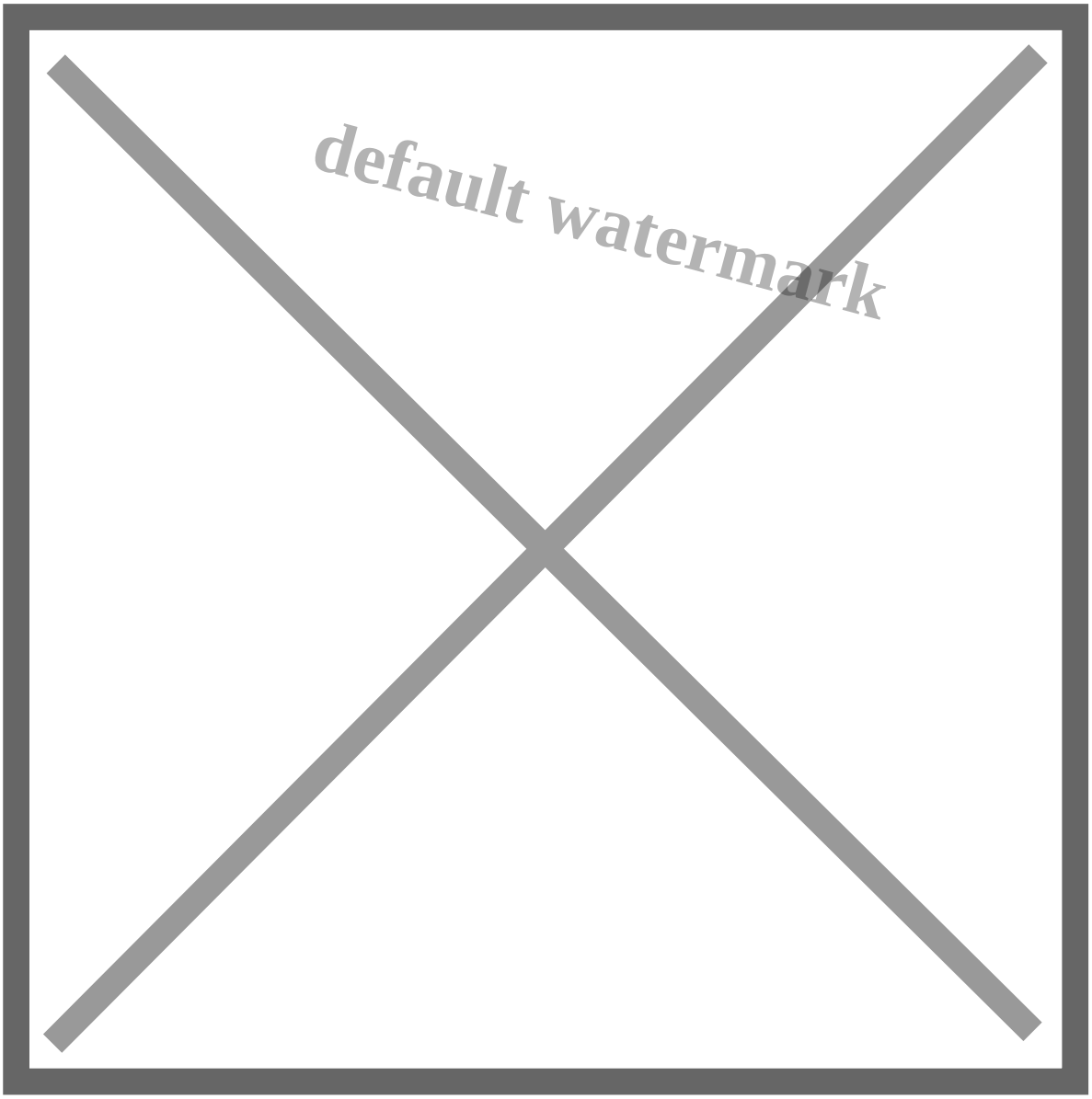
Distributed Enterprise

Post pandemic, most organizations have adopted a hybrid approach, making them pivot business models to meet consumer and behavioural changes through remote working. Distributed enterprises

allow a distant framework to virtualize consumer touchpoints and enhance relevant technologies. A recent Gartner study states that 75% of companies that use distributed enterprises will grow better than their contemporaries by 2023.

Verticals Using Cloud-Native Platforms

With the rise in digitalization, companies are moving their legacy applications and work to the Cloud through â??lift and shiftâ?? approaches. However, that approach does not work for all and typically hits roadblocks on scaling or elasticity. Businesses are adopting cloud-native platforms instead to automate their workloads and tasks and concentrate on competitive differentiation.



Technology engineering is becoming increasingly important to help companies grow, develop and reshape the world. â??Every company is a technology companyâ?• â?? is the new paradigm for

business leaders. Often, however, leaders are left wondering about the gap between innovation and adoption. This is where change leadership comes in. Change leaders with a â??Product/Service Managementâ?? mindset tend to envision a strategic roadmap grounded in customer centricity and undertake implementations with a â??no-compromiseâ?? process orientation. These change leaders are champions of industry.

Here are some considerations when you, as a change leader, want to implement your next large-scale digital transformation project.

Change Leader Caveats

Getting Buy-In from Key Stakeholders

Digital transformations donâ??t yield sustainable results when businesses are not aligned on processes and outcomes. Indeed, most CIOs acknowledge improper focus, inefficient executive sponsorship, and resistance to change as major hindrances to successful transformation initiatives.

Change leaders articulate the vision for digital transformation in a business structure and the glue for success in transformational initiatives. From acknowledging the employeeâ??s efforts to tracking results, they work between business processes and outcomes. A critical responsibility of change leaders is to achieve stakeholder consensus across different levels of the organization.

Change leaders must understand every role in the process chain above and below the surface level. Employees will always be anxious about new technologies causing disruption and making existing processes complex. It is the job of a change leader to build trust and awareness, reduce employee workload, gain consensus, enhance efficiency and effectiveness of daily work. They draft the vision for a digital transformation and support throughout the implementation such that it gets more efficient in the long run.

Sponsoring Tools and Technologies that Enable Doing More with Less

Digital transformations fall short of expectations when done in a piecemeal approach. Improper or ill-timed process modifications exacerbate the problem of data silos and lead to integration issues downstream. To derive best results, change leaders should promote technologies that will give them functionality and flexibility.

Choosing the right use cases leads to early wins and understanding how to extend technology engineering later to prevent silos is essential. It is always prudent to pilot projects to validate value creation before undertaking full scale developments. Change leaders who blend agile thinking with a lean, six sigma process management focus tend to find the right balance when scoping, planning, and implementing these transformations.

Keeping Humans in Sight

Executives looking to engineer change and accelerate digital transformation should keep humans central to their vision. Emerging technologies will only work better if they enhance human

operators/interactions instead of replacing them. Changing tools and technologies are relatively easier than changing behaviours for sure. However, people-centricity enables the acceleration and sustainability of any digital transformation.

Conclusion

Technologies will keep improving and continue to change the way people live and work. Five years before, few companies grudgingly migrated their technology infrastructure and data to the cloud. Today, if you are not on the cloud, you are probably deemed a laggard. Technology engineering has a significant role in Industry 4.0. Companies developing and adopting new technologies work as a guiding light in the digital transformation of human lives, but change is not easy to achieve. Change leadership and management is as much art as it is science. When done right, our modern society as a whole benefits.

Category

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