

The Siemens logo is displayed in a white rectangular box in the top left corner. The background of the entire page is a night-time aerial view of a city skyline, likely Hong Kong, with numerous illuminated skyscrapers and a large white arrow pointing upwards and to the right, symbolizing growth and digital transformation.

SIEMENS

Siemens Digital Industries Software

IP&LM: Enabling Excellence in a Digitally Transformed Future of Work

Executive Summary

Today's business environment is starting to give us a glimpse of the way we will work in the future. The norm today is operating under a VUCA dynamic environment. When VUCA was first coined, it intended to highlight the volatility, uncertainty, complexity and ambiguity in the world, yet the future of work expects more disruptions while consumers' demands increase. The risks in innovating and products launches could not be higher and integrated solutions that allow for collaborating and fostering intimate interactions along a product life cycle are a must for tomorrow's organizations.

Abstract

Having had the opportunity to work in just about every corner of the world, I have seen first hand the strong interest in programs delivery excellence and how to achieve it in the midst of unrelenting uncertainty.

The digital movement has only added to the pressures and the promises. As I saw program management mature, one of the biggest gaps continued to be the siloes in the ways of working, missing transparency, starting over anew, extreme wastes in resources and valuable time, and lack of responsiveness to change.

The clearest signs of programs excellence are exhibited in the consistent achievement of speed to market and relatedness to changing consumers' needs

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Dr. Al Zeitoun, PgMP, PMI Fellow, Global Innovation Strategist, is an executive who strives to unlock and transform organizations' digital future by offering end to-end support for their business strategy. He held Senior Leadership roles spanning a diverse range of industries across global regions, such as with Booz Allen Hamilton, with a common focus around delivery of world-class solutions and solving customers' pains as industries move to Digital. His experiences included serving on PMI's Global Board of Directors, PM Solutions President, Emirates Nuclear Energy Corporation Executive Director, and International Institute for Learning's Chief Projects Officer.



Delivering with Speed and Excellence is the new norm

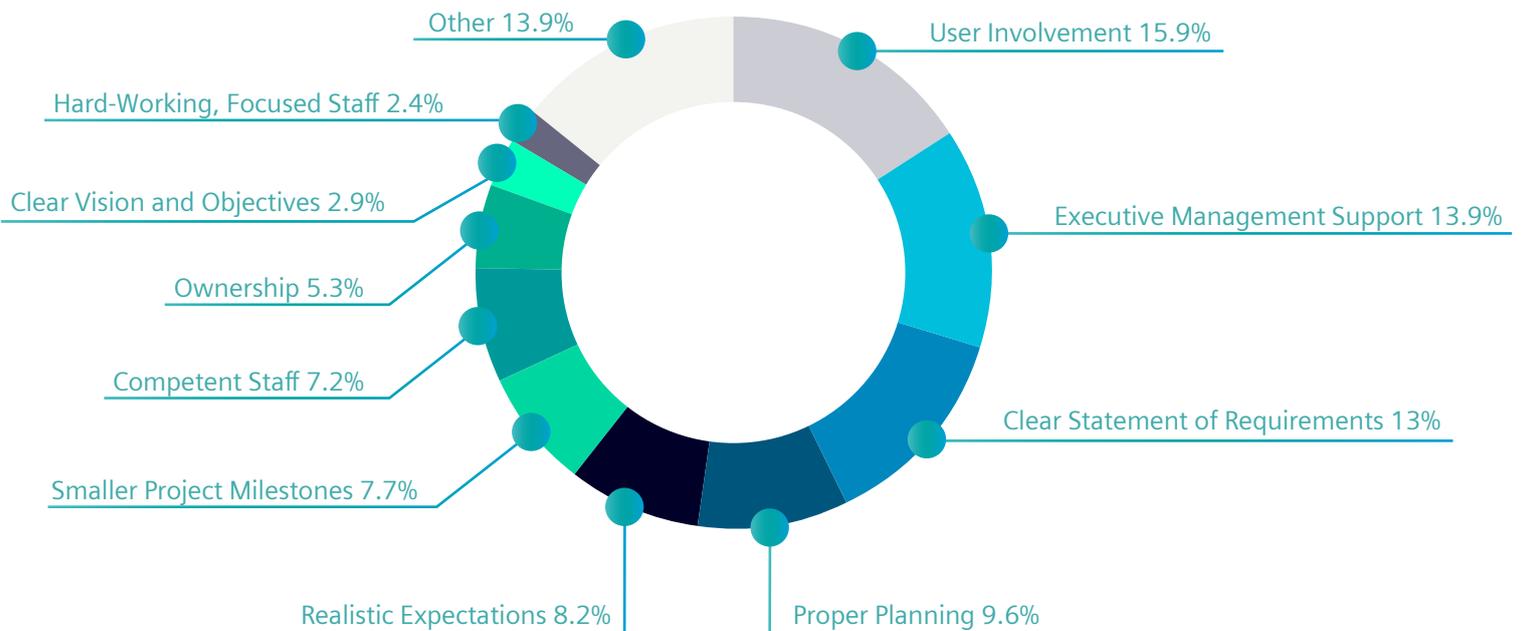
Whether in consumer goods, manufacturing, energy, financial, pharmaceutical, or enterprise software solutions, the common thread for delivery excellence continues to be identical: bringing the fitting balance between the spheres of process, people, and governance. I will use this proposed delivery excellence model with a focus on these three spheres to draw close analogy to the difference making that Integrated Program & Lifecycle Management (IP&LM) brings.

and rising demands. The 3 spheres also have an integrated effect as they work in tandem to achieve a higher delivery excellence scale. This is what I find to be prevailing in IP&LM. I will explore each of these 3 spheres and draw the analogy to the digital threads that exist in the IP&LM solution.

Just as in the case of professional tennis players, when the repeatability of healthy patterns is prevalent, excellence is dominant. In order to get us the highest return on our investment in delivery excellence, the digital solutions have to be dynamic and sensitive to our customers' fluid



Study for the Top Causes of Project/Program Failure



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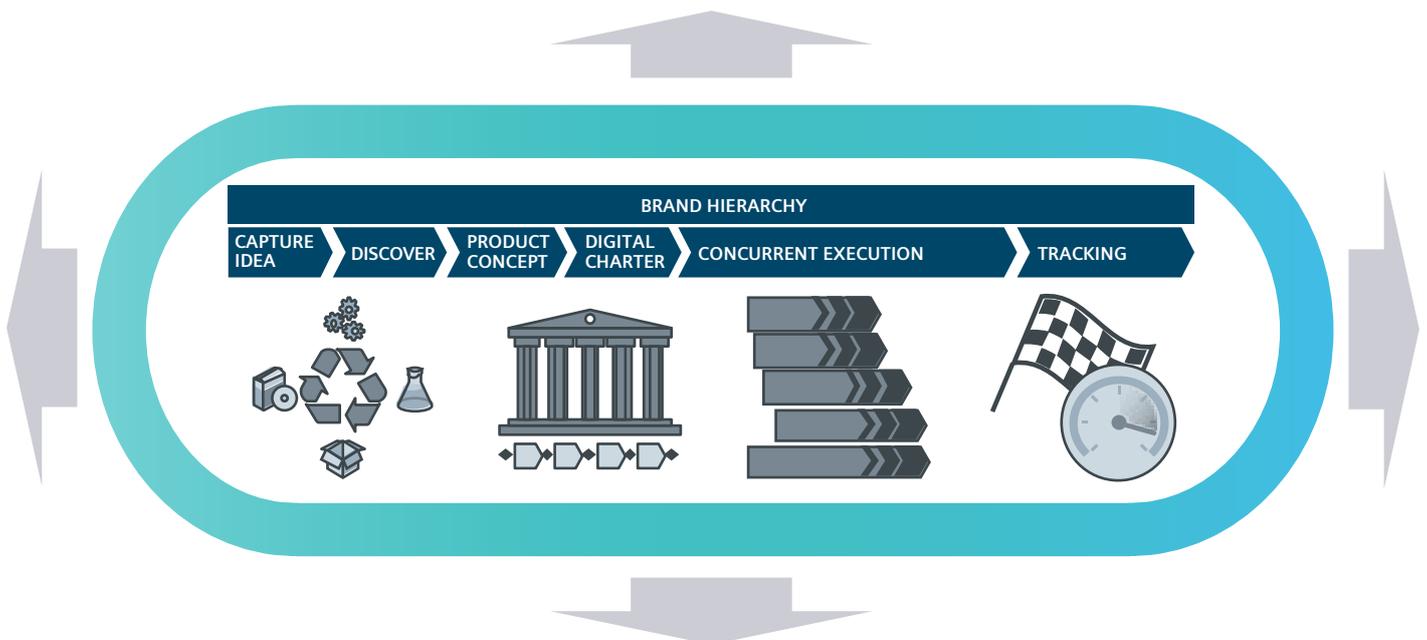
Process

For the process sphere, the delivery excellence gauge has to take into consideration that working in the future will continue to be in the midst of increasing uncertainty and complexity. The gauge goes from autonomy on one end of the scale to alignment on the other end. The right processes for achieving scale in delivery excellence has to balance the need for strategic alignment across all processes, business units, products, with the need for local autonomy and adjustments to address local markets.

So let's map that to the future process advantages that IP&LM provides.

Even though the first look at the process journey here looks to be sequential yet it is truly fluid. Speed is the name of the game with the touch points intending to break organizational silos and allowing for the wonderful benefits of co-creating from capturing the idea all across to tracking. One of the critical delivery gaps for most organizations is that they operate as if every program is the first they have ever done.

Becoming a transformed learning organization is such a differential for future of work. As we launch programs for new product in a new region or market, we should capitalize on the great assets that exist and maximize re-use. This frees space and resources to innovate as needed while enough processes for consistency creation remain.



I would like to zoom in on a few key elements as examples of where I was observing meaningful processes that enable leveraging assets and work flows:

- A backbone for process consistency is the Digital Twin concept/strategy, which is a virtual entity that mirrors the physical world, turning data into insights to continuously design, build and optimize throughout the product and production lifecycle
- What Siemens did is surround this concept with five digital threads. Siemens considers that the Digital Threads form the neural network of the Digital Twin
- Comprehending the interactivity across the 5 digital threads help us understand their impact on the entire transformation mission. These five are: Integrated program & lifecycle management (most of my observations focus), Smart product & process design, Production design & optimization, Flexible manufacturing, and traceability & insights
- As I dive into my observations on IP&LM, here is an example that resonated with me while interviewing one of Siemens' subject matter experts: Case in point: the head of marketing for a large multi-national personal care company was on a business trip to demonstrate cooling effect to the skin for a new product. He forgot to take a sample along so he stopped by the duty free and picked one, only to realize upon use that it has zero additional cooling effect. He researched the issue and found that development team cancelled the raw material that was in charge of creating this effect. Their answer was: did not know that effect was promised!
- I can't emphasize enough how relevant that example is for many of the programs and product releases I have encountered across industries in just around every corner of the globe. This example also speaks to the power of the End-2-End (E-2-E) that IP&LM brings to initiatives' repeatable successes. What excited me first about this IP&LM thread is the triple balance of speed, agility, and rigor
- A key to this immediate power comes from combining the lifecycle management of the design and validation of a new product with the program and project management
- In a good program standard, the overarching level above the specific program processes is a balanced portfolio level. In IP&LM, a brand hierarchy organizes a company's complete product portfolio, including all of the individual products and the innovation assets that define them. Brand Hierarchy management is the key to efficiently finding assets that can be reused, speeding up innovation

Let's recap some of the reasons why the process consistency is such a critical element for delivery excellence as exhibited by IP&LM:

- Process fluidity is imperative
- The key to process excellence here is to sense what are the most suitable types, numbers, and amount of processes for achieving initiatives' outcomes with speed
- For delivery excellence to happen, and as evident in my review of the IP&LM solution, engagement of stakeholders is critical

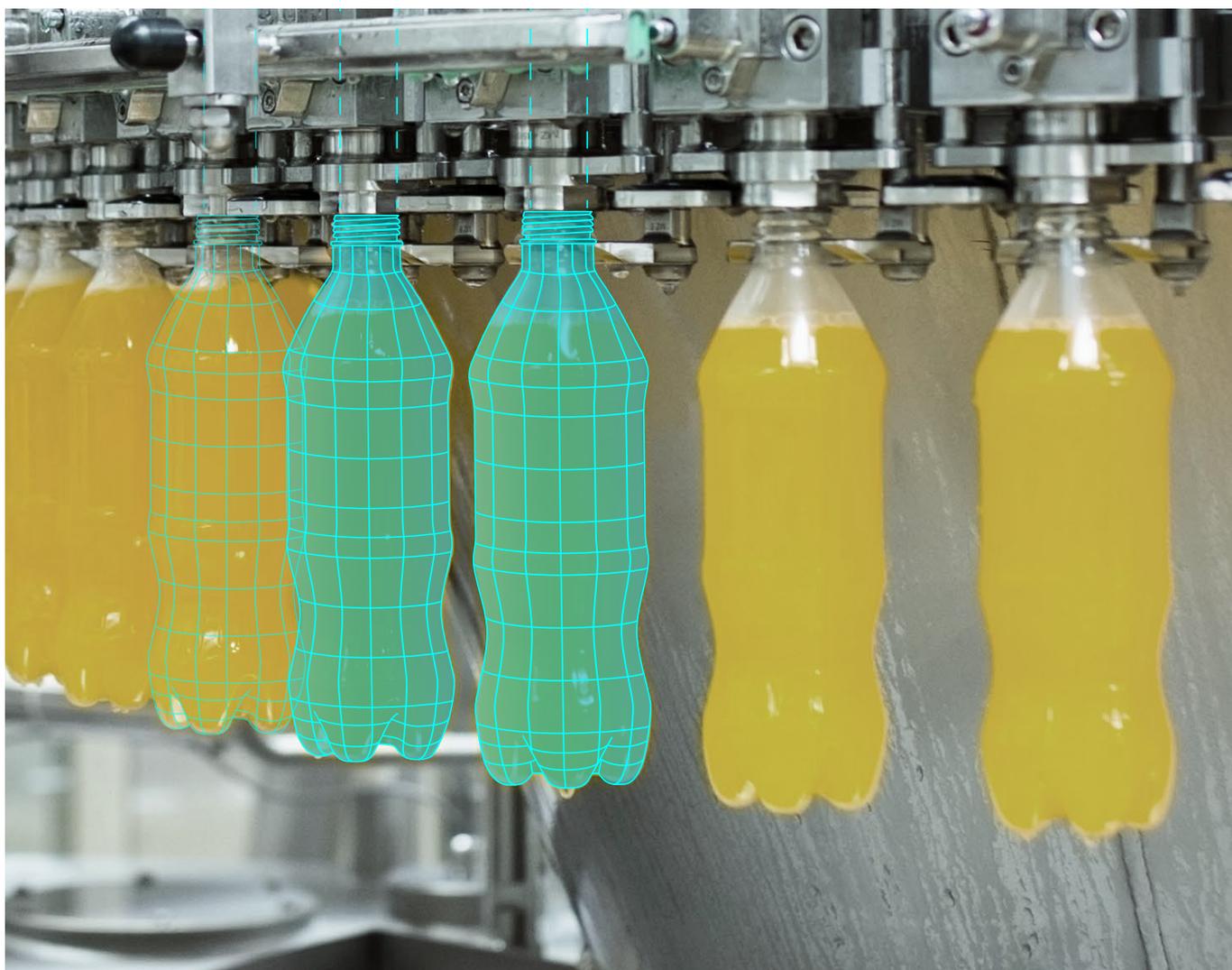
Processes should give a fitting structure yet leave enough room for individual creativity, co-creation, and strengthening ownership.



“So what”

We have to find the right process balance between autonomy and alignment. The organizational culture will show us the degree of fit in choosing the processes that enable both delivery and strategic alignment, yet leave the right size window open for a personal stamp from the different organizational units, thus bringing in their creativity and ownership.

Scaling process excellence is quite possible using the process richness of IP&LM that demonstrates early adaptors' successes. At that point, it becomes contagious and scaling happens when it clearly becomes attractive for other business units to follow suit.



People

For the people sphere, the delivery excellence in the future will hinge on the transparency and data driven decisions. The impact of digitalization on running and changing the business represents the competencies required for future excellence. Digital technology contributes strongly as the future of work differentiator, yet at the same time the reaction to this new revolution has been quite uneven and difficult to sense. As with the process scale, sensing and responding fast to changing needs has to happen at every layer in the organization.

For this people critical sphere to deliver excellence, one has to work on new implementation frameworks that are comprehensively designed around customers. The outward focus on customers that IP&LM creates, circumnavigates internal politics. Typically we use tools like design thinking to bring the best ideas to the mix and to balance machine intelligence with the impact on how our people go about their daily lives.

Delivering excellence uses traditional people competencies while being agile in developing competencies for the digital age.

As I look at the IP&LM and its role in empowering people across the spectrum of the ecosystem, I find it encouraging that there is enough support to building the trust currency that is most vital in achieving successful digital transformations.

- IP&LM enables people by helping each discipline maintain their own set of templates, each being small, clear, and easy to change
- Product teams can build a choice of approaches that best fit their needs and the circumstances identified by Product Context. The solution works more like a box of building blocks that can be combined very easily and provides an environment that can adapt incredibly fast to any current and future challenges
- From idea capture to discovery, the solution includes the original intent and purpose of the product, as well as listing all the relevant claims that designs must deliver. This frees people to focus on innovating
- The Digital Charter helps the right autonomy people need by factoring in the complexity of development and the type of initiative with clarity, such as whether it is a new product variant like a Cold Brew coffee, a product expansion or customization pack, or entirely new product to the world



“So what”

We need new lenses to devise the most appropriate mix of people competencies for us and for our customers' organizations, to excel in delivering complex products and solutions while becoming more innovative and fast.

I find the clarity of different personas that support different IP&LM critical roles very encouraging. As we know from program delivery challenges, lack of clarity of roles and responsibilities could derail outcomes. Having the right mix such as: portfolio manager, marketing manager, governance team, program, project, and product managers properly defined with responsibilities and clear impact on the organization is of utmost value to transformation success.

Scaling the impact of the people sphere requires unleashing the secret recipe for making it work and will result in high collaboration level across organizational boundaries that we have not yet witnessed. When access to joint trusted data is achieved, such as the marketing brief, which is a critical alignment document that includes the original intent and purpose of the product, as well as listing all the relevant claims that designs must deliver, a space for focusing on collaboration and trust building is created.



Governance

For the governance sphere in the framework to work, we need a hybrid framework chosen with an eye on the future. The future of work is hybrid and IP&LM exemplifies that. The future of work has governance altered from any classical view of steering committees to a much more fluid approach in order to achieve timely and fast decision-making by executive teams who are hyper focused on achieving benefits. We have to look holistically at the business and carefully gauge the appetite and readiness for this rethought approach to governance with excellence.

Decision-making success spreads through contagion. As an example of the value of effective decision-making with IP&LM that is core to future governance with speed, let's say a 10K employee organization and 2000 projects with a setup time of 2 weeks for their new products. So even with a saving of half that time, we save 4000 person days every year.

The other critical dimension to this sphere is the executive leadership team. Working on complex programs, we have to ensure that the executive group adjusts fast to the new governance with excellence. This requires creating greater transparency in the Boardroom and eventually changing the executive role from one of steering to one of experimenting and redirecting. Lightning speed decision-making requires a massive amount of decision-making muscle building and practice coupled with a growing appetite for taking risks that is enriched by timely data access.

Here are few specific observations in IP&LM that support successful programs governance in the Future of Work:

- Enterprise applications, like this, influence a lot of people so it is a competitive advantage to have IP&LM framework enable the governance agility
- A culture change is required for adaption of IP&LM across industries
- More interest could exist in consultancy organizations as they support clients govern and map out business processes
- Scaling this way of governing to a larger organization is a gap even though some business models are being obsolete and could use this data richness to reinvent themselves
- Understanding cultures would help tremendously in figuring out governance adjustments so resiliency in working across the lifecycle and the right degree of risk taking would be achieved
- An enabler for future governance is having integrated KPIs: foundation built on data first, build trusted relationships, and then work on developing the optimal solution



Excellence in governance is achieved by shifting from the classical steering focus to a heightened delivery focus.

“So what”

A governance framework for delivery excellence in the future requires the bar to be set quite high in the degree of autonomy modeled by the executive team and cascaded down and across. To achieve a faster organizational cultural tilt, make it safe for teams to have fun experimenting, and count on the ripple effects that successful stories demonstrate to the others. This is core to the power of IP&LM and the possibilities digital twins create for having difficult conversations and decisions early in the lifecycle and throughout programs’ journeys.

Scaling the impact of the governance sphere requires a very different way of defining organizational success. Speed is at the center of this new governance and learning is a critical sub-component of it. Initiatives’ delivery success metrics change, behavioral change follows, reflecting how fluid and agile governance needs to look.



Looking forward into the Future of Work

Bringing together the 3 delivery excellence spheres creates a multiplier for scaling delivery excellence. Achieving the right balance of process autonomy and alignment, coupled with the right mix of traditional and non-traditional competencies, and integrating that under an umbrella of agile governance anchored in a delivery focus is the secret to expediting and achieving delivery excellence. Integrating the efforts on the 3 critical spheres discussed has the potential of bringing a much higher Return On Investment as compared with a sole focus on any of these 3 spheres individually.

IP&LM hits the mark on a wide spectrum of process, people, and governance interplay. It provides both the balcony view and the very specific details that are needed by the decision makers of future innovations. The wide perspective that is achieved across the stages of the framework ensures that leaders are not lost in the details yet able to zoom in on any required assets. This also frees the creativity mindset that drives continual transformative innovations.

Processes are prioritized and focused on adapting with speed while achieving consistent quality.

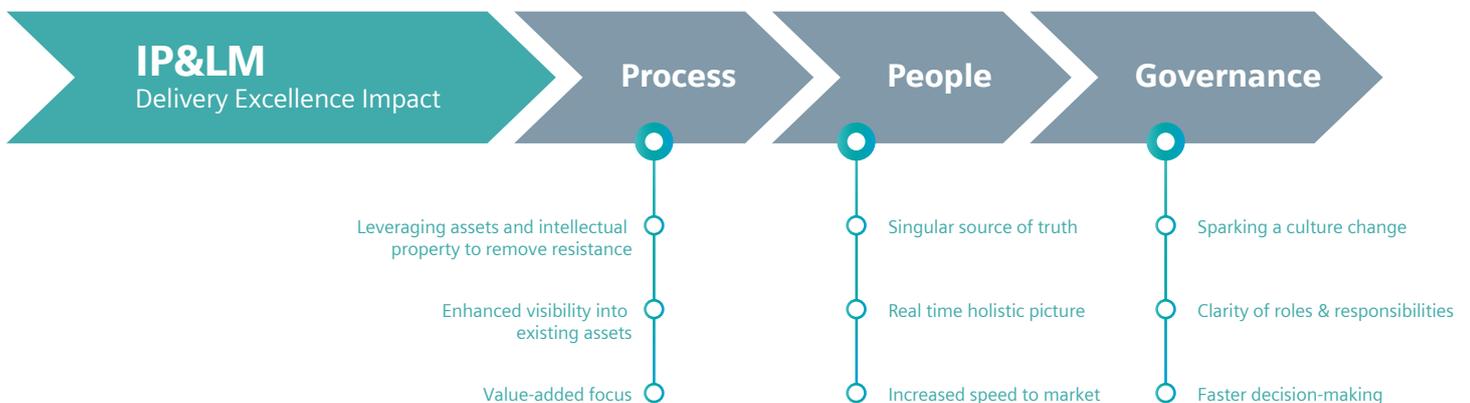
People are empowered to make timely decisions and have clear organizational roles in transforming the ways of working and achieving outcomes.

Governance is seamless and objective with the power of data and learning that IP&LM creates.

In this new world, although excellence continues to be a continuing journey, the nature of the road ahead is changing faster than ever predicted, due to the seamless interplay between technology and data. A healthy culture of ongoing excellence focus for the future needs a combination of resilience in pursuing new and different ways of doing things than those we have been comfortable with in the past, together with encouraging experimentation as the vehicle for learning.

IP&LM provides a focused approach to delivering new initiatives, innovating and expediting product launches, extracting knowledge from them and changing fast when it isn't working, meaning that delivery excellence outcomes are within our grasp.

Excellence is built on increasing process autonomy, digitally capable people, and agile, delivery-focused governance.





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About Siemens Digital Industries Software

Siemens Digital Industries Software is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. Our solutions help companies of all sizes create and leverage digital twins that provide organizations with new insights, opportunities and levels of automation to drive innovation. For more information on Siemens Digital Industries Software products and services, visit siemens.com/software or follow us on [LinkedIn](#), [Twitter](#) and [Facebook](#).

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