



A WHITEPAPER ON

# How can manufacturers improve customer experience with Digital Transformation?

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## EXECUTIVE SUMMARY

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The application of digital transformation tools offers effective solutions for manufacturers to improve transparency of their processes, ensure the traceability and integrity of the supply chain, and match demand and supply effectively. The right digital transformation tools also enable manufacturers to remove inefficiencies, become more proactive, and apply innovation on a sustained basis. All these interventions enhance customer experience greatly and contribute to the bottom-line.

## WHITEPAPER

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Today's manufacturers face cut-throat competition and are hard-pressed to improve customer satisfaction. Creating a differentiated customer experience is easier said than done in an age where customer expectations are extremely fluid and industry biggies reset benchmarks by the day.

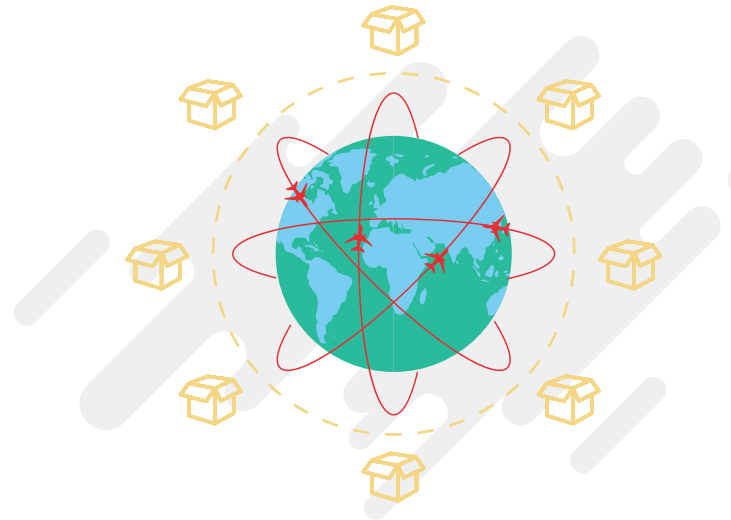
Manufacturers need to create agile, customer-focused experiences, with flexibility and innovation built into the mix. Digital transformation is a key tool to achieve the same. Here are the specific challenges standing in the way of enhancing customer experience, and ways to leverage digital transformation overcome such challenges, and thereby enhance customer experience.

## Challenge #1

### INFUSING TRANSPARENCY TO THE SUPPLY CHAIN AND OTHER SYSTEMS

Many manufacturers face the stumbling block of opaque supply chains, fallout of the historical nature of supply chains being paper-based and highly regulated. Opaque supply chain inhibits manufacturers from getting accurate and timely insights. Lack of such real-time insights inhibits the enterprise from doing what is needed to fulfill customer expectations.

Opaque systems and processes are also out-of-place in a progressive enterprise which seeks to attract talent. Today's data-driven enterprises require transparent systems and a learning organization seeking top talent an open culture.



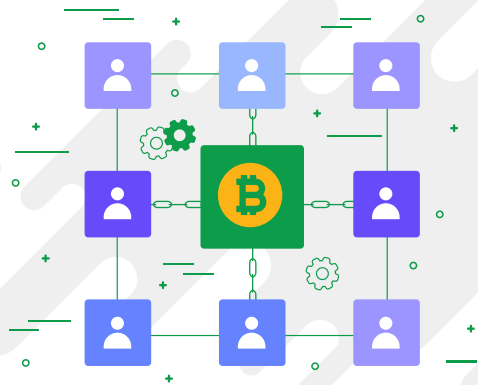
## SOLUTION

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**Deploy GPS, RFID, and other technologies to make supply chain transparent.** Such tools offer accurate and real-time information regarding the status of a product in the supply chain and offer proactive solutions to road-blocks.
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**Offer a common cloud-based platform, integrating all stakeholders of the value chain.** Enable real-time collaborative tools through such platforms. Offer mobile apps, enabling key stakeholders to access the required information anytime, anywhere.
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**Ensure holistic processes for the manufacturing, marketing, and sale of complex products.** A common platform, as opposed to maintaining information silos in individual entities or departments, supports transparency throughout the manufacturing process. For instance, it allows the design team to co-opt feedback from customers directly, for a production team to pace schedule according to customer expectation of delivery, and more.

## Challenge #2

### ENSURING TRACEABILITY AND INTEGRITY OF THE SUPPLY CHAIN

Closely associated with the challenge of ensuring transparency is the need to enforce traceability of the supply chain and ensure the integrity of the entire process. Today's digitized economy, combined with an extremely fluid and fast-paced business environment, requires instant decision making and leaves no room for errors. Moreover, trust is the cornerstone on which business relationships exist.



## SOLUTION

- ❖ **Apply blockchain technology.** As a commodity moves through the supply chain, creating a blockchain-based distributed transaction ledger of goods and the value transfer, generates a single, comprehensive, shared chain of data and logic, which remains tamper-proof. This establishes the authenticity of goods or raw material and provides accurate traceability of where a commodity originated in case of a recall.
- ❖ **Demolish data silos.** Bring together all databases and associated systems into a single cloud-based solution, or deploying connectors to seamlessly integrate the different database.

## Challenge #3

### MATCHING DEMAND AND SUPPLY

Many manufacturers face a big challenge of accurately predicting demand for their products. Inaccurate forecasts run the risk of the enterprise either carrying too much raw material or work-in-progress inventory, or missing delivery deadlines and not being able to fulfill customer expectations regarding the availability of a product. Both outcomes are costly in today's competitive business environment.



## SOLUTION

- ❖ **Apply advanced analytics to improve forecasting.** Use historical data integrated with relevant environmental data such as weather, annual events and more, to predict when and where a product is needed.
- ❖ **Apply IoT In advanced scenarios.** For instance, manufacturers may implement self-stocking devices that initiate a reorder of materials when a particular threshold is met

## Challenge #4 REMOVING INEFFICIENCIES

Today's enterprises have no option but to be lean and mean. The combination of cut-throat competition and highly demanding customers leave no room for flab or sloth. Customers, now well aware of the choices in front of them, would rather choose a competition than pay for inefficiencies. Whether any delay was outside the company's control or not makes little difference to them.



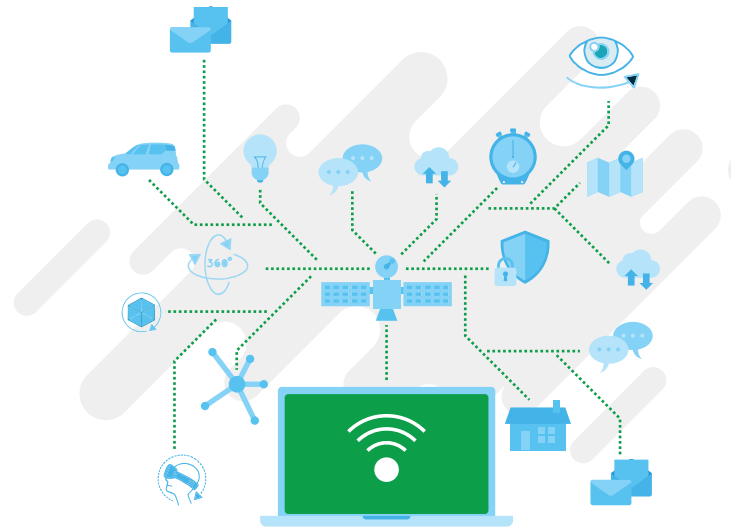
## SOLUTION

- ❖ **Make all interactions data driven.** Digital approaches, grounded in data analysis, make it possible to transform every facet of customer interaction, be it responding to customer demands, accelerating the decision-making process, or restructuring operations keeping customer convenience in mind.
- ❖ **Apply advanced analytics.** Most forward-looking companies have already isolated and removed easily observable inefficiencies related to data. Apply advanced analytical tools to analyze all available datasets simultaneously, to unearth lingering and latent inefficiencies.

## Challenge #5

### BEING PROACTIVE

Businesses need to take things head-on in today's fast-paced business environment. A proactive approach is essential to be one-up on competition, and also nip issues in the bud, before they escalate and lead to shutdowns or other disruptions. Any disruption is virtually a death-knell, for in today's age of information overload, out-of-sight means being out-of-the-customer's-mind. The business would have to start all over again to catch the customer's attention, and more importantly, establish trust.



## SOLUTION

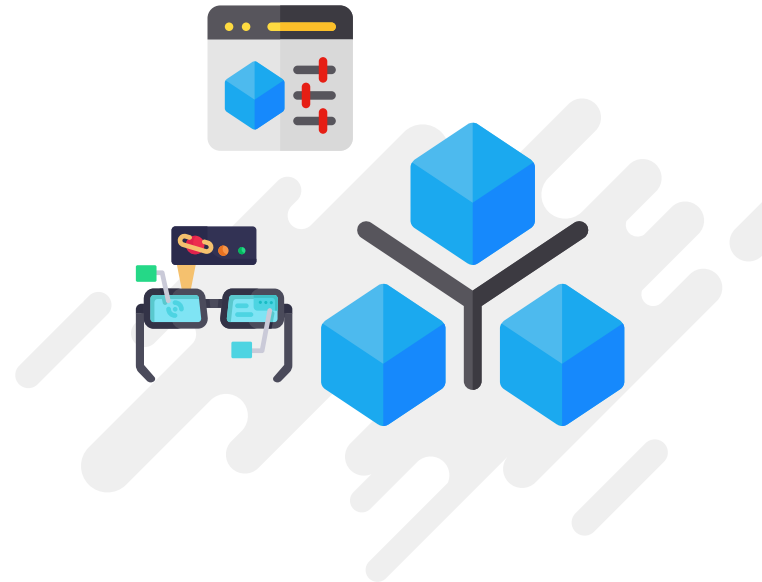
- ❖ **Deploy IoT based predictive maintenance techniques.** IoT sensors monitoring the conditions under which the equipment operates, and making automated interventions in real-time could fix problems before it comes to pass. For instance, timely automated alerts allow field service agents to service equipment promptly, and come with the right tools and spares when they come for service.
- ❖ **Deploy Virtual Reality solutions to improve the quality of work.** For instance, field service technology could tap into virtual reality technology and real-time collaboration tools to make a thorough fix to the machinery, without having to come back again, for want of information.
- ❖ **Deploy IoT based smart-shelf technology.** The technology allows manufacturers to scan a shelf or inventory point to know the exact status of the inventory, or be alert of theft in real-time. Manufacturers may detect when a store is running low on an item, and automatically initiate the replenishment process.

## Challenge #6

### APPLYING INNOVATIVE SOLUTIONS

Innovation is no longer a luxury in today's highly competitive world, where companies try to outdo each other in providing better offerings to the customer. In an age where technological boundaries have all but disappeared, only innovation enables companies to differentiate on a sustained basis. However, even while understanding the importance of innovation, the big challenge before manufacturers is how to implement innovation efficiently, in a sustained way, and how to make the perfect trade-off between innovation and aping industry best-practices.

Innovation in customer experience creates mutual value, and may be positioned as the “middleware for sustained business results.” The potential, however, is under-utilized by enterprises.



### SOLUTION

- ❖ Apply Virtual reality to create prototypes, such as a 3D rendering of a kitchen, to seek customer approval before production, rather than produce first and try to sell already manufactured products.
- ❖ Opt for 3D printing, and manufacturing-as-a-service to bring production closer to the customer, and allow deep customization even with batches of one.
- ❖ Offer an integrated system, with intuitive front end apps to eradicate data silos, and facilitate an open and transparent culture. Such a culture is essential for innovation to thrive.

## CONCLUSION

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Digital transformation tools are of yeoman's benefit to the enterprise, and go a long way in ensuring customers remain happy. However, these tools also require considerable resources. Unless applied the right way, with the right objectives in mind, the interventions will end up wasting resources with nothing tangible to show in return. But when done right, these interventions enhance the customer experience. The resultant higher sales contribute to the bottom-line directly.

## REFERENCE

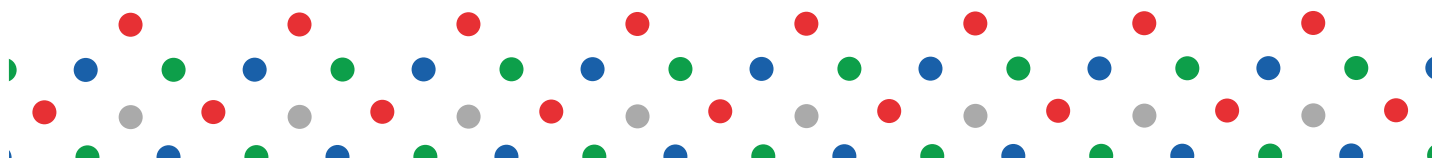
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## AUTHOR BIO

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**S. Karthikeyan**, or **SK** as he is better known, has 19 years of experience in designing, leading and delivering world-class software solutions. His specialties include Product Ideation, Innovation & Strategy, Enterprise & Solution Consulting, Data Science Solutions, and Digital Transformation. As Chief Innovation Officer, SK ensures that experimentation and innovation continues unfettered at Suyati Technologies. He leads the Mekanate team that is developing a Digital Transformation platform using AI, ML, IoT and Big Data technologies. He holds a Masters Degree in Computer Application, and Advanced Certificate in Information Technology Management from IIM, Kozhikode. The opportunity to build technically complex solutions is what runs through his mind all day, and probably keeps him awake at night! Connect with him on [LinkedIn](#).





Suyati is a fast-growing, digital transformation solutions company that helps you rebuild your customer experience for the digital consumer. We collaborate with businesses to strategize and implement impactful digital initiatives that position our clients ahead of the competition. We are digital-first and we focus on delivering digital transformation solutions that support your various engagement strategies.

Our three-phase approach to implementing digital transformation for you ensures that you win stakeholder support, secure early wins through competitive advantage, and transform your business for future growth. And our tailor-made platform, Mekanate, helps you discover your business DNA from your passive and active data, and use it to initiate, integrate and accelerate your DT implementation.

With our niche and rich expertise in a wide range of technologies and services - CMS, CRM, e-commerce, Cloud, IoT, Data Analytics, and Product Engineering - we help companies across the globe leverage their best on web/cloud/mobile platforms.

Learn more: [www.suyati.com](http://www.suyati.com)

Get in touch: [services@suyati.com](mailto:services@suyati.com)

