BRISTLECONE zinnov

DIGITAL SUPPLY CHAIN MANAGEMENT

BUILDING A THREAT RESILIENT SUPPLY CHAIN

DECEMBER 2020

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I. INTRODUCTION

The year 2020 has been bleak for the entire world. No one was prepared for the COVID-19 pandemic and the resultant economic crisis. High unemployment rates, turbulent stock markets, risk of recession are all testament to the devastating impact that the virus has had on companies across verticals across the world. A plethora of enterprises have suffered insurmountable losses, with some even ceasing to exist. All of this begs the question – How has a microscopic virus that originated in the district of Wuhan, been able to cripple the world economy and affect so many verticals? Because the pandemic deeply affected these verticals in certain critical areas – one of which is the supply chain ecosystem.

The supply chain ecosystem is the lifeline for multiple verticals including Retail, Manufacturing, Oil & Gas amongst others. Disruptions in supply chains have always had a devastating impact on each of these verticals. These disruptions can range from natural disasters such as tsunamis, earthquakes, floods, etc., to geopolitical events such as tariff impositions, price fluctuations, and political instability. The loss of contact with China and other strategically important locations effectively broke multiple links in supply chains across the world. The fact that US goods imports from China accounted for 18.1% (USD 451.7 Bn) of overall US goods imports in 2019 underlines the importance of the aforementioned statement. While a few companies had started moving their manufacturing out of China to other low-cost locations in the aftermath of the US tariff impositions, most companies still had their manufacturing operations in China in the wake of COVID-19.and have paid a hefty price for the same Companies that had shifted their operations from China, were not spared as their new locations have also turned out to be high-risk locations.

While talking about disruptions in the supply chain, it would be difficult to ignore the disruptive impact of digital technologies. We are currently living in the fourth industrial revolution and witnessing Digital transformation at an unprecedented level across multiple verticals, each with a multitude of use cases. Companies are making significant investments in digital technologies such as Internet of Things (IOT), Artificial Intelligence (AI)/Machine Learning (ML), Hyper Intelligent Automation (HIA), and Blockchain. The need for data is more pronounced than ever. Company business heads expect to have all the necessary figures and analysis in front of them so that they can make informed decisions. Companies are striving to gain complete visibility across the supply chain, and the aforementioned digital technologies are helping them with it.

In an effort to ensure resiliency, companies across verticals have started investing in revamping their supply chains by leveraging digital technologies. A recent Zinnov report states that by 2022, US logistics companies will be spending more than USD 80 Bn on digital technology. In order to meet these rising demands for digital technology, Independent Software Vendors (ISVs) too have had to dramatically augment their offerings. A few ISVs have already started this process, but completing it in a short period of time, is quite difficult.

This Bristlecone-Zinnov whitepaper examines various threats faced by supply chain ecosystems and how enterprises have leveraged digital technologies in order to combat these threats. We will also look at ISVs that have already started on this journey and the best practices that they have adopted. Additionally, this whitepaper also details a playbook that will help ISVs in augmenting their supply chain offerings in order to meet evolving client expectations.

II. THREATS FACING THE SUPPLY CHAIN

The supply chain ecosystem is built on a system of moving parts – all of which have a specific role to play in the smooth functioning of the supply chain. If any of these parts is subjected to any form of threat and fails to perform, the entire supply chain will be disrupted. Therefore, while designing a supply chain, it is essential to understand the possible threats and challenges faced by it and then work on a mitigation strategy. In this section, we will be look at various types of disruptive events and the threats they pose to supply chains across the world

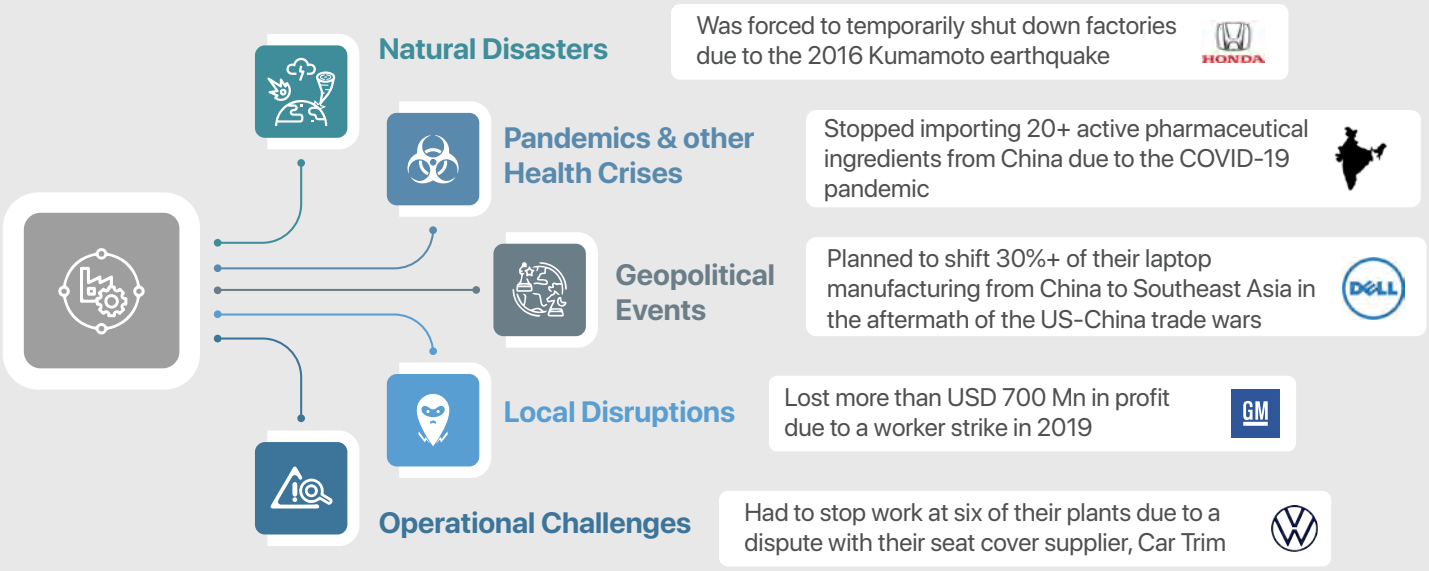

Figure 1: Threats faced by Supply Chain Ecosystems

Natural Disasters

Natural disasters such as floods, tsunamis, earthquakes have always wreaked havoc on supply chain operations, leading to late deliveries, closed ports, and delayed flights. Most companies get caught unawares by such disasters and suffer heavy losses. A recent tornado strike at a critical Ford manufacturing plant disrupted the overall supply chain, adding to the overall USD 2 Bn loss incurred in the first quarter. A major earthquake in Kumamoto, southern Japan, forced a Japanese OEM located in the UK to shut down production lines for a couple of days. As we can see, although the earthquake occurred in Japan, it impacted global supply chains and stopped production in multiple locations.

Pandemics & other Health Crises

In a world ravaged by COVID-19, supply chains across the world have been crippled. China and other high-risk nations got removed from global supply chains, thus causing a break in the chain and disrupting operations across verticals. Let us consider the pharmaceutical industry as an example. China is a major supplier of active pharmaceutical ingredients to generic drug manufacturers around the world. Production of these ingredients has slowed down as a result of the lockdown and factory closures caused by the pandemic. This has resulted in shortages and relatively higher costs for the raw materials for generic drugs, thus leaving producers facing difficulties in production and supply of end products. India has decided to stop importing more than 20 active pharmaceutical ingredients amid fears of shortages within the country. Other verticals such as Automotive, Consumer Electronics and Retail are facing similar issues. Furthermore, it must be remembered that COVID-19 is not the first pandemic to affect supply chains. In the aftermath of the SARS outbreak in 2002, Motorola had to suspend operations in its Singapore facility after more than 300 workers were quarantined due to SARS exposure.

Geopolitical Events

While the previous two sections are more to do with natural events, there are also man-made geo-political events that impact supply chains. A single decision made in the White House in Washington D.C., could have reverberations across supply chains across verticals. These decisions often lead to events such as price fluctuations, variations in demand/supply, rise in taxes, etc. The recent US tariff imposition on Chinese goods is a case in point. The decision exposed the dependence of US manufacturers on China. AudioControl, an electronics manufacturer, sourced more than 20% of their components from China, and is now faced with a USD 200K bill as a result of the 10% tariff rate. Such heavy unplanned adverse impact on cash flow when cash conservation is critical, is forcing companies to remove China from their supply chain and redesign accordingly. Dell planned to shift more than 30% of its laptop manufacturing from China to Southeast Asia as a result of this tariff imposition.

Local Disruptions

In addition to the above-mentioned indirect threats, companies and supply chains have also been subject to other attacks and threats that are more local in nature, i.e., impacting a particular company/a specific supply chain. Examples of such threats include labour strikes, accidents, cyberattacks, etc. The General Motors worker strike in 2019 cost the company an output of more than 8K vehicles per day and a possible USD 700 Mn in profit. This impact was not just felt by GM, but also on its suppliers – American Axle & Manufacturing and Cooper-Standard Holding, who were dependent on GM for more than 15% of their revenue. Cyberattacks have been another key area of concern for most supply chains, with more than 300 cybersecurity incidents impacting supply chains in 2019 alone. One prominent example is the ransomware attack on Belgian aerospace supplier ASCO Industries, that forced the company to shut down production lines at four different factories across North America and Europe and stop operations for over a month.

Operational Challenges

The events mentioned above can be classified as black swan events and may occur rarely. However, supply chains do face other challenges as well that occur more frequently and have the potential to hurt a company. Key challenges include untrained workers, poor relationship with suppliers, product defects etc. Volkswagen accused their seat cover supplier, Car Trim, of supplying them with flawed leather seat covers and cancelled a contract worth USD 600 Mn, leading Car Trim to stop all deliveries and counter-sue Volkswagen. This meant that Volkswagen had to stop work at six of its plants, causing nearly 28,000 workers to have their hours slashed.

Each one of the aforementioned threats have the potential to critically cripple a supply chain and subsequently haemorrhage a company Therefore, it becomes imperative for a company to have measures in place for any such threats or challenges. Digital technology plays a key role in this aspect and for this reason, we are witnessing significant investments in digital supply chain solutions by companies. In the subsequent section, we will see how companies are investing in digital technologies in order to make their supply chain resilient in the face of such disruptions.

III. ROLE OF DIGITAL TECHNOLOGY IN THREAT MITIGATION

We are living in an era where technology itself is being viewed as a disruptor. From connected assets to assembly robots, the adoption of digital technologies has grown exponentially across all functions of an enterprise. The supply chain is no exception, because companies are trying to leverage digital technologies to not just optimize but also mitigate threats to their supply chain operations as much as possible.

Source & Plan
Customer raises a request for field services

PROCUREMENT/SPEND MANAGEMENT
- Spend Classification
- Demand forecasting
- Data enabled Vendor/Supplier Profiling
- Automated parts ordering

RISK & COMPLIANCE
- Smart Contracts
- Payment Fraud detection
- Authenticity testing
- Vendor Risk management
- Supply Chain Digital Twins
- Social Media Tracking

SUPPLY CHAIN FINANCE
- Automated payment processing
- Crypto-currency

Manage & Execute
Call Center agents receive customer requests and process them accordingly

MANUFACTURING
- Real-time work-in-process (WIP) order and employee tracking
- Real-time defect detection
- Asset track and trace for compliance, audit controls, etc.
- Asset maintenance schedule, calibration, and ageing tracking
- Root cause analytics on asset failures

WAREHOUSE MANAGEMENT
- Robot-enabled picking and placing
- Automated environment monitoring
- Real-time product tracking

INVENTORY MANAGMENT
- Robot/drone enabled inventory management
- Demand forecasting
- RFID-based automated inventory tracking and reconciliation
- Real-time depletion and replenishment analytics to reduce markdowns

Transport & Deliver
Developing workflows, assigning tasks & defining SLAs

TRANSPORT MANAGEMENT
- Automated Goods Traceability
- Automated route selection
- Automated task assignment
- Perishable item /Grey market traceability/ counterfeit product detection
- Route optimization
- Real-time order status on IOT wearables
- Weather Forecasting
- Supplier delivery status with on-time forecast analytics
- Item-level track and trace on part/lot

FLEET MANAGEMENT
- Drone/autonomous vehicle-based delivery
- Remote fleet tracking
- Remote worker tracking
- Remote goods tracking
- Container Temperature Sensing & Weight Tracking
- Vehicle speed, fuel and usage analytics

Figure 2: Supply Chain of the Future

This section explains how companies are investing in digital technologies to make their supply chain resilient in the face of disruptions.

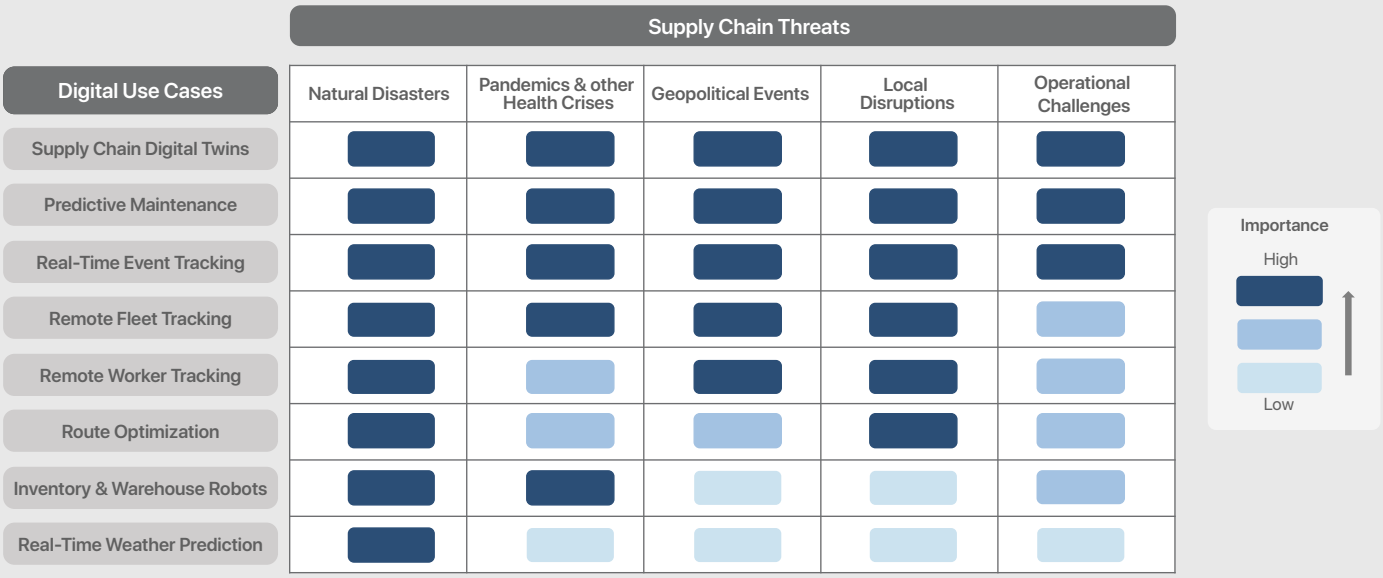

Figure 3: Digital Threat Mitigation

Supply Chain Digital Twins

Supply chain visibility is critical for companies. Companies strive to have real-time information about their supply chain. Digital twins afford companies a measure of supply chain visibility, helping them immensely for disaster management. A supply chain digital twin is a complete simulation of a supply chain that integrates with the company's systems and uses real-time data to provide real-time insights. Through these digital twins, companies become aware of any disruption on a real-time basis through slight deviations in performance levels. So, if there is a natural disaster in Japan which is preventing goods transportation, the parent company based in the United States will come to know about it in real-time. A few companies such as Medtronic have already developed digital twins of their entire supply chains in order to plan their supply chain better and be ahead of any such disruption.

Predictive Maintenance

Predictive maintenance is another key use case with respect to disaster management in supply chains. As was seen with digital twins, companies want to ensure that they get ahead of any potential disruption, i.e., they are attempting to become more proactive rather than reactive in disaster management. While a digital twin will provide a company with a broader view of potential disruptions in the supply chain, predictive maintenance will help keep track of the health of key machines and tools being used across the supply chain. Major logistics companies such as DHL, FedEx, and UPS have implemented predictive maintenance across their fleets. Frito-Lay North America, a unit of PepsiCo, used a predictive electrical system maintenance program on its fleets, that identifies cranking voltage issues and automatically generates work orders.

Real-Time Event Tracking

We live in the Information age and social media is an information treasure trove. Companies have been leveraging social media for consumer behaviour analysis, promotions, etc. Companies are now going even further to leverage social media tracking tools as part of their threat mitigation strategy, to predict possible supply chain disruptions. DHL is using sentiment analysis to monitor 8 million sources of data on the Internet, including social media, for anything that could signal a disruption. E.g., passing of a new law/regulation.

Remote Fleet Tracking

Fleet and logistics management is a key aspect of supply chain management. While predictive maintenance is being used to predict possible failures in the vehicles themselves, it is equally important to track the fleet itself. Tesco deployed a trailer tracking technology from Microlise, to chart optimized routes for their fleet. Companies are even progressing beyond simple vehicle tracking and are even analysing the environment surrounding a fleet for any potential disruptions. DHL uses computer vision to map out the surrounding areas at sea and detect potential threats. Bristlecone is currently helping a client develop a solution to track their shipments and fleets across land and sea from China to USA.

Remote Worker Tracking

Along with machines, it is also imperative for companies to track their workers and their health. The COVID-19 pandemic has only heightened this focus. Companies are now tracking workers to find out if they have come in contact with an infected patient or are traveling to an area with a high concentration of COVID-19 patients. Again, worker tracking is not just limited to tracking worker locations, but also to get insights on employee behaviour and performance. Dupre Logistics used IOT to track their drivers' driving manoeuvres and provide them real-time feedback in order to prevent accidents.

While the above-mentioned use cases are the most prominent that companies turn to in order to mitigate threats, there are other measures that companies are implementing to ensure supply chain resiliency. For example, in order to mitigate the threat of cyberattacks, leading logistics companies have been aggressively hiring cybersecurity personnel (~30% of their current cybersecurity workforce has been hired over the last year).

This section clearly indicates that companies need to start investing in digital technologies to ensure resilience in the supply chain. But as mentioned earlier, these are not the only disruptions that companies need to prepare themselves for. The advent of Industry 4.0 has led to a spike in digital investment across verticals. It is essential that supply chain solutions be on par with this spike in digital investment. This is a clarion call for supply chain ISVs to augment their products and offerings accordingly. The next section delves into how SCM ISVs have started to dramatically start augmenting their solutions to keep pace with Industry 4.0.

IV. EVOLUTION OF SUPPLY CHAIN SOLUTIONS

With enterprises clear on leveraging digital technologies to future-proof their supply chains, they are increasingly looking to their partner ecosystem for assistance in the same. Therefore, it is imperative that supply chain ISVs also augment their products and offerings accordingly. In fact, leading ISVs have already begun on this journey and have achieved success too. In this section, we will be looking at the initiatives and best practices that ISVs have taken to be at par with the rising customer demand.

Figure 4: Digital Augmentation initiatives adopted by SCM ISVs[1]

Product Use Case Expansion

The process of digital transformation is not stationary in nature. It is important for companies to build and scale their current offerings as well as identify newer use cases for adoption. Llamasoft expanded into the field of supply chain digital twins.

Verticalization

An important facet of product development is to have a customer-centric development strategy in place. Clients are looking for customized vertical-specific offerings rather than a one-size-fits-all model. Leading ISVs such as Infor, Llamasoft have offerings that are tailored to specific verticals such as Retail, Oil & Gas and Manufacturing, amongst others.

AI-Led Enhancement

ISVs across verticals have looked towards Artificial Intelligence and Analytics in order to develop "Smart" products, capable of automating routine manual tasks and providing valuable insights. SCM ISVs are no exception to this trend. Jaggaer expanded their SCM offerings by developing an AI-powered delivery predictor.

[1] Entry Level ISVs – ISVs that have emerged over the last 5 years with less than $100M revenue; Mid-Tier ISVs – ISVs with revenue between $100M - $500M revenue; Top ISVs – ISVs with more than $500M revenue

SaaS Transformation

Every year, there are a plethora of ISVs that either emerge as a SaaS start-up or are transitioning to a SaaS model. According to a recent report by Zinnov, there are more than 14,000 SAAS companies globally, with more than 4000 of them emerging only in the last 5 years. SCM ISVs are no exception to this trend. While the new-age start-ups are SaaS natives, the older start-ups have begun to adopt a SaaS model too. Blue Yonder has shifted to a SaaS model, and in the last financial year, their SaaS revenues grew by more than 80%.

API-Led Architecture

In order to integrate digital functionalities into their existing systems, ISVs have to evolve from a rigid, monolithic architecture to a more flexible, open, API-led architecture. This enables organizations to easily structure and restructure internal systems to support new projects and technologies. This also enables them to easily integrate with client systems as well as with other products from other ISVs as well. Jaggaer's API strategy is a case in point, which enables its SCM products to integrate with more than 40 ERP products.

Developer Ecosystem

IT is increasingly becoming core to most businesses. It is no longer the domain of an IT or software engineer, as is evidenced by the number of citizen-developers in the world. The developer community is growing at a rate of more than 30% and is expected to reach 50 million by 2024. The global developer base will continue to grow, as will the start-up base (USD 300 Bn funding in 2019 alone), and leading ISVs are attempting to engage with both through various mechanisms – developer programs, dedicated marketplaces, etc. Market leaders such as Oracle, SAP, have dedicated developer programs that enables them to engage with a plethora of independent developers and leverage their expertise.

Smart Integrations

One of the most critical components in an ISV's journey of digital evolution is the partner ecosystem. There are multiple types of partners that ISVs can collaborate with, including other ISVs, System Integrators (SIs), enterprises, etc. Partnering with each of these entities has its own benefits and purpose. Partnering with another ISV can help an ISV immensely in product innovation and access to newer markets. Hence the ability to integrate third-party solutions onto their own portfolio or build their solutions on an external platform is very important for an ISV. For example, Blue Yonder built their new portfolio of AI-powered products in partnership with Microsoft. We would encourage you to read our whitepaper entitled 'Smart Integration, an Essential Building Block for Digital Platforms'. [2]

Engineering Outsourcing

As SCM ISVs embark on their digital evolution journey, it is important to have the necessary skilled talent in place. Rather than trying to procure the required talent themselves, a few SCM ISVs have chosen to outsource the software engineering tasks to third-party Service Providers. Service Providers have access to a wealth of engineers trained in digital technologies such as AI/ML, HIA, Blockchain and IOT as well as SCM subject matter experts that enable the ISVs to enjoy the benefits of faster time to market because of their scalable workforce. Blue Yonder has collaborated with multiple leading Service Providers for the purpose of product development and enhancement.

Engineering Globalization

Other than outsourcing the product engineering and development process, another possible avenue that ISVs are actively pursuing is to expand to geographies where they can leverage the skilled local talent. Hiring local talent in affordable locations such as India would also prove to be cost-effective. Companies like SAP, Oracle have dedicated engineering teams in multiple countries all over the world.

[2] "Smart Integration, An Essential Building Block for Digital Platforms": https://zinnov.com/smart-integration-an-essential-building-block-for-digital-platforms/

Co-Innovation-Led Partnerships

Enterprises are increasingly focused on building digitally empowered supply chains that afford them greater flexibility, transparency, and resilience. They have appointed leaders, set up innovation centers, and dedicated teams for achieving this very purpose. Hence, it is of little surprise that they have also been willing to partner with ISVs for the purpose of co-innovation. For example, IBM, Walmart, and JD.com collaborated to leverage Blockchain technology for food traceability.

Research Collaboration

In addition to other enterprises, ISVs, and SIs, SCM ISVs have also been collaborating with educational institutions for research purposes. A few have even set up CoEs (Centers of Excellence) on campus for this very purpose. Blue Yonder partnered with the Massachusetts Institute of Technology (MIT) to advance their research in intelligent supply chains, including areas such as natural language processing, predictive behaviour, and prescriptive optimization.

CoEs/Innovation Centers

ISVs also need to foster innovation within the company and having dedicated internal measures will help accelerate it. One important initiative is to have CoEs focused on product innovation. Blue Yonder set up a CoE in Hyderabad to focus on their autonomous supply chain vision, leveraging digital technologies such as AI/ML, HIA, etc.

As we have seen in the previous sections, digital evolution is not an option but an imperative for enterprises, and the same can be said for SCM ISVs. Most SCM ISVs have started on this journey and have enjoyed success. However, it is not a straightforward process and requires careful planning. In the next section, we will be looking at a playbook that will help SCM ISVs in augmenting their offerings and ensuring that they remain at par with the ongoing digital revolution across companies, across verticals.

V. DIGITAL AUGMENTATION FRAMEWORK

Digital evolution has now become a necessity for all ISVs, and SCM ISVs are no exception. However, since this is not a straightforward or a linear process, it requires the participation of not just the ISV itself but also members of the larger ecosystem. This process will be different across each stage of the company's growth. Broadly speaking, this process can be divided into 4 distinct stages

	PRIMARY	PROGRESSIVE	ADVANCED	MARKET LEADING
	STAGE I	STAGE II	STAGE III	STAGE IV
DIGITAL INFRASTRUCTURE	• Legacy monolithic infrastructure	• Using the public cloud for hosting non- critical applications	• Using both the public & private cloud for hosting applications but with a few on-premise clients	• Having a dedicated SaaS model with no on-premise customers • API-led flexible architecture
TECHNOLOGY ECOSYSTEM	• Identifying potential partners	• Partnering with startups and leading ISVs	• Having a dedicated partner program for ISVs	• Having a developer program offering trainings and certifications • Have a dedicated marketplace for other ISVs
ENGINEERING OPTIMIZATION	• Hiring and training local engineering talent at headquarters	• Setting up offices in low cost nearshore locations and hiring local talent	• Setting up offices in low cost offshore locations and hiring local talent	• Outsourcing engineering and product development tasks to 3rdparty service provider
INNOVATION	• Have existing engineering talent to focus on innovation along with product development	• Have an innovation lab /COE for all innovation led motions • Hire a leader (Chief innovation officer, Chief AI officer) etc.	• Have dedicated COEs spread all over the world for specific fields / technologies	• Have supply chain alliances with other enterprises, for the purpose of coinnovation
PRODUCT STRATEGY	• Focus on a single use case based on company vision/business plan	• Augmenting current product with new digital powered capabilities	• Exploring newer use cases and building new products based on the same	• Building newer product catering to new customers/markets • Building vertical specific products

Figure 5: Digital Augmentation Framework

STAGE I - PRIMARY

In this stage, an ISV is at the entry level, with a legacy-based architecture. Here, they should be focused on understanding and assessing their own capabilities and the path they want to follow as per the company's vision. They should also take this time to build their foundation in terms of talent, partner identification, use case identification, etc. This would involve hiring and grooming the talent needed (preferably at the company headquarters), identifying the use cases that they want to focus on, and start identifying potential partners.

STAGE II - PROGRESSIVE

This is the stage where ISVs start developing their infrastructure. This implies transitioning from the legacy on-premises monolithic architecture to the cloud. The process, however, should be gradual in nature. It may start with moving a few non-essential applications to the cloud. It is at this stage that ISVs would ramp up their innovation-led measures, with dedicated innovation teams/CoEs in place to accelerate the process. It is also at this stage that the company should think of expanding globally. Again, this should also be a gradual process, and nearshore locations (locations in neighbouring countries close to the headquarters) could be selected.

STAGE III - ADVANCED

At the advanced stage, the company would have the digital infrastructure in place on the cloud. The company should continue to expand its global footprint with respect to engineering and have both nearshore and offshore centers. They should explore newer use cases and expand their product portfolio. They should now have dedicated CoEs that are focused on specific technologies or verticals. At this phase, they should also have a dedicated partner program comprising of other ISVs, start-ups, and SIs.

STAGE IV – MARKET-LEADING

This is the stage where ISVs should have a flexible API-led architecture. The use of APIs would enable faster product integration and enhance developer engagement as well. Hence, it is important to have a dedicated developer program in place with training material, periodic events, certifications, etc. The company should now focus its attention and resources on innovation and identifying new avenues for product portfolio expansion. The ISV's ecosystem can be leveraged for the same. Alliances can be built with other ISVs, enterprises, and SIs, for the purpose of co-innovation. Engineering and product development can be outsourced to third-party Service Providers.

Digital adoption is growing at an accelerated rate across all verticals across multiple value chains. In the backdrop of this digital proliferation, it is of little surprise that companies have started to expect their supply chains to be optimized and impervious to any threat or disruption. COVID-19 is further heightening these expectations and increasing the demand for digitally enhanced SCM solutions. Therefore, digital augmentation is no longer optional for supply chain ISVs, but an imperative. The process might not be easy, but with a structured framework-driven approach, a supply chain ISV can digitally evolve in tandem with rising customer expectations and ensure resilience in the face of disruptions – both unforeseen and anticipated – in the years to come.

ABOUT BRISTLECONE

Bristlecone, founded in 1998, is headquartered in California, with presence in multiple geographies globally. Bristlecone helps business maximize the strategic value of their software investments leveraging software engineering & enterprise supply chain software services. They specialize in the following areas:

- Product Engineering & Development
- Robotic Process Integration and Automation
- Smart Integration, Data Science and Analytics
- Cloud and Managed Services
- Digital Supply Chain
- Digital Sourcing & Procurement

For more information, contact info@bcone.com

ABOUT ZINNOV

Founded in 2002, Zinnov is a global management and strategy consulting firm, with presence in Santa Clara, Houston, Bangalore, Gurgaon, and Paris. With a team of experienced consultants, subject matter experts, and research professionals Zinnov assists Software companies, Global System Integrators, Enterprises, and Private Equity firms in developing actionable insights that help them create value – across dimensions of both revenue and optimization. Over the past 18 years, Zinnov has successfully consulted with over 250+ Fortune 500 companies by:

- Structuring and implementing Digital Transformation levers enabled by technologies like AI/ML, Cloud, IOT, and RPA
- Advising global PE firms in asset shortlisting and target evaluation, commercial due diligence, and value creation
- Helping global companies outline and drive their open innovation programs, design and operate accelerator programs, and enable collaboration with start-ups across specific use cases and predefined outcomes
- Enabling global companies to develop and optimize a global engineering footprint through center setups, and technology and functional accelerators to achieve higher R&D efficiencies, innovation, and productivity
- Growing revenue for companies' products and services in newer markets through account intelligence, market entry, and market expansion advisory.

Zinnov serves clients from across multiple industry verticals in the US, Europe, Japan, and India.
For more information, reach out to us at info@zinnov.com

AUTHORS AND CONTRIBUTORS

Vikram Kaul
Vice President & Business Head - Product Engineering
BRISTLECONE

Gururaj Parvati
Director - Pre-sales and Solution
BRISTLECONE

Shipra Sharma
Product Manager
BRISTLECONE

Vasudev Nayak
Product Manager
BRISTLECONE

Vaibhav Gupta
Principal & Practice Head – Private Equity & Principal Investor
ZINNOV

Prankur Sharma
Engagement Manager - Digital Transformation
ZINNOV

Shreyes Geetakrishnan
Consultant
ZINNOV

Ankit Saini
Analyst
ZINNOV

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