

BUSINESS OPERATIONS – TRANSFORM TO BECOME AN AUTONOMOUS LIVE ENTERPRISE



INFOS/S[®] Knowledge Institute



Contents

Enterprises are migrating across three horizons	5
D <mark>igital</mark> experiences	8
B <mark>usiness pr</mark> ocess as a service	10
Al <mark>Ops and</mark> automation	12
Ag <mark>ility and</mark> innovation	14
Resilient Ops	16
Hybrid cloud	18
S <mark>ervice man</mark> agement	20
Autonomous IT business operations – a critical factor for better business results	22
Advisory council and contributors	25

BUSINESS OPERATIONS – TRANSFORM TO BECOME AN AUTONOMOUS LIVE ENTERPRISE | 3

In a customer-centric enterprise, each process, technology and initiative is developed to improve the customer experience and build customer confidence. So, as technologies advance and customer needs change, businesses are shifting from providing personalized digital experiences to offering intelligent, self-created experiences. IT business operations lead this charge by creating autonomous operations that can make intuitive decisions and value chains, improve agility and reliability and deliver a perceptive customer experience. With the use of no-code platforms, artificial intelligence operations (AI Ops) and cloud-native platforms, IT teams are able to employ design thinking and co-creation support to facilitate faster, customer-centric innovation.



We operate in an increasingly complex world disrupted by new digital technologies like AI, Internet of Things (IoT), big data analytics, hybrid cloud and conversational experiences. As a result, the emerging landscape introduces both opportunities and threats from unexpected places. The challenge lies in the ability to sense these threats, then respond quickly, frequently and almost instinctively, as if human nature. The objective of any organization is to adopt this type of agility and responsiveness at an enterprise scale.

On the one hand, enterprises relentlessly drive digital transformation programs to gain a competitive edge; on the other hand, they are constrained by the siloed implementation of IT-run services. These silos prevent synergies across the IT stack, and the multitude of tools used makes the current IT landscape extremely complex.

We believe that organizations should approach business and IT operations driven by business outcomes that foster integrated end-to-end enterprise management services. This approach not only unlocks a gamut of synergies for the enterprise but also transforms enterprise management services from traditional IT service level agreement (SLA) governed services to business services driven by key performance indicators (KPIs).

Enterprises are migrating across three horizons

There are several trends shaping the business and IT operations arena over the next few years. We will lay out these trends across three horizons where Horizon 1 (H1) is the current state, Horizon 2 (H2) is the forecast one to two years from now, and Horizon 3 (H3) is beyond that.

Traditionally, most organizations viewed IT as a business enabler, which made reducing IT operations cost a key driver. Now, technologies like AI and extreme automation tools bring so much efficiency and cost savings that they transform today's business models. As the role of IT evolves, business agility and customer experience are becoming key priorities. Understanding customer journeys, then identifying

Figure 1: Adapting to market dynamics: the three horizons

KEY PATTERNS

- Immersive, intelligent, self-created experiences
- Cognitive, decentralized, smart contract-driven ecosystem processes
- Autonomous operations
- Agile business value chain spanning the entire ecosystem
- Multi-cloud portable and interoperable applications, platforms and infrastructure
- Agile business service management with BizDevOps, DevSecOps
- Personalized digital experiences
- Predictive enterprise business processes
- Al-driven intelligent automation
- Agile, resilient enterprise with nimble processes, IT and people
- Hybrid cloud with interoperable public and private cloud applications, platforms and infrastructure
- Enterprise service management, DevSecOps
- Help desk, generic messaging
- Integrated enterprise business processes
- Task and robotic process automation
- Agile IT
- Resilient IT systems
- Virtualized private cloud infrastructure with limited public cloud adoption
- IT service management based on Information Technology Infrastructure Library (ITIL)

Source: Infosys

and eliminating the friction points in real-time, is essential. To achieve this business adeptness, organizations adopt DevOps models with integrated business, application development and operations teams and use extreme automation powered by AI and cognitive bots to make operations zero touch as much as possible. H2's focus is on making enterprises more nimble, resilient and sentient. As technologies like distributed ledgers mature in H3, blockchainbased ecosystems will form across various domains driven by smart contracts to make the entire value chain responsive and robust.

H3

/elocity, Variety, Volume

MORE AGILE, RESILIENT AND TRUSTED ECOSYSTEMS THAT ARE DECENTRALIZED AND CUSTOMER-CENTRIC

A decentralized digital ecosystem creates more agile and resilient value chains and smart, contracts-driven business processes. Immersive, intelligent experiences are developed using computational design, no-code platforms and modernized multi-cloud interoperability and portability. With a focus on product, teams employ design thinking, BizDevSecOps and living labs to facilitate faster, customer-centric innovation.

H2 AGILE, AUTONOMOUS ENTERPRISES POWERED BY AI WITH A CUSTOMER FOCUS

Hybrid cloud interoperability across systems creates more resistant, self-healing IT systems in an autonomous enterprise environment. Al-driven automation and DevSecOps improve team agility, reliability and customer service.

H1 EFFICIENT AND MODERNIZED ZERO-TOUCH ENTERPRISE

As part of their digital transformation journey, IT operations adopt more nimble processes with a virtualized, on-demand infrastructure and platforms. This results in greater efficiency, responsiveness and automation.

Let us explore IT business operations' key trends across the following domains:

- 1. Digital Experiences
- 2. Business Process as a Service
- 3. Al Ops and Automation
- 4. Agility and Innovation
- 5. Resilient Ops
- 6. Hybrid Cloud
- 7. Service Management

Figure 2. Business operations key trends across key technology domains



Source: Infosys

DIGITAL EXPERIENCES



One of the key trends in digital experience management is the shift from traditional, siloed channels to more collaborative and cognitive channels. The focus is to provide a personalized experience where channels are equipped with intelligence layer support to understand the user's needs and suggest relevant alternate options. This macro trend is possible by advancing more interactive channels and personalized context based on user preferences for different user groups within the same domain or subgroup. Individual experience configurations, combined with interactive channels that provide instant feedback, make the entire digital experience more effective.

The main factors influencing the digital experience space include conversational chatbots, a democratized user experience, personalized customer journeys and contextual interactions.

Trend 1 – Conversational customer service and experience

Enterprises once relied on traditional channels like e-mails, the web and SMS messages to facilitate the digital experience. But these channels were siloed, which forced customers to complete their interactions within each channel. The need for collaboration led to new communication channels like Microsoft Teams and WhatsApp Business, which removed the silos and created a consistent omnichannel experience. Demands for a personalized experience have led to more interactive conversations between customers and fulfillers through these channels. Powered by interactive chatbots and integrated across modern channels, traditional customer care centers are evolving into customer experience centers. A major telecom company built a cognitive chatbot solution in partnership with Infosys to provide automated query resolutions and better collaboration across their global tax audit team. For their chatbot system, Infosys implemented the multichannel IBM Watson with Genesys solution and, to modernize their contact center, they utilized Amazon Connect (an AWS CCaaS Platform).

Trend 2 – Micro feedbacks and nudges to continually enhance the user experience

Managing customer feedback and preferences via digital experience management fosters customer satisfaction and new business opportunities. The customer experience center is fast becoming a customer engagement center with proactive nudges, which combines the customer's data elements, past interactions and current preferences. This new customer engagement framework allows enterprises to address and resolve a customer's immediate needs in a timely manner.

Infosys partnered with a UK-based consumer goods company to reimagine the digital experience through their cognitive-first approach. Moving away from traditional channels like e-mails, the digital experience is now powered by the Live Enterprise Application Management Platform, along with Digital Brain, to bring in a proactive nudge framework for various personas. The intelligence is derived by the agents working on top of a knowledge graph, and the experience rendering is personalized for different roles.



BUSINESS PROCESS AS A SERVICE



Clients are quickly adopting the latest benefits of AI and the cloud. They now use predictive and cognitive process management to drive efficiency, effectiveness and the stakeholder experience. This allows organizations to understand their process landscape better, promote decision making and review their operating models from a fresh perspective.

More recently, enterprises have employed a more proactive, exception-based management approach driven by process discovery and automation solutions. These systems have enabled the early adoption of automated root cause identification and analysis. Now, decision support systems focus on the next best action/predictive process monitoring analytics and recommendations, which lead to the early evolution of proactive command centers for end-to-end process landscapes. Operating models are also impacted as enterprises move to industry platforms focused on touchless processing and enhanced customer experience, extreme automation/digital worker management and low-code, no-code business process management orchestration.

The H3 horizon map is moving toward automated process optimization with a focus on proactive risk and compliance flagging. Enterprises are adopting more intuitive bots, augmented reality (AR) assistants and deep-learning assisted business resiliency to shift to cognitive process management. Al will lead enterprises to explore cross-functional data exchanges, industry-specific, machine-learning (ML) trained virtual agents, and blockchain-based trust systems and processes.

Trend 3 – Industry data exchanges and vertical/enterprise outcome-based platforms

More enterprises are adopting stack-based solutions to address industry problems. Delivered as a managed service, businesses utilize a domain with digital LEGO blocks and an operations approach. Evolving from function-focused transaction platforms on the cloud, these industry platforms now focus on touchless processing and enhanced customer experience.

Industry platforms and exchanges will significantly improve the organizational stakeholder experience while accelerating process effectiveness. This will enable organizations to stay current on the technology roadmap while improving cost efficiencies in their IT spend and operations management.

Enterprises need to identify areas that can drive endto-end user experiences and business outcomes that can be moved to cloud-based industry platforms.

European mortgage providers are adopting digital mortgage platforms stacks as customer preference shifts towards digital and selfservice capabilities, with simple, transparent, personalized and consistent journeys in an omnichannel environment. These platforms deliver scale and efficiency through fully interconnected digital applications. Stater NV is one such industry platform, managing 1.7 million loans and a \in 310 billion primary residential servicing portfolio. It drives adoption as a European mortgage full-service provider with balanced assets across the mortgage lifecycle – origination, servicing and collection.

Trend 4 – Cognitive, extreme automation and digital worker management with a focus on risk and compliance

Enterprises are rapidly moving beyond rule-based automation and adopting Al/ML-based automation and managing an extended bot landscape. Digital is involved, so businesses are focusing on Al/ML-enabled monitoring and the prevention and control of risk and compliance. Companies have evolved from task, bot and robotic process automation (RPA) to extreme automation and digital worker management and will soon move to cognitive bots such as real-time, sentiment-based response systems, AR field-service assistants and automated process optimization.

Extreme automation, combined with decision-making effectiveness and a better understanding of outcomes, will continue to create an agile and evolving process landscape.

With the help of HumanWare assistive technology, we expect seamless interaction across AI and subject matter experts. However, organizations will need to identify key outcomes, engage in a re-imagined design model and start creating new ways of working enabled by these technologies.

The Covid-19 pandemic highlighted the significance of extreme automation as it helped enterprises reorient focus from efficiency to service recovery and business resiliency. Infosys partnered with a global healthcare devices major create a resilient and efficient BOT enabled process landscape to rapidly evolve into a cognitive and responsive finance organization using Al. On the first day of the pandemic outbreak, 97% of the 1,132 live BOTs were not impacted, demonstrating the effectiveness of the Infosys solution.

AI OPS AND AUTOMATION



Rapid digitization has influenced companies to reflect on their current strategy and explore a new, "always on" IT model. Customer transactions driven through apps and online portals require a highly available IT environment and the ability to handle large volumes of data. This demand for high availability extends throughout the entire ecosystem, including the infrastructure, network, applications and databases to ensure access to all stakeholders anytime, anywhere.

Today's IT ecosystem is dynamic, distributed and componentized, in other words, complex. In this context, the traditional IT operations model is unscalable and fails to deliver on commitments. Ops teams are now looking to AI to comprehend the data generated and derive meaningful insights to prevent outages, maintain ecosystem uptime and accomplish service assurance goals. As AI advances, AI Ops will run as sentient operations and autonomous systems.

We already have natural language processing algorithms that can identify IT service ticket trends and analyze the patterns to identify potential failures. AI/ML algorithms can now extract content from structured documents and comprehend text from images, and processing unstructured documents is not far behind.

Automation is the key to future success. Automation scripts will help build a digital workforce where a core set of humans are augmented by digital workers that can think, act and analyze.

Trend 5 – Movement from simple runbook automation to a sentient digital workforce

As organizations begin to adopt cognitive automation, they find that a digital workforce can perform cognitive functions to help them move toward selflearning autonomous systems. A repository of bots can help accelerate this adoption because of the varied functions they can perform – from sensing an anomaly to resolving the failure and learning from the episode to improve the prediction. The key to this acceleration is the ability of bots to interact across multiple RPA and non-RPA technologies.

Consolidated automation workflows drive a successful digital workforce under a unique identity to create a

digital twin of a human worker. This aggregation with the identity is also critical for auditing and tracing the actions of the digital workforce. The depth of the cognitive system capabilities, which are evolving rapidly, will define the acceptance and transition to these digital workers.

In partnership with Infosys, a leading European consumer goods manufacturer has embarked on this journey of building a sentient enterprise by leveraging three critical solutions from Infosys: **Digital Brain**, a technology that builds a knowledge graph to make sense of enterprise-wide data; Live Enterprise **Application Platform (LEAP)**, software that provides a cognitive-first dashboard to detect anomalies and predict failures; and **Infosys Cognitive Automation Studio**, which helps build an army of cognitive bots to leverage abilities from Digital Brain and LEAP.

Trend 6 – Ticket triaging, solution prediction and auto resolution

A critical task in IT operations is to service tickets that either report failures or user requests. However, improper routing and miscategorization of tickets are typical challenges facing IT, resulting in delayed mean time to resolve (MTTR). Previously, deterministic automation routed the tickets to the correct assignee based on defined rules. Today, we have solutions driven by AI that learn from historical data and identify the right category of the ticket based on the problem/ request details. These solutions enrich the tickets with appropriate information to aid in faster response and resolution, greatly reducing MTTR.

Today's systems currently rely on deterministic rules to identify the resolution path and corresponding automation, if available. While this is a step forward from the manual triggering of a relevant automation solution, the technology is still limited by defining the rule upfront for identification. New developments in Al are helping us predict solutions based on historical trends and knowledge artifacts. Once the resolution is identified, performing that action becomes just a matter of triggering the right bots. This evolved Al will help create, in essence, self-healing systems.

An Asian tax regulatory body and a client of Infosys used our in-house solutions, including an Intelligent Automation tool, to classify, enrich and route their tickets to the right support engineer more efficiently and reduce MTTR by 20%.

A support team of FINACLE, Infosys' banking solution, automated its ticket classification and analysis to identify top solutions. This implementation leveraging **Nia** is a selflearning solution that improves accuracy and relevance based on user feedback.

AGILITY AND INNOVATION



Today's rapidly evolving business and technology paradigms require enterprises to employ agility and innovation at a rapid pace. As businesses move toward a more collaborative and connected ecosystem, they will need to build a more responsive value chain both inside and outside the enterprise. Accordingly, enterprises must adopt specific processes within applications and operations to remain responsive and advance.

A new culture is emerging where design thinking and co-creation support a value-based delivery model. To sustain these business dynamics, rapid application changes are being delivered through DevSecOps and BizOps-based pipelines. While the business operations processes are becoming more standardized and digitized, they are also auto-discovered using AI techniques. App change delivery has shifted from IT to business users, thanks to low-code (LC) platforms.

Additionally, integrated decision support systems are evolving into more intelligent and autonomous systems that leverage serverless, container-based apps and provide omnichannel help to the end user via the web, mobile and edge devices.

To stay relevant, innovation centers are shifting from an enterprise center of excellence to a partner-driven, cocreated environment. The speed of delivering advancements is achieved by reusing entire gold standard process implementations and shifting from a traditional RPA to an industry-relevant bot ecosystem.

Trend 7 – Shift of innovation centers and rapid innovation delivery

With a fast-evolving ecosystem and advancements from crowdsourcing, businesses will inevitably embrace innovations beyond the enterprise walls. Enterprise-specific technology or business centers of excellence are still prevalent; however, a paradigm shift is happening to co-create the value with the non-enterprise entities. The partners in innovation have evolved from employees to service providers and now, to external entities and partners. These visionary networks are comprised of cross-domain, cross-technology, cross-region entities. They include businesses, open-everything communities and university research collaboration through private equity investors like The House Fund, as well as various niche technology providers.

Innovation labs are taking a broader approach, providing quicker proof-of-concept delivery and maturing into large-scale implementations. As such, it is now possible to have problem-focused innovation where businesses can explore newer arenas and deliver greater value at a lower cost. They bring on a dedicated innovation champion and a team that understands the finer details of co-funding, coingenuity, co-creation, co-delivery and co-benefits. A design-thinking approach in a lean, responsive culture helps foster advancements across the entire value chain. Enterprises are adopting a rapid experimentation-based approach leveraging open platforms like Kaggle and Unearthed and are using hackathons to promote collaboration and develop newer solution methods

Infosys partnered with one of the world's largest telecommunication service providers to help establish and anchor an innovation lab with its Living Labs offering. It delivered over 15 innovations in rapid joint-innovation cycles using existing Infosys solutions and developed a new IP. Some of the advancements include Al-driven stock replenishment, integrated supply chain, automated contract compliance testing, biometric security, real-time network visualizations, operation efficiency and rapid business value.

Trend 8 – BizDevSecOps to drive agility in business operations

The traditional touchpoints between business requirements and IT application delivery are changing. While embracing agility, enterprises are also adopting DevSecOps practices to deliver continuous app changes and ensure security compliance. The need for continuous value delivery is challenging businesses to adopt BizOps principles, using a more integrated and intelligent decision support system. Thanks to advancements in technology and the commoditization of day-to-day ML, decision systems have become more autonomous. Development in the infrastructure space has propelled container-based applications hosted on the cloud and, at the same time, manifested them as serverless-as-a-service apps.

Enterprises are making an effort to support web, mobile and edge device-based application delivery through DevOps principles. Omnichannel apps are reducing the time to deploy changes while supporting end-user operations. A left shift of application change doers – from developers to business requirement owners – helps deliver changes quickly and without information loss. LC platforms enable businesses to manage their apps without relying on their IT teams and are cutting down the entire cycle time.

Power app platforms now support LC solutions and serverless app deployment and allow power users to define the apps for enterprise use. If enterprises must embrace this change, they will need to reskill their domain experts to deliver quicker app changes using such technical advances. Additionally, the entire non-core support ecosystem (where the business functionality is core and technology is non-core) needs to be fully automated and, in essence, invisible to take app change productivity to the next level.

Infosys collaborated with a major automotive company to develop continuous integration, continuous delivery (CI/CD) pipelines that enable them to deliver app changes more quickly to end users. Beyond build and test automation, Infosys also built security check and compliance automation as part of the DevSecOps process. Real-time status updates, as well as infrastructure and business metric tracking, have helped the client make faster app release decisions and execute them without interruptions.

RESILIENT OPS



Availability, business continuity, security, compliance and performance management are top considerations when building resilient operations. Since the COVID-19 outbreak, businesses have been forced to implement digital technologies and move to the cloud to remain viable.

In the '90s and early part of 2000, many organizations developed siloed IT-centric operations resiliency through disaster recovery planning/testing and disparate application and infrastructure-level event monitoring/reporting. Fast forward to today, where enterprises are now implementing proactive monitoring combined with automation to provide self-healing capabilities.

With the advances in AI and ML applications, the focus has shifted to building a strong business enterprise through predictive and unified solutions that cut across applications, infrastructure and business processes.

To become adaptive and sentient, an organization must reach beyond enterprise boundaries and connect with ecosystem partners and edge computing devices such as supply chain and healthcare value chain that require a cognitive and connected enterprise.

Most established software product vendors help organizations become more robust by upgrading their offerings to cater to future needs. Still, several new vendors bring niche AI/ML and domain-specific capabilities to the market.

Trend 9 – Al Ops-driven site reliability engineering and edge resiliency

Establishing a well-tested disaster recovery backup for data and applications is a necessity for organizations. Many industry verticals are moving from on-premise only to a combination strategy using hybrid cloud on the hosting side. Several organizations are also shifting to the reliability of cloud-native applications and adopting a multi-cloud strategy.

To ensure business operations availability and continuity, organizations have also established proactive event monitoring and alerting through various tools at application, infrastructure and network levels. We now see more companies adopt AI Opsbased intelligent correlation, self-healing actions and site reliability engineering (SRE) principles. In the future, as edge computing devices are integrated into business processes, their resiliency will be a top priority.

Traditional market leaders like Splunk, Zabbix and Nagios are enhancing their AI Ops capabilities in alignment with this trend. Established tech companies like AppDynamics and ScienceLogic are augmenting their AI Ops self-healing capabilities and improving processes-centric operations, while products like KubeEdge, Microsoft's Azure Stream Analytics and SAS Analytics for IoT are helping to bring ecosystem and edge stability.

Infosys utilized the site reliability engineering capabilities of its LEAP platform to help its client, a large consumer packaged goods company, proactively monitor 20 businesscritical applications across three geographies using its Al Ops engine and cognitive-first automation bots to enable self-healing and availability improvement.

Trend 10 – Integrated and ecosystemlevel performance management is the way of the future

Application performance management providers helped enterprises monitor end-to-end applications across IT asset layers by assessing infrastructure availability, service responses and synthetic transaction monitoring. Now, their focus has shifted to monitoring end-to-end live enterprise business services management by constantly probing the enterprise for friction and taking intelligent actions. This requires mapping business processes to underlying applications and infrastructure assets through comprehensive configuration management.

The future of IT and business resiliency will be performance management across a partner ecosystem based on industry vertical-focused solutions like consumer retail, supply chain, healthcare, energy and utilities segments with services hosted in a multicloud environment.

Infosys partnered with a large soft drinks manufacturer develop IoT-based industrial vertical resiliency to provide real-time plant visibility. This transparency resulted in increased plant throughput and profitability: they boosted their efficiency by 45% to 60%, removed data duplication and reduced paperwork and manual effort by 70%.

HYBRID CLOUD

As digital technologies advance, enterprises continue to move toward a hybrid multi-cloud. The workload migration to the cloud requires certain remediation to adhere to cloud standards. However, the advancement of cloud-native solutions such as containers will enable seamless migration of workloads between a private and public cloud. The applications will have no cloud lock-in, and enterprises will be able to migrate workloads seamlessly without additional effort or downtime.

There will also be a need for hybrid multi-cloud management platforms that can provision, orchestrate and manage workloads across the cloud. Key capabilities will be the implementation of software engineering principles to empower developers and CI/CD pipeline builders, an advanced observability platform to manage the diverse platform landscape and amplified automation using self-healing techniques. These platforms will use AI/ML capabilities for effective event management, create meaningful insights and help build autonomous systems.

With workloads spreading across private cloud, public cloud and SaaS applications, users will require direct access to corporate data from their enterprise-owned and personal devices. Rather than routing traffic to a central VPN gateway, they will use a combination of software-defined networking and a wide-area network to provide secure access from their user devices to cloud-hosted applications with committed performance.

Trend 11 – SRE-driven, multi-cloud management to achieve operational efficiency and improved service availability

We see a paradigm shift in managing cloud operations as SRE-driven management offers more efficiency, productivity, better customer experience and improved availability.

Traditional operations followed an ITIL framework for managing incidents. The L1/L2/L3 support structure based on experience and domain knowledge was created to solve issues and incidents based on their complexity. Moreover, the support was more towercentric with regards to network, compute and storage.

SRE brings together engineering aspects in five operational dimensions: engineering-focused teams, a collaboration between Dev and Ops teams, unified observability across platforms, automation and platform architecture to drive enhanced application availability. SRE adoption will bring higher efficiency and drive higher reliability of cloudhosted applications. SRE also plays a large role in accelerating digital transformation and enhancing the user experience. It powers emerging digital solutions like digital virtual assistants, AR/VR-based troubleshooting and agentless service desks. SRE-based hybrid cloud operations help businesses to innovate faster, launch new products and offerings with a higher pace and reduce stress on service desk/IT teams.

Organizations need to focus on three key areas: (1) enable resources for SRE in terms of training and certifications, (2) adopt next-generation observability and automation platforms and (3) redefine the operations structure and processes aligned to the SRE way of operations.

Well-orchestrated cloud management platforms enable SRE-driven operations and empower developers to publish faster releases. Advanced observability platforms transform reactive, alertbased monitoring into pre-emptive event logs with trace-based observability. The Al/ML-powered platform performs real-time event correlation, noise suppression, anomaly detection and potential root cause to precipitate faster resolution. A leading U.S.-based fast food retailer implemented SRE to improve operational efficiency and application availability by partnering with Infosys. The program included implementing an automation and observability solution, re-skilling their existing team on full stack technologies and driving the SRE culture through coaching and training programs. The program delivered a 30% reduction in incidents, a 25% decrease in selfhealing incidents and reduced environment provisioning time from two days to two hours.

Trend 12 – Cloud-native technologies adoption to build platforms for accelerated innovation and speed to market

We are seeing enterprises adopting container platforms for developing their next generation business applications. Containers decouple underlying operating systems and infrastructure and enable developers to build applications on any platform. The technology also offers seamless migration of applications across the cloud without any remediation or downtime.

Applications were once tightly coupled with the operating system and underlying infrastructure, which required significant remediation, testing and validation effort to migrate applications to the cloud. Furthermore, any patching/update in an operating system required retesting of applications. When applications are containerized, there will be no cloud lock-in, and applications will move seamlessly across the cloud. These efficiencies will help achieve real-time cloud brokerage capabilities.

Container technology is quite promising for developing and hosting next-generation digital applications. With built-in redundancy, containers offer extremely high-platform availability – a critical business requirement. Container solution eliminates the application's dependencies on underlying cloudnative technologies, enabling enterprises to move applications across hyperscalers without worrying about compatibility and migration costs.

Enterprises need to build capabilities to provision, manage and orchestrate container platforms. The containerized platform should be integrated with a DevOps toolset to ensure developers can deploy their codes seamlessly without facing the complexities of the underlying container platform.

A leading semiconductor manufacturing company in the U.S. and the world's leading financial management company partnered with Infosys to deploy its container platform to modernize their platforms to host and develop digital solutions. The solution helped these businesses improve their new service launch frequency by leveraging cloud-native technologies offered by various hyperscalers. It also helped solution architects create and develop application deployment blueprints in a much more automated manner bringing reusability and speed.

SERVICE MANAGEMENT



Service management is about selecting the right products and vendors to plan, design, deliver, operate and maintain the overall lifecycle of IT and business-enabler services. Their goals are to reduce costs, improve efficiencies and ensure the best customer experiences while maintaining business agility, reliability and innovation. Service management involves moving toward adept processes like DevSecOps that enable faster release cycles. Team structures are becoming product-centric, with a combination of business sponsors, application developers and operations specialists making decisions collectively in responsive sprints to enable better collaboration. Google introduced site reliability engineering to apply an engineering mindset to the operations' context, which is now adopted by several organizations.

Trend 13 – Business outcomes become the new measure of service management

One of the key trends in service management is the move from IT SLAs to business KPIs. Most organizations face the watermelon effect. From the outside, their IT metrics are green, suggesting everything is positive. But from the inside, the business looks red, indicating end customers are not happy, and business is suffering as a result. To combat this watermelon effect, tools like HP BSM software can help define, monitor and manage business SLAs. AI Ops tools like Moogsoft and BigPanda correlate IT metrics to business KPIs and predict and forecast what can go wrong so that proactive interventions can be made.

A large insurance client of Infosys had frequent issues with on-time adjudication of claims. Although their IT SLAs were being met, they were penalized for the issues. To alleviate the problem, Infosys partnered with the client to implement a business control center using our Live Enterprise Application Management Platform to define, monitor and manage their business KPIs. As a result, they could take metrics such as their claims auto adjudication rate and correlate it with underlying IT disruptions, which helped prioritize and resolve any issues and meet their KPIs.

Trend 14 – Going beyond IT service management to enterprise service management

Enterprises have seen the benefits of processes like ITIL that take a service-centric approach to IT functions to ensure that all lifecycle aspects are addressed systematically. Service management tools like ServiceNow and Remedy currently support enterprise corporate functions like HR, finance and facilities and are evolving to support more complex processes like supply chain, logistics and others that go beyond enterprise boundaries. One of the largest privately owned engineering firms implemented enterprise service management by collaborating with Infosys. The client's business and IT functions now operate out of one consolidated cloud-based platform based on Infosys' ESM Café built over ServiceNow, which has made them a fastmoving, ready-for-anything live enterprise.





Autonomous IT business operations – a critical factor for better business results

As customer-centricity becomes critical, providing a digital experience is no longer a differentiator. Instead, enterprises must look to deliver intelligent experiences where the user has greater control and flexibility. Business and IT operations assume significant importance in this context as they can exponentially increase the synergies that can be derived across digital transformation programs and enable a perceptive customer experience.

With rapid strides made in IT business operations thanks to technologies such as AI, no-code platforms, cloudnative platforms and extreme automation, the emphasis has moved from cost reduction to business agility and customer experience. Enterprises will shift focus to business outcomes, which in turn will push enterprise management services into delivering business services with KPIs. Infosys' expertise in IT business operations and our ongoing efforts put us in a credible position to guide enterprises through this complex yet necessary journey.





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