Enterprise IT organizations are increasingly balancing legacy/heritage management investments, and new, modern estate investments with public clouds, DevOps, Agile, and microservices adoption.

Unlocking the Potential of the IT Environment Through Enterprise Intelligence

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Introduction

Digital transformation (DX) is driving fundamental change in most business models and ecosystems. These digital competencies require a new level of professional business acumen within IT for "running IT as a service business." This new IT operational strategy transitions IT from an engineering-driven to a service delivery organization with a new DX operating/financial model. Successful CIOs are creating a viable and competitive IT services business specifically designed for DX.

Digital business is driving a wide variety of applications, business services, and data sources deployed on diverse platforms, including on-premise, private cloud, hybrid, public cloud, and multicloud environments. These facilities are being accessed directly by end users using a wide variety of handheld and mobile devices. Providing competitive consumer-like responsiveness to end users without slowdowns, interruptions, or crashes is a critical success factor for IT organizations to meet ongoing digital business imperatives.

Technology providers and business IT organizations have transformed as businesses adapt to a global, highly integrated world in which products and services must be developed, deployed, and retired quickly. IDC calls this world the 3rd Platform of computing — a combination of contractable services, IT organizations focused on partnership/service management as well as durable asset creation, and highly adaptive/integrated information technologies across a spectrum of products and platforms.

Part of this transformation has been a change in approach from the IT-as-an-asset steward to IT-as-a-service provider and a corresponding increase in the need for service management software to manage the way IT solutions are procured, provisioned, operated, and retired. This change is mirrored in other disciplines, eventually converging into a need for IT enterprise intelligence.

Technology suppliers must respond to enterprise expectations for unified management across multiple clouds. As the scope and scale of cloud environments expand, savvy enterprise customers are taking special interest in how cloud management solutions unify monitoring, provisioning, workload migration, IT operations analytics, capacity planning, and consumption monitoring/chargeback. Customers seek solutions that can support a wide variety of sources and can provide persona-based visibility and control for IT operations, DevOps, and line-of-business (LOB) decision makers.

Enterprise customers have become increasingly aware of the value of open source–based innovation. Particularly in areas such as container management and configuration automation, enterprise customers expect vendors to provide commercial support for open source technology as part of a comprehensive management solution.

This IDC Vendor Spotlight takes a closer look at how Enov8's "Enterprise IT Intelligence" management platform allows enterprises to better understand and manage their complex IT environment– and IT fabric–associated services and operations.

AT A GLANCE

KEY STATS

By 2022, global public cloud servicers spending will grow to US$300 billion, from a base of US$118 billion in 2017, at a five-year CAGR of +20.5%.

WHAT'S IMPORTANT

Cloud delivery is a growing point of interest for infrastructure and operations teams as they consider the level of overhead they are willing to support and the efficient delivery of certain IT operations management (ITOM) capabilities that software as a service (SaaS) offers.

KEY TAKEAWAY

Understanding and managing architecture, availability, and service quality across the rapidly evolving technology stack continue to be an important requirement, although they are difficult to achieve.

Harnessing the Potential of the 3rd Platform and Innovation Accelerators

IDC expects the global 3rd Platform (big data/analytics, cloud, mobility, enterprise social) and innovation accelerators (3D printing, augmented/virtual reality, cognitive/artificial intelligence, internet of things, next-gen security, and robotics) market to grow to US$4.1 trillion by 2022 from a base of US$2.6 trillion in 2017, according to IDC's *Worldwide Black Book 3rd Platform Edition, 1H17.*

The origination of the 3rd Platform has a disruptive impact on nearly every aspect of the DX of a business. In addition, it shakes the very foundations of how nearly all central IT departments can, will, and should be organized and managed in the future. There are three major market forces, which are both complex and sometimes counterintuitive, that will drive this change:

- Central IT needs to compete directly with externally provided 3rd Platform services.
- Central IT needs to integrate closely with 3rd Platform services.
- Central IT needs to broker, monetize, and market combined IT and 3rd Platform IT services.

Essentially, central IT is no longer the sole source provider of IT services to a captive user base. IT must compete with third-party service providers on both price and quality for the delivery of IT technical services — and will often lose.

Yet the impact of the previously mentioned three market forces creates another phenomenon and opportunity that impacts IT not as the technical provider of IT services but as the business manager of IT services. With this disruption, IT must manage the coordinated and optimized delivery of a large basket of services not from a purely technology perspective but rather from a business perspective in which the following key management concerns can be addressed:

- Is the enterprise portfolio of IT services efficient and effective for DX initiatives?
- Are service providers working together in an integrated manner?
- Are costs of the service portfolio competitive and becoming more efficient?
- Is each IT service delivering the DX business value for which it was intended?
- Is the investment in the 3rd Platform creating a DX competitive advantage?

The opportunity for IT in this new 3rd Platform world is to relinquish the role of central IT as the sole provider of IT services and become the broker, integrator, and manager of the breadth of the IT service portfolio. This implies that all investments in IT are managed as an enterprise portfolio of IT services and that the financial and competitive optimization and contribution of this portfolio to DX become among the primary goals of the new central IT. Managing the business of IT answers the following key questions from the LOB:

- How did IT contribute to our business and DX initiatives this year and how do we measure it?
- Is IT competitive with the outside market and what are our direct competitors doing?
- How much will cloud, big data, mobile, and social media cost us and save us?
- Have we optimized our resource allocation and operations in line with DX strategic business plans?
- Which IT applications are creating the most DX value and which ones are destroying value?
- Where are the best DX opportunities to apply new 3rd Platform IT innovations?
- How are we brokering essential ecosystems services from external markets?
- How are we measuring IT performance against our DX business goals?

The imperative is that IT management "runs IT as a viable service business." Table 1 shows the changes that occur during the transformation of traditional IT to an IT service business.

TABLE 1: *Change from Traditional IT to an IT Service Business*

Traditional IT	IT Service Business
IT business model	
Central IT primary provider of services	Multiple, competitive providers of IT services: LOB, IT, 3rd Platform, and outsourced
IT decisions made centrally	Decentralized LOB/IT buying decisions
Finance pushes centralized control of IT	IT costs spread across consumers of IT services
IT organized around functional cost centers	IT organized around IT business-oriented DX services
IT portfolio management	
Project management office (PMO) responsible for delivery of portfolio of IT projects	Product management and PMO leveraged for demands of enterprise service portfolio
Poor definition of IT services	Rigorous definition of all types of 3rd Platform and IT services
Little portfolio management	Optimized management of enterprise service portfolio
IT focus on improving/automating business process	IT managing and delivering DX-oriented services for varied business outcomes
IT financial management	
IT costs recorded as an overhead selling, general, and administrative expenses (SG&A) cost center	IT costs recorded within product/service costs that they support
IT uses corporate general ledger (GL) for financial accounting	IT uses service-based cost model as a subledger to manage the IT business
Finance to allocate IT costs based upon cost centers	IT customer consumption of IT services tracked and charged based on usage
Costs outside of central IT not consolidated	"All in" IT costs consolidated into an enterprise cost model
IT product management	
Unclear accountability for IT services with focus on app development and operations	Product/service managers empowered to drive service value creation
Little coordination between central IT and "shadow IT"	Effective coordination between all service providers, including central IT

Services delivered from on-premise technical teams	DX services delivered from IT, LOB, and third-party service providers
Core information technology infrastructure library (ITIL) processes for efficiency of service desk, incident, configuration management database (CMDB), problem, change, and release	Any IT process prioritized for effective service delivery and customer satisfaction
IT performance management	
Large IT projects linked to ROI and business goals	All IT services linked to shared goals of business, end customer, and ecosystem
IT value creation poorly tracked through metrics	IT value creation tightly tracked across all service providers through 3rd Platform KPIs
Poor communication of IT contribution to the business	Strong communication of IT contribution to the business

Source: IDC, 2017

Critical Issues in Running IT as a Service Business

Running IT as a viable service business requires that IT creates value by providing competitive services to its customers in which the value perceived and received by the customer exceeds the cost of the service and supersedes any equivalent or alternative use of those funds. The critical issues for IT services management (ITSM) originate within the traditional IT model that handicaps the answers of IT to the fundamental business questions that identify the optimum value of IT and enable IT to be run as a viable service business:

- What services does IT provide?
- What does each service cost?
- What value does each service create?
- Who is consuming each service?
- Is each service competitive?

Causes of ITSM Critical Issues

ITSM issues arise as IT services are not defined, tracked, and measured:

- **IT services not defined**: The IT service portfolio is at the heart of designing a new service-based IT business model. Many companies cannot define their services and have not fully transformed their processes from a cost center–centric organizing principle to a service-based organization. With many IT services located outside of central IT, they remain nonintegrated within a consolidated enterprise portfolio.

- **IT service costs not defined**: Aligning IT costs to the service portfolio requires shifting IT costs from the general ledger and other sources to a form of a subledger that is organized around IT business-oriented services. This DX imperative requires strong support from both IT and financial management.

- **IT service cost consumption not tracked**: IT service consumption is based upon high-level allocations of IT costs and not actual consumption of IT services. Once the service costs are determined, costs can then be absorbed and charged back based upon actual consumption metrics.

- **The value of each IT service not measured**: The value or benefits of most large IT projects are calculated initially in the business cases that form the basis of the capital budgeting process. However, the monitoring of the achievement of these benefits within actual operating costs is usually not performed.

- **IT focused on projects not products/services**: IT has made great progress in developing advanced PMOs, which plan and track IT project activities. However, there is no ownership or accountability to the life cycle, value, risk, and longer-term cost of each IT service.

- **IT performance not well measured**: Traditional IT metrics originating within the context of 2nd Platform are proving insufficient in measuring the effectiveness of 3rd Platform and DX initiatives. The new rules of IT measurement require tight connection of technology's contribution to target business outcomes, with only thriving IT organizations currently able to step up to this demand.

Critical Challenges to Run IT as a Viable Service Business

Running IT as a service business for DX is founded upon elevating key business management practices previously lacking in the traditional IT business model. These best practice concepts, methods, and techniques are prevalent across successful industries and need to be reapplied to IT. The four key business practices that need to become the foundational pillars of the new IT business model that runs IT as a service business are (see Figure 1):

- IT service portfolio
- IT financial management
- IT product management
- IT performance measurement

FIGURE 1: IT Services Management — Challenges in Running IT as a DX Service Business
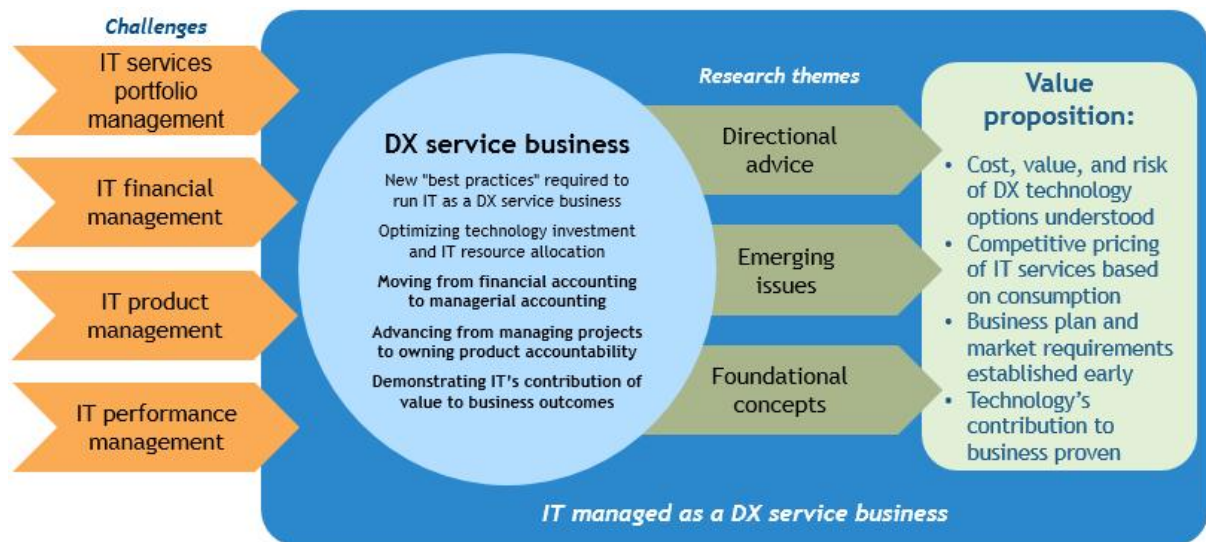
Source: IDC, 2017

Key Challenges

The sections that follow discuss the key challenges that must be overcome to transform IT from the traditional business model to a DX service business with the need to incorporate the four foundational business practice pillars.

Leveraging Service Portfolio Management in Steering IT Through DX Waters

Many IT organizations have dabbled in defining their IT services and creating an IT service catalog, but until the major IT business decisions are fully focused on optimizing the cost, risk, and value of the entire IT service portfolio, it is literally impossible to ensure that the IT resource and asset allocations are funded at an optimum mix. The challenge is to push this IT services initiative "over the hill" in which budgets, costs, projects, monthly reporting, and customer consumption are all aligned with the services that they support.

Advancing Managerial Accounting to Optimise and Express Financial Contribution of IT

One of the more difficult tasks in building out the IT service portfolio is to align IT costs to the life cycle of almost all IT assets. This requires building a service-based cost model in the form of an IT services subledger in which costs are accumulated and distributed to technical services, IT business services, customer-facing services, or ecosystem-facing services that incur the cost. Managerial accounting techniques can be used to analyze the efficiency, competitiveness, and value contribution of each service within the portfolio.

Using IT Product Management to Ensure That IT Services Deliver Expected Value

Once services are defined, they must be managed toward their goals. In all types of industries, product managers (PMs) usually carry the responsibility to steer the product or service through all life-cycle phases to achieve the business goals. For example, Agile methodology is now requiring product owners to drive IT use cases. IT customers are requiring that IT's contribution to business goals is articulated and measured. DX is now requiring the creation of an IT product management capability that ensures the DX business outcomes are being achieved. This challenge to steer each technology product or service through the innovation, integration, and incorporation phases of the product life cycle can be resolved by instituting product management capability.

Measuring IT Performance to Ensure IT Delivers Expected Value

DX demands performance and reward systems that ensure IT and the use of technologies are in line with objectives of the enterprise. Goals and metrics are required to set targets that optimize the cost, risk, and value of the IT service portfolio to demonstrate how IT is contributing to the financial goals of the company and to measure the customer satisfaction, product performance, revenue creation, and technical debt. This challenge is being resolved through new DX service business incentives, key performance indicators (KPIs), and performance management systems that are in place to measure the contribution of IT to the business.

In summary, the four new IT business practices that are needed to run IT as a DX service business are expressed in Figure 2 as the delivery framework for the IT Service-Based Business Model.

Figure 2: Delivery Framework for Running IT as a DX Services Business
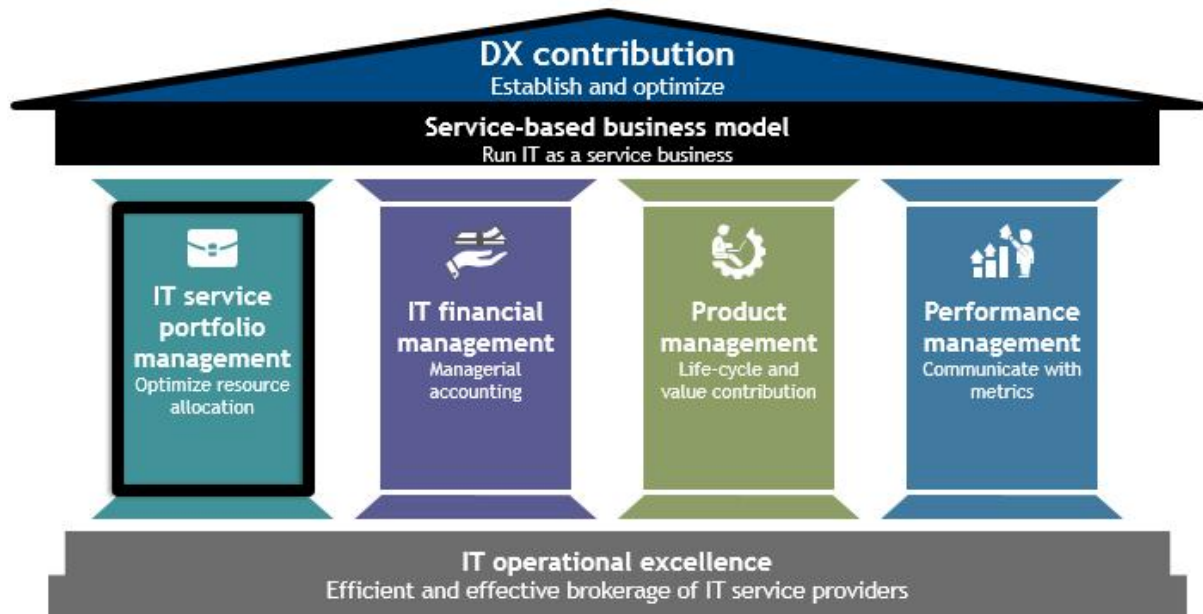
Source: IDC, 2017

The Need for an Integrated View of Services and Operations Management

Given the impact DX has on every aspect of the organization, enterprises recognize they do not possess the skills or resources to plan, implement, and manage their strategic DX initiatives on their own. However, the sense of urgency to act has increased, and speed and cost continue to be driving factors. Buyers should partner with digitally transformed service firms that are active in key ecosystems and able to work with the entire organization from the CEO to end users and beyond, bringing knowledge, intelligent automation, and proven platforms to bear in transforming this next wave of organizations.

IDC predicts that by the end of 2019, worldwide DX spending will reach US$1.7 trillion worldwide, increasing 42% from 2017. By 2021, at least 50% of the global gross domestic product (GDP) will be digitized, with growth driven by digitally enhanced offerings, operations, and relocations. The capability to use data to drive new business model development and create robust digital business process capabilities that operate with speed, scale, and agility becomes a must for any enterprise that wishes to succeed in the digital economy. As a key enabler of DX, the utilization of cloud technology has been continuously increasing. The usage of multiple cloud providers is increasingly common and growing to be the norm. IDC predicts that by 2020, over 90% of enterprises will use multiple cloud services and platforms. As a result, cloud resource management and integration of resources across cloud platforms will grow to become critical capabilities at IT organizations driving DX at enterprises.

The distributed and agile nature of cloud platforms brings the challenge of managing IT resources and ensuring the delivery of business value in this new paradigm. As the previously mentioned framework depicts, to be able to run IT as a service business in the cloud era, it is necessary to understand the services and products across the overall stack, cloud or on-premise, and plan/provision/measure accordingly. This requires an integrated view of the services and operations across the entire IT environment

Overview of Enov8 Solutions and How They Helps Address the Aforementioned Issues

The foundation of achieving optimized performance for IT services management is clear, and the information in which the environment the IT operates is reliable. Enov8 offers a platform that helps enterprises address the key challenges in achieving optimized IT performance through a solution that:

- Enables the comprehensive mapping across IT environment resources and relationships

- Streamlines IT operations through standardization and automation

- Improves release collaboration (and coordination) across teams, projects, and programs

- Simplifies service management by promoting lean methods and self-service

- Uplifts "delivery insights and optimization" through "cross–tool–chain" information aggregation methods

By having a comprehensive and complete view of the assets, resources, and the interdependencies of the overall IT environment, decision makers are empowered to approach the IT operations in a more holistic way. Resources can be better allocated across various IT service portfolios, production life cycle can be managed with higher predictability, and performance can be tracked and managed more effectively.

Figure 3: Illustration of Enov8's Solutions Portfolio
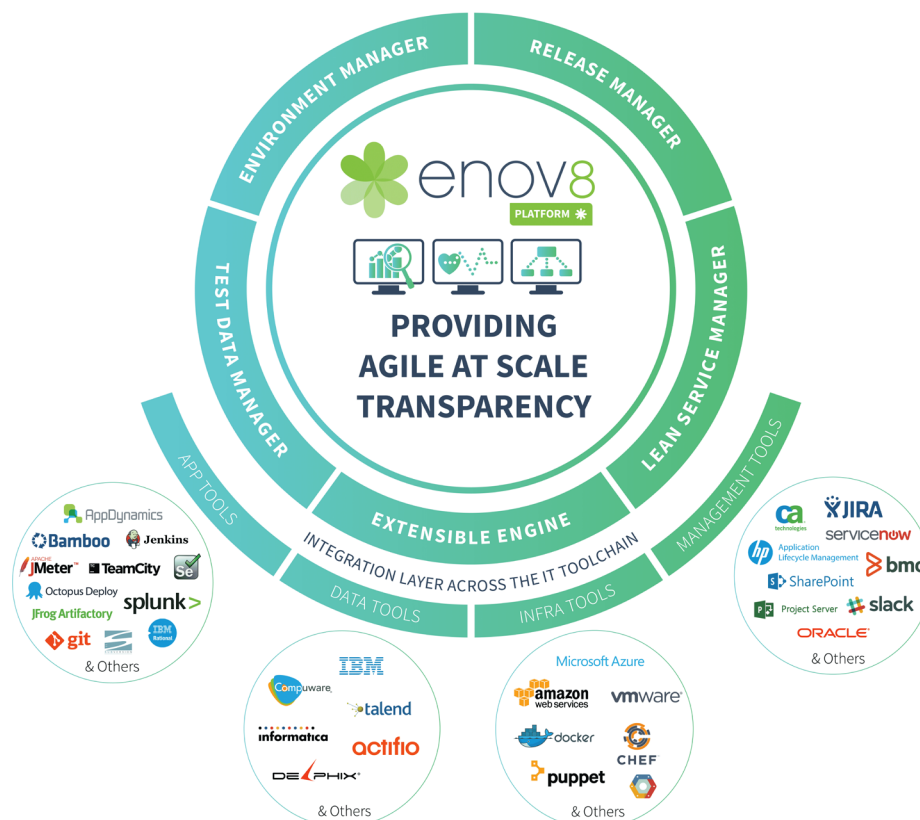
Source: Enov8, 2018

Customer Use Cases

One of the key financial institutions in Australia provides services such as investment, superannuation, wealth management, retirement income products, investment platforms, financial advice, and private banking. At the time of engaging Enov8, this large financial institution was running hundreds of major IT programs per year that crossed thousands of systems and business processes using bespoke tools and spreadsheets. The need for rapid product change meant the organization was continually in a reactive mode building new nonproduction (test) systems that were often not fit for purpose (causing project disruption) and rarely decommissioned (resulting in significant overspend).

Key Challenges

The key challenges faced by the financial institution included:

- Significant overspend
- Lack of visibility of complex IT environments
- Nonstandardized, often manual, operations
- Lack of stakeholder view
- Manual reporting and processes

Client Requirements

To address the challenges, the organization was looking for a solution that would help it better understand its computer systems and the broader IT environment and have analytical insights (such as demand, usage, and operational behavior) to facilitate effective decision making and optimize IT expenditure.

Solution

In collaboration with Enov8, the client undertook a proof of concept that focused on rapid discovery, environment modelling, and out-of-the-box governance methods. Initially starting with one business unit, the client quickly identified that the Enov8's solution was superior to other solutions the client evaluating in parallel and felt the tools' flexibility with respect to scale and ease of integration made Enov8's solution a logic fit for an organization with a complex IT and DevOps toolchain. After a successful evaluation, the decision was made to roll out Enov8 globally and have Enov8 manage all nonproduction assets and operations.

The key benefits are:

- **Insight into unused assets**: Decide with confidence what can be decommissioned without disrupting users.
- **Reduction in infrastructure**: Save on infrastructure costs for assets not being used.
- **Reduction in licensing**: Save on licensing cost for assets not being used.
- **Less service overheads**: Save on your services footprint.
- **Delivery acceleration through service and operational optimization**: Deliver effectively and efficiently.

Insights Enov8 has provided were:

- Identify overspend.
- Identify service issues.
- Identify compliance hot spots.
- Identify runbook automation versus manual.
- All of the aforementioned are actively being monitored and improved on.

Conclusion

DX is driving fundamental changes in business models and ecosystems. In response to market disruptions, businesses are more reliant on technology to bring about productivity improvements and business innovations. As the adoption of 3rd Platform technologies creates an IT environment that is increasingly diverse and dynamic, the IT departments of organizations need to accordingly shift from being the sole provider of technology to becoming services providers that coordinate, integrate, and manage the arrays of IT products and services required to deliver business value.

The transition brings critical challenges in defining the IT services portfolio, aligning costs to the life cycle of all IT assets, managing IT products to achieve business goals, and monitoring and managing of IT performance. Overcoming these challenges are key to turning from the traditional model of IT to a service-oriented model that propels digital transformation. By offering a platform that enables the decision maker to have a comprehensive and complete view of the resources and their interdependencies within an IT environment, Enov8 enables a more streamlined and optimized state for running IT as a service business.

Message from Enov8

Enov8 is an "Enterprise IT intelligence" platform that "umbrellas" your IT landscape, providing both at-scale visibility and control. It is a solution that allows you to better understand all the moving parts (applications, data, infrastructure, people, process, and tools), understand their inherent relationships, and orchestrate them collectively.

Enov8 has a number of modular solutions that complement each other and directly support organizations IT service objectives. This includes solutions for IT and test environments management, lean service management, data management, deployment management, and enterprise release management

For more details on Enov8, please visit https://www.enov8.com
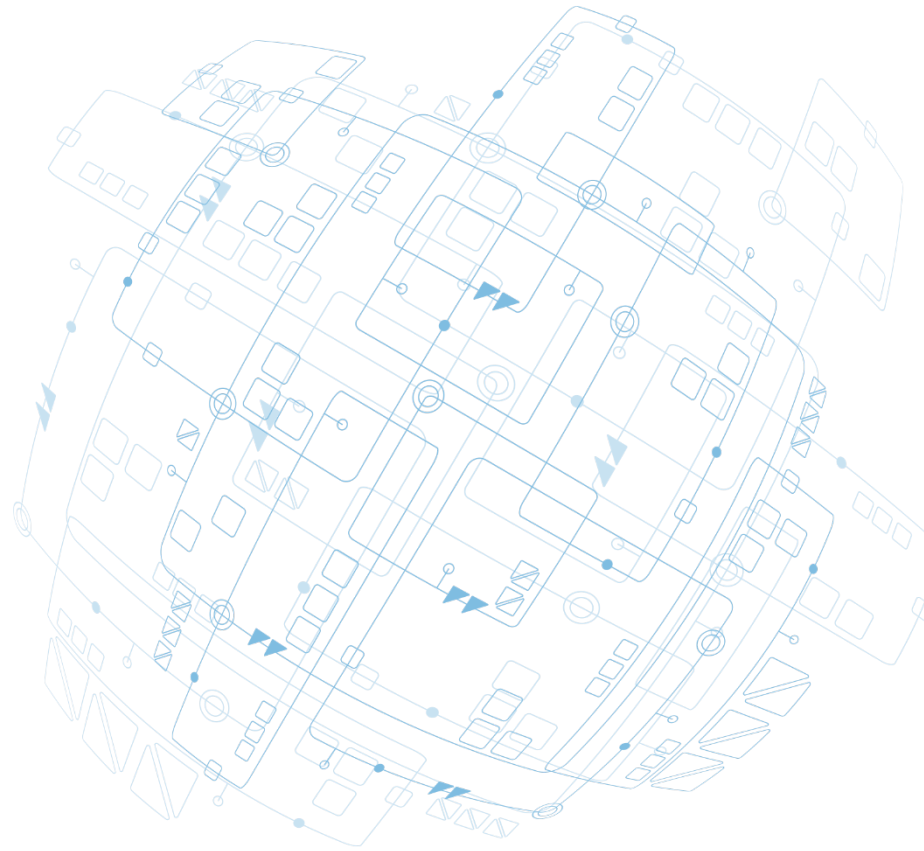
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