



How AlOps is proactively helping organizations stay relevant

A need to support digital transformation without creating a new and more expensive "IT legacy" is a multi-dimensional challenge that many organizations struggle to sort through and COVID-19 has further altered and compounded it. As a result, the rules of business are being redefined at an unprecedented pace; this disruption is not short-term and will have lasting systemic impacts. Organizations must adapt and transform to handle the additional challenges of today's working climate. Ernst & Young LLP professionals conducted a Physical Return and Work Reimagined (PRWR) survey June 2020 revealing that COVID-19 had a transformational impact on employees and business. The responses provide a snapshot of the key trends the pandemic has brought to various industries.

More than 50% of IT decision-makers have experienced a disruption in their business¹

This revelation has presented us with a chance as much as a challenge: a chance to segue from a growth economy to a value-based economy marked by prioritizing long-term value and the needs of organizations.

Application of digital technologies such as artificial intelligence (AI) offers the potential to drive market differentiation, market focus and is immensely valuable in helping companies adapt to these trends. AI has achieved widespread adoption among large organizations and new FinTech companies across the global financial service industry.

According to the Global AI in Financial Services Survey insert January 2020, jointly conducted by the Cambridge Centre for Alternative Finance and the World Economic Forum and cosponsored by Ernst & Young LLP, research shows that within two years the use of AI technology is projected to increase dramatically into a wide variety of use cases that not only reduce costs but also enable the creation of new revenue streams.

Al for IT Operations (AlOps)

The pandemic has unequivocally silenced any remaining doubts about the necessity of digital transformation to business longevity. In fact, its impacts continue to accelerate seismic changes and dramatic investment reshaping organizations and their operations.

Reimagining work - Everything on the table

Business disruption and planning

52% Expanding their plan to transition business/workforce to other productive areas

Digital tools and technology

56% Moving to a greater focus on cloud-based technology

Learning and skill development

41% Amending competency frameworks and developing remote leaders and manager capacity

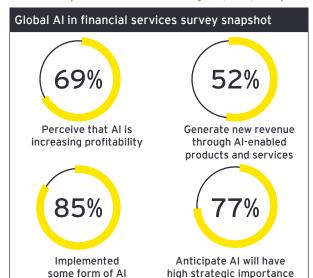
Workforce cost

42% Reviewing organization and operating models

Remote work strategy

56% Enhancing technology for remote work, idea sharing, communication and knowledge sharing

Source: EY Physical Return and Work Reimagined (PRWR) survey



Source: Global Al in Financial Services Survey, Cambridge Centre for Alternative Finance and the World Economic Forum, 2020

within the next two years

Organization leaders are already working on enhancing their operating models to account for these challenges by having businesses turn to technology to gain insights into the data. Because many IT operations decisions hinge upon the ability to analyze data and recognize patterns, there is an impetus to enable operational Intelligence capabilities and the implementation of in-house or third-party AlOps tools can be useful, even when applied to narrowly focused domains

¹Source: 451 Research "Coronavirus flash survey June 2020," accessed 9 September 2020.





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Many organizations still use silos and rudimentary toolsets, combined with manual processes, to manage and operate their IT ecosystem. The cognitive load to correlate and extrapolate any insight or root cause from the enormous amount of data is prohibitively difficult to resolve with traditional IT operations and monitoring technologies. This inability to find the root cause of a problem related to the IT infrastructure can result in data loss, financial loss, reputational loss and more. In order to avoid this, the enterprise infrastructure management in today's digital world needs to be modernized.

Organizations continue to resort to reactive methods of managing the IT landscape and are waiting for an impact or an incident call from an end user. The traditional operational toolsets are no longer capable of handling the new age digital environment on various fronts and executive leadership is finding it difficult to handle the challenges that digital transformation brings to IT monitoring and operations.

More than 35% of IT organizations use more than 30 toolsets to manage their IT infrastructure, applications and cloud¹

Challenges

Exponential uncorrelated data growth

- Speed and complexity have exploded the volume of IT events and Incident data that IT operations has to process
- Difficult to correlate and extrapolate any insight or root cause due to silos and rudimentary toolsets
- Monitoring tools do not cut across the multiple data types required for useful insights
- ► IT teams have spent years purchasing overlapping tools incapable of sharing data
- Silo IT operations are making it difficult to deliver business insights from operations data

Siloed IT operations

Increase IT complexity/no single pane of glass

- Organizations use various overlapping toolsets to manage their IT infrastructure, applications and cloud environments
- Rising complexity due to the increasing number of things to manage, siloed operations support stacks, dynamic and programmable infrastructures, increasing data volumes

Complex IT infrastructure

- Transformation challenges are particularly acute in legacy organizations with large heterogeneous IT environments vs. born-in cloud entities
- With current pace of change, fragmentation and technology debt is driving IT costs higher long-term, despite the supposed benefits of the application programming interface (API) economy by introducing new risks as it relates to management across a more dynamic and federated model

Disconnected workforce collaboration and new talent

 Geographically distributed teams have led to a lack of real-time collaboration and increased difficulty in managing and maintaining accountability

Tighter IT budget and scalability challenges

- Cost and time to deliver new features stays the same while customer expectation continues to rise
- Organizations are locked into fixed cost models



¹Source: Gartner 2019 I&O Summit



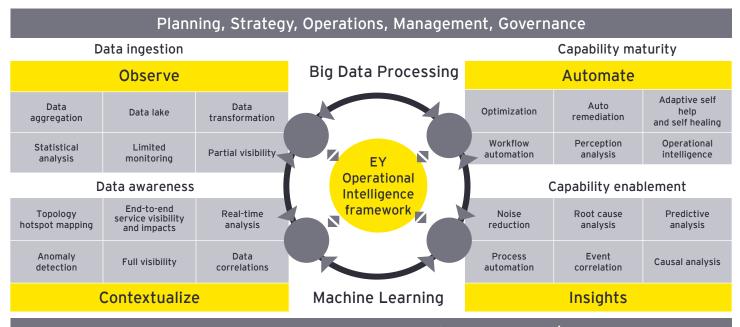
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Operational intelligence is leading the way for AlOps

Digital transformation is a business-driven investment strategy that will vary by client. Successful institutions will increasingly be providers of personalized insights and products. Therefore, there are significant implications for data management and the pace of change for product development and market launch. 451 Research found that 43% of organizations reported a decline in their competitive position due to the poor performance of IT infrastructure and operations management. To combat this, organizations must change their thinking regarding how IT operations and monitoring align with the scale of the demands and the changing landscape.

EY operational intelligence service offering enables an organization's journey from ITOps to AlOps by laying the foundation for a highly mature and automated operating environment. Our operational intelligence (OI) framework enables dynamic collaboration and the ability for teams to swarm in a non-linear work environment to self-direct and self-evolve, and ultimately, improve intelligent operations. With Al in ITOps, organizations can establish truly integrated services that will transform the technology landscape through IT modernization and NextGen operating models. data generated by IT system platforms can be turned into meaningful insights by eliminating complexity through process optimization and tooling enhancements. This enables our clients to achieve the highest level of AlOps transformation maturity while exponentially improving operational efficiency for the enterprise. The resulting outcomes are intelligent insights that use automation to provide continuous improvements and continuous delivery with real-time responses.

Our offering enables self-directed teams and comprehensive service intelligence that can effectively manage today's complex enterprise environments, consistently deliver a superior user experience, and rapidly realize significant operational efficiencies. The EY OI framework is based on our deep knowledge of I&O and experience supporting our clients' development of their end-to-end AlOps strategies to support the scalable ingestion and analysis of the ever-increasing volume, variety and velocity of data. The framework enables the concurrent use of multiple data sources, data collection methods, and analytical and presentation technologies.



Agile, ITSM, DevSecOps, SRE, Permitting Process, CI/CD

The OI offering is a key component to drive EY Modernized Operations (ModOps) Marketplace, which is a set of solutions that provide clients with easy, compliant and service-based access to the modern IT operations industry. The ultimate goal is to advance clients' organizations, processes, culture and technology through innovation.



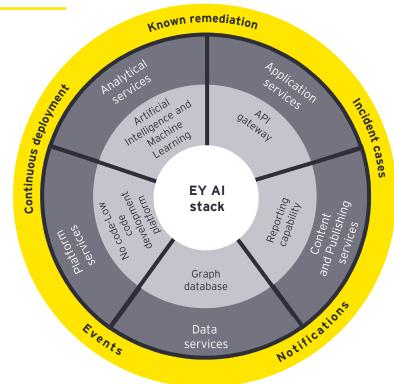
A pragmatic approach to AlOps

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Organizations can continue to rely on rules-based approaches to operations management but not for long. Investments and improvements need to be made on how we do business today to incorporate Al that drives ITOps automation.

Enabling our clients to create an agile based technology-agnostic architecture to address their ITOps transformation challenges is key to EY operational intelligence delivery.

Based on organization's requirements and the KPIs that need to be impacted, we can help create a custom IT operations and management solution with OI capabilities that can unlock automation, accountability and self-assurance whether building the capability in-house, through a vendor relationship or utilizing a managed service provider.



What are the benefits?

Cost optimization

- Reduce cost in unleveraged, high value resources, provide economic value in cost avoidance
- Across organizations, AlOps is found to increase both operations' leanness and product differentiation
- Value-centric business services

Service oriented and platform enabled

- Orientation of complex product centric services
- Increased transparency into service delivery and drivers
- Focus on efficiency enabled by AIOps
- Key metrics that aligns to value chain and value streams while benchmarking performance
- Shifting to automate initiatives that meet predefined criteria



Strategy

- Business development financial analysis on new products, market segments and customer categories
- Cost and utilization of resources
- Return on investment (assets, expenses, etc.)
- Improve real-time business operations

Operational excellence

- Advanced analytics using AlOps and ML
- Automation and intelligence
- Self healing, predictive learning
- Impact avoidance, early warning indicators
- Enhanced data visibility and contingency analysis

Improve resiliency

- Prioritization of work based on business criticality and risk
- Increase velocity while driving stability
- Reporting that informs priorities based on established thresholds
- Single pane of glass for resiliency

Market leaders will transform, others will transition.



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