IDC ANALYZE THE FUTURE

IDC ANALYST BRIEF

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2020 exposed a need for new intelligence frameworks to drive better business decisions in times of uncertainty. The future belongs to organizations that make intelligence a strategic priority, but it will take more than a technology investment to get there.

Analytics Have Become Essential to Business Survival and Future Competitiveness

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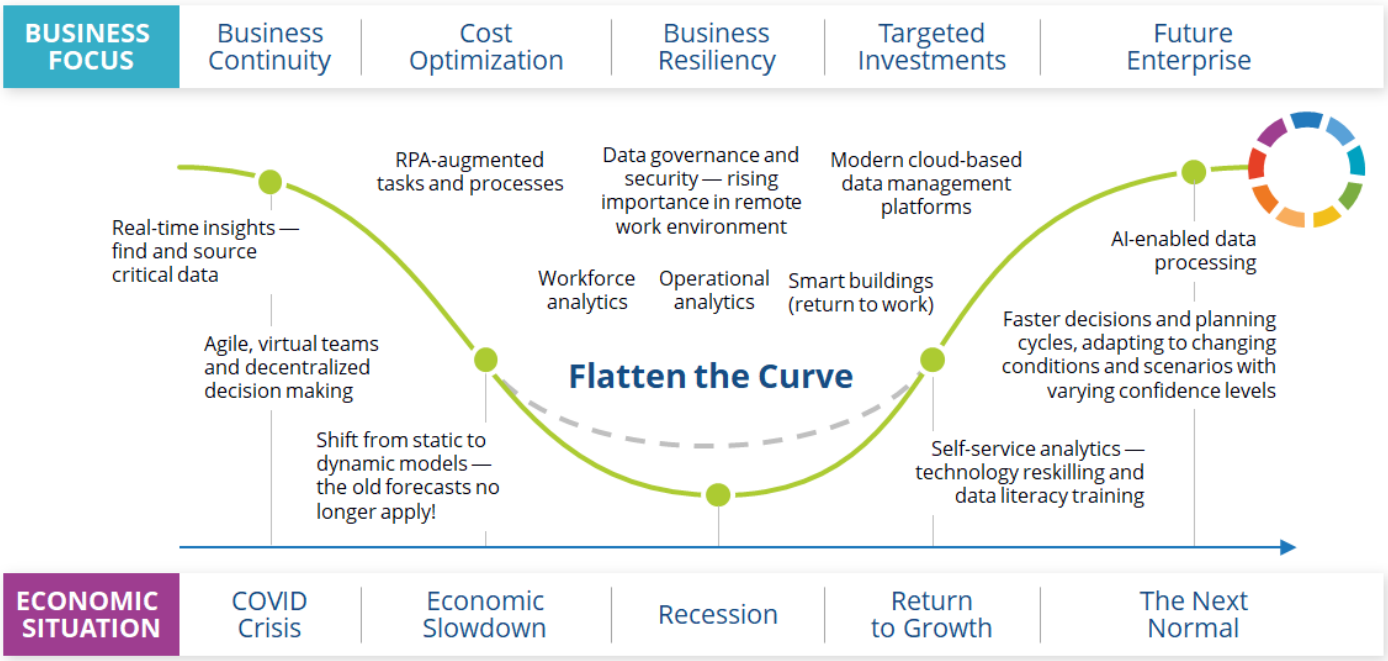
Written by: Jennifer Hamel, Research Manager, Analytics and Intelligent Automation Services

FIGURE 1: ***Analytics Drive Enterprise Intelligence and Adaptability at Each Stage on the Road to Recovery***



Source: Market Analysis Perspective: Worldwide Analytics and Intelligent Automation Services, 2020 (IDC #US45733320, September 2020)

Introduction

The COVID-19 pandemic has underscored the importance of digital transformation in the eyes of CEOs across all industries. Yet CEOs still face a difficult decision in this challenging economic environment: Continue to prioritize cost cutting or invest in technology to flatten their organization's recessionary curve. Each company faces unique challenges on the road to recovery and toward the digitally transformed end state that IDC describes as the future enterprise. Many companies are influenced by external forces, while others are driven by internal organizational and cultural dynamics. Part of IDC's future enterprise agenda is the future of intelligence, where organizations become learning enterprises built on evidence-based cultures. During a time of uncertainty, real-time information from all internal and external sources, combined with historical learning and knowledge, enables organizations to rapidly replan and reforecast.

Figure 1 illustrates the role of data, analytics, artificial intelligence (AI), and automation at each stage of the recovery — from responding to the immediate crisis to improving technology solutions, processes, and skills to learn and adapt better to the next disruption. First, in the early days of a crisis, companies focus on continuity, which requires getting access to the right data and making decisions at a much more rapid pace to keep business moving. For many companies, shifts in organizational and data strategy can be as important as, if not more important than, technology investments. Next, during the economic slowdown, with cash flows and workforce productivity constrained, automation is a key lever to increase the output and consistent execution of tasks and processes at a lower cost. Then, in the recession, as businesses overcome the initial phase of the crisis and stabilize financials, the focus turns to business resiliency, or the ability of an organization to adapt to changing circumstances while maintaining its central purposes. Analytics provide crucial visibility into employees and operations as work is distributed across virtual environments, also underscoring the importance of strong data security and governance protocols. Then, as economic activity recovers, businesses ramp up investments again, accelerating their shift to modern, cloud-enabled data and analytics platforms and exploring new types of intelligence solutions involving the Internet of Things (IoT), computer vision, natural language processing, and knowledge graphs.

Recovery does not mean a return to a pre-crisis state; rather, it is the beginning of a new type of economy — the next normal — in which rapid replanning and reforecasting will become routine and the annual planning process will be a relic of the past. In an IDC study completed in early July 2020, 65% of the 663 participating organizations worldwide stated that the COVID-19 pandemic exposed gaps and shortcomings in their analytic and AI/machine learning (ML) models. This result is only surprising in not representing an even greater percentage of organizations. Models based on historical data became suddenly obsolete in their ability to predict the future. Revisiting model assumptions has become crucial. However, many organizations do not have the processes in place to track assumptions.

IDC FutureScape: Worldwide Future of Intelligence 2021 Predictions forecasts that by 2021, external shocks and resulting uncertainty will drive 75% of Global 2000 companies to discard existing decision models and focus on a new framework for decision environments to improve resiliency. Exponential growth in the volume of data from digitized operations and interactions will spur investment in new decision environments that enable more rapid ingestion of data from owned systems as well as external data or content providers; functionality to perform rapid scenario analysis, risk, and opportunity assessment; and frequent forecasting and planning. Additionally, within this framework, more employees will be tasked with making data-driven decisions, requiring investment in data literacy and analytics skills.

As clear as the intelligence needs of the next normal appear, getting there is another matter entirely. Prior to the pandemic, businesses had invested heavily to incorporate intelligence technologies into their strategic priorities. According to IDC, worldwide spending on big data and analytics software, hardware, and services neared $200 billion in 2019. Starting over with completely new decision environments may seem unrealistic, if not ill-advised. Many organizations still have not realized the full value of their previous analytics investments because of challenges with adoption spanning data, technology, and skills that were frequently exacerbated by siloed processes and projects. Success — even survival — in the next normal will require a more thoughtful, holistic approach to pivot to the right technology solutions and processes so that the next crisis might be more bearable.

Benefits

Continuing to invest in analytics capabilities, despite current economic and resource challenges, will keep organizations on the path toward the future of intelligence, which IDC defines as an organization's capacity to learn combined with the ability to synthesize the information it needs in order to learn and to apply the resulting insights at scale to gain a sustainable competitive advantage or an ability to fulfill the organizational mission. This definition incorporates several familiar capabilities and value propositions. The desire to synthesize information is not new, the desire to learn is not new, and the need to deliver insights at scale is not new. However, treating all three capabilities as a cohesive enterprise capability remains elusive for most organizations.

It is enterprise intelligence that is starting to define the future winners. Organizations that are able to harness the power of their data-driven culture, the data literacy of their employees, and the processing power of their technology are showing greater resiliency in today's pandemic-affected world. They are also better positioned for the eventual recovery and for redefining the future enterprise. Examples of organizations that invested to increase their enterprise intelligence as part of digital transformation initiatives over the recent past abound across industries, inspiring commitment on the part of most CEOs and C-suite executives to make becoming a more data-driven, intelligent organization a top priority for the next five years.

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Considerations

What differentiates intelligent organizations is not simply access to or ownership of more data than their competitors or better analysis of this data. To separate themselves from their competitors, truly intelligent organizations will need to focus on cultivating the ability to continuously learn at scale and to explain outcomes based on that learning. Ultimately, the winners will be those able to use this learning to adapt faster than their competitors.

Technology investments alone will not be enough to accomplish this. Businesses will also need to address internal cultural and organizational issues, such as siloed data and knowledge management, misaligned priorities and incentives across business units, mistrust in data or models, inadequate skills, and fear of the unknown impact of new technology on individual roles. A trusted services partner can provide advice and implementation support to help create the strategic, technical, and organizational foundations for enterprise intelligence that will last long after the project is complete. For example, agile analytics teams, consisting of data scientists (either internal or from a third-party provider) and subject matter experts, can help organizations move faster to respond to enterprise intelligence needs, from defining (or redefining) the business problem to sourcing and integrating the right internal and external data, updating prediction models, running scenarios, and creating dashboards that highlight business-critical information.

Conclusion

Enterprise intelligence is an essential tool for business resiliency that will enable businesses to become better, and more adaptable, learning organizations in the future. Businesses need to find ways to prioritize analytics initiatives, even while the pandemic persists, to avoid being on the wrong side of the digital divide once the current public health and economic situations recover. Long-term success will require addressing data, technology, people, and processes to transform enterprise intelligence systems.

About the Analyst

Jennifer Hamel, *Research Manager, Analytics and Intelligent Automation Services*

Jennifer Hamel is a Research Manager for IDC's Worldwide Services team, responsible for the Analytics and Intelligent Automation Services research program. In this research, Ms. Hamel covers the entire life cycle of services related to adoption of analytics and intelligent automation technologies, which include information and data management, BI tools- and analytics application-related services, advanced analytics, big data, and cognitive/artificial intelligence services.

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IDC Research, Inc.

5 Speen Street
Framingham, MA 01701, USA

T 508.872.8200

F 508.935.4015

Twitter @IDC

idc-insights-community.com

www.idc.com