genpact

The future of decision-making: augmented intelligence

What happens when you combine data, analytics, and artificial intelligence (AI) with human judgment? Augmented intelligence – by which the analytical power and speed of AI takes over most of the data processing. With this approach to AI-powered analytics, augmented intelligence guides human employees to make more informed and smart decisions at speed.

Not long ago, analytics was considered a behind-the-scenes advisory function. Today, it has reached a level of maturity wherein analytical insights and data-driven decisions underpin our everyday software and processes. So, how do you realize its potential in your enterprise?

Augmented intelligence can transform decision-making, which is why it has captured the attention of business leaders across a variety of industries. To be successful, enterprises must develop partnerships that combine both technological and industry expertise. In other words, create a culture of industry-led augmented intelligence. When augmented intelligence is industry-led – and tied closely to the unique needs and nuances of each business as a result – the opportunities are endless.

Unfortunately, few know how to connect people, processes, and technology to realize the benefits of augmented intelligence at scale. Many aspire to reimagine the employee and customer experience with AI-powered analytics but rarely realize its full potential.

Creating a recipe for success

If you think about analytics like cooking, then data and technology – such as AI and machine learning – are fine ingredients, but you need experienced chefs to make an outstanding dish. The chefs in this scenario are your data scientists, data engineers, and people with industry expertise. Only with their guidance can you realize the power of augmented intelligence tailored to your industry

Equally, you need to have the right models and processes in place. You can plug data into AI to create new analytical models and uncover predictive recommendations, but these models do not exist in a vacuum. They have inputs and outputs that impact the rest of your business, which you must closely govern.

Put simply, if you're investing in analytics and AI, think beyond data and technology. An industry-led approach to augmented intelligence is the most impactful. You also need to consider the paradigm shift in how humans and machines will work together. Only then will you find your recipe for success.

Filling your talent pool

There have been significant advances in business analytics over the years, yet applications are not always practical. Efforts to harness the ever-growing volume and variety of data within an automated process – the industrialization of analytics – is revealing gaps in the talent pool.

Though there are many data scientists who can spin extensive webs of data into theoretical models, there aren't many who can translate a model into a scalable reality within an enterprise.

A decade ago, there was a talent group – mainly statisticians – with one set of skills in the back office. They would build

models to come up with probability distributions and develop a model. The model would then be handed off to the IT team, who would develop it for deployment.

Today, the volume of data has grown dramatically. With the rise of AI, the process has evolved far beyond statistical models, and we can now sort through data patterns. Perhaps most notably, the people working with data and technology have changed. You're likely to find two skill sets: industry experts with deep business knowledge and technology experts well-versed in data, analytics, or AI.

Combining the two skill sets to create a bilingual who can speak the language of both industry and technology is crucial. That said, a true bilingual is often difficult to find.

But why does it matter? Well, if a project has 15 industry experts but no data engineers, the chances of developing a successful analytics model are slim. For example, a US bank worked for two years to deploy a single production model. However, the banking specialists who developed the model lacked the data engineering skills to scale it, so other possible deployments stalled.

When looking for an augmented intelligence partner, start the bilingual conversation as soon as possible. This combination of industry and technical expertise – from data science to big data engineering and AI – will be crucial to successfully embedding advanced analytics into core business processes.

Becoming data-driven

Many business leaders want their enterprise to be data-driven. They have mounds of data available but struggle to turn this data into actionable insights.

The beauty of augmented intelligence is that it blends the strengths of humans and machines. It augments human instinct with smart algorithms to deliver predictive insights at speed. These insights can help redesign business functions, spot customer behavior patterns, and unlock strategic opportunities leading to increased compliance, better experiences, and revenue growth.

Intended to enhance human cognitive abilities, augmented intelligence is different from automation. In the future,

most processes will run without human intervention. However, there will always be instances that require human instinct.

For example, think about an aircraft autopilot. In modern aviation, the autopilot can operate independently, or couple with a navigation system to fly preprogrammed - but you still need a pilot for takeoff and landing. In an ideal world, the autopilot system would incorporate human knowledge, experience, and intuition. The result would be human capabilities enhanced and extended through augmented intelligence.

To fully appreciate the potential of augmented intelligence in analytics, you must change your mindset. The goal is not to create a partially automated process. The goal is to create an entirely new process - in a world that is predominantly automated but designed to accommodate and enhance human expertise.

Looking to the future

In modern businesses, almost all employees are knowledge workers. Yet many enterprises struggle to provide the right set of tools to support them. In the era of information overload, employees need and want to make fast, data-driven decisions.

Augmented intelligence can help by examining data to uncover patterns and correlations at scale. This scenario requires feedback loops to improve upon algorithms and

make sure that when things don't happen as expected, there are mechanisms in place for understanding why.

The future of augmented intelligence hinges on a transition into a new way of working and thinking. Blending data, analytics, and AI is a critical - and necessary - place to start, but there are limits to technology without talent. Success requires the right mix of human instinct with machine intelligence.

As you develop your augmented intelligence strategy, consider these five steps:

1. Develop and seek bilingual talent to harness a variety of expertise that underpins an industry-led approach

2. Think through change management to ensure a smooth adoption of new and better ways of working

3. Connect your technology and business strategy to ensure you have proper governance over your human and machine workforce

4. Migrate data and analytics to the cloud for increased agility, flexibility, and scalability

5. Develop white-box algorithms that can diagnose issues if things aren't working as they should

With this approach, you will be able to develop a future-proof analytics capability and approach to data-driven decision-making. And, because many enterprises are already on their augmented intelligence journey, there's no time to waste.

About Genpact

Genpact (NYSE: G) is a global professional services firm that makes business transformation real. Led by our purpose - the relentless pursuit of a world that works better for people - we drive digital-led innovation and digitally enabled intelligent operations for our clients, guided by our experience reinventing and running thousands of processes for hundreds of clients, many of them Global Fortune 500 companies. From New York to New Delhi, and more than 30 countries in between, we connect every dot, reimagine every process, and reinvent the ways companies work - because transformation happens here.

Get to know us at Genpact.com and on LinkedIn, Twitter, YouTube, and Facebook.