



At-A-Glance Guide from
Empyrean Benefit Solutions

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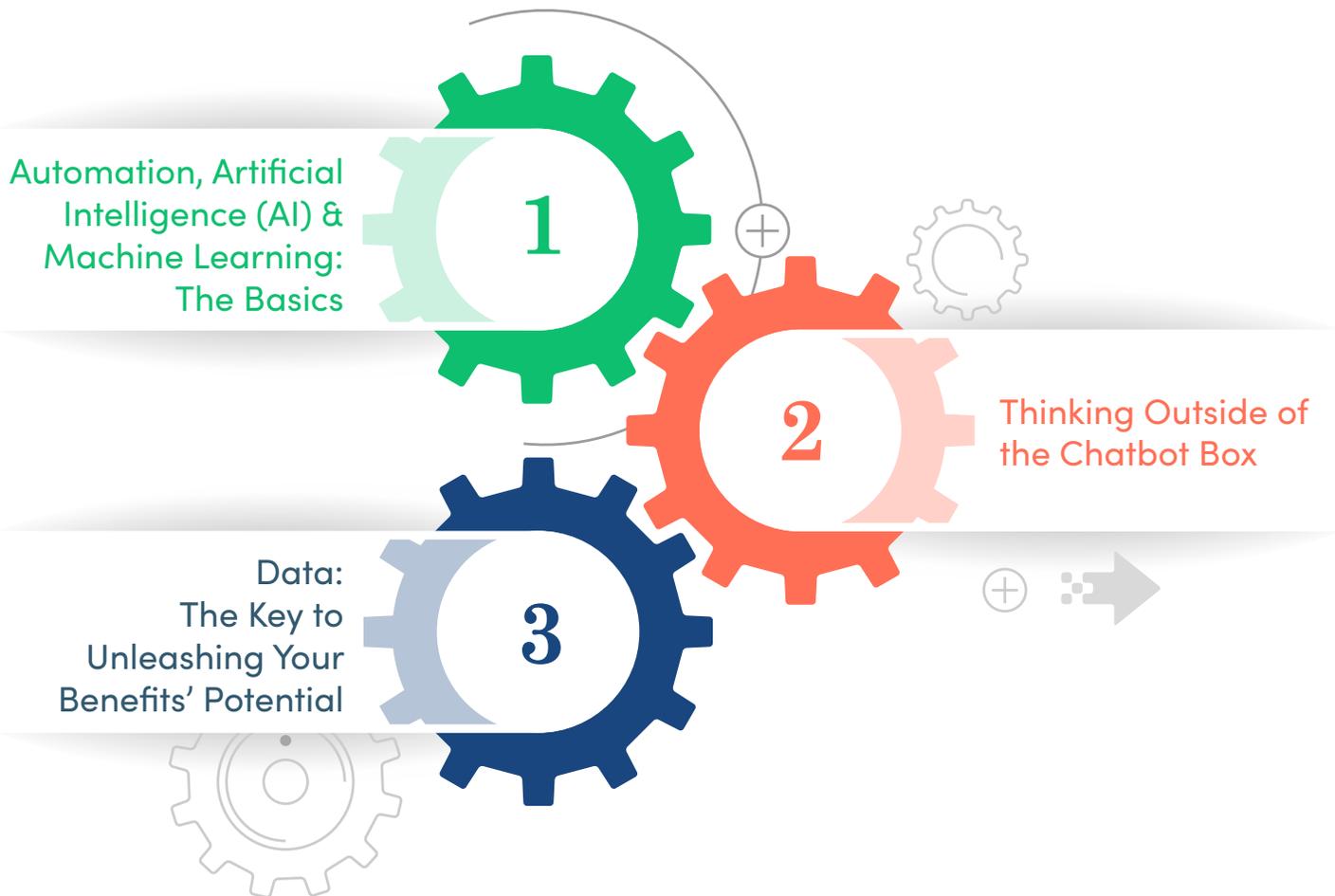
Analytics & AI in HR:

Leveraging Data to
Take Control of
Your Benefits Strategy



EMPYREAN

CONTENTS



INTRODUCTION

Breakthroughs in data analytics and machine learning technology are changing how we live, work, and even experience benefits and access health care when needed. While near infinite data is available, properly leveraging it presents a wide range of challenges that HR is expected to resolve. Without the right support, bringing together benefits data, technology, and employees' needs can be a complex juggling act.

Meanwhile, encouraging employees to become better educated and more engaged with their benefits remains a top concern for leading employers. Poorly engaged participants can equate to wasting benefits spend and technology investments, and leads to dissatisfied employees who can't value the sizable benefits investment you make for their wellbeing.

How can HR harness the true potential of data analytics and AI to realize a measurable return on your investment? What do data analytics and AI have to offer employees, and the benefit leaders that manage their programs? And how can HR take advantage of these technologies to future proof their benefits strategy and ensure their success?

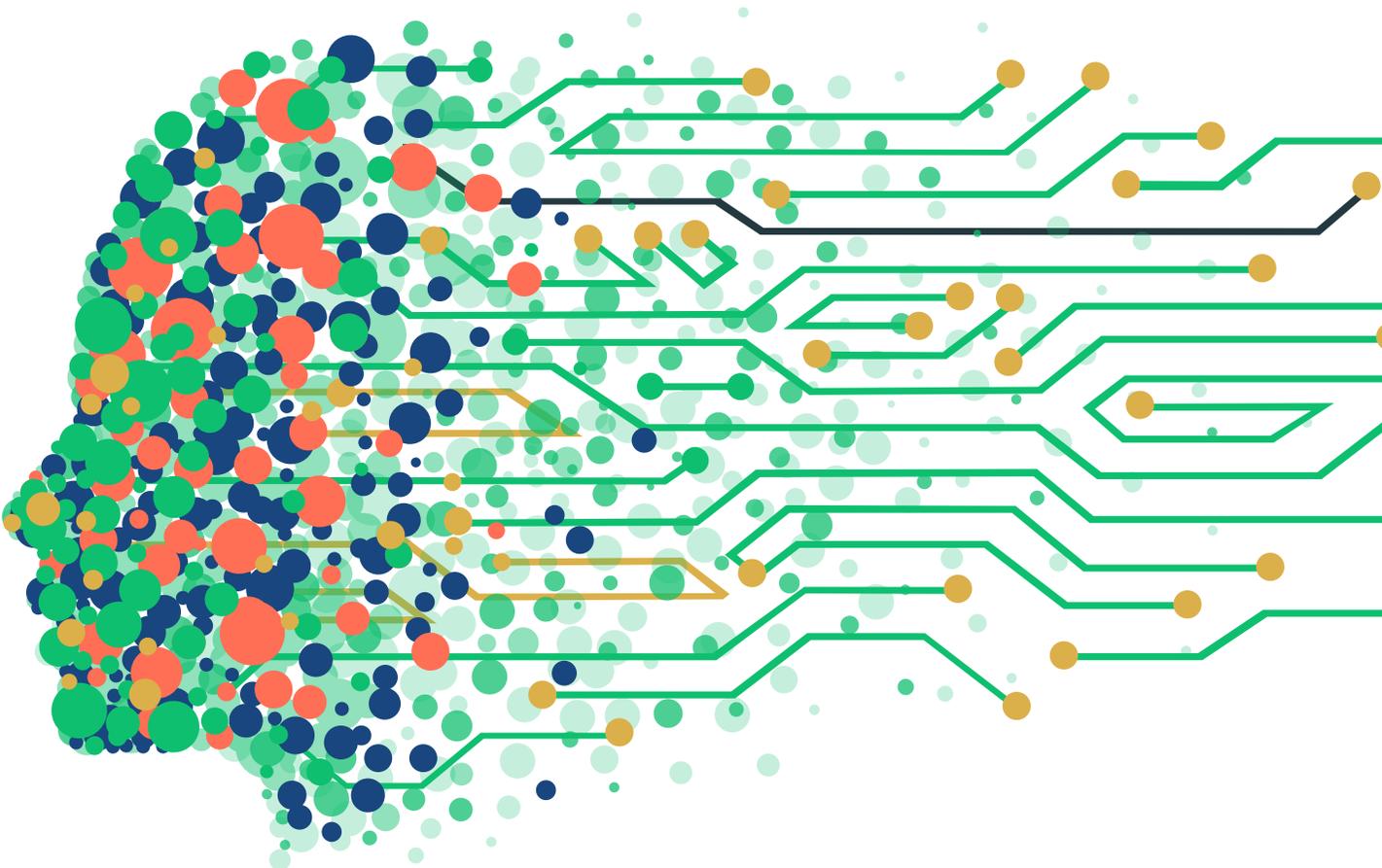
Consider this all-too-common scenario: Your employee is facing yet another open enrollment decision. They're feeling the typical confusion and stress that plagues 67% of employees when researching the best benefits for their family in the upcoming plan year.¹ They login to their benefits portal and prepare to enroll – but they're anxious and scratching their heads about where to start.

How can intelligent technology best support your employee at this crucial moment?

This At-A-Glance Guide explores the impact and value of data analytics, AI, and machine learning technology on today's employee benefits programs. Read on to learn the most effective ways to leverage the latest advancements in data science and achieve better outcomes for your employees, their families, and your business.

1

Automation,
Artificial Intelligence (AI) &
Machine Learning:
The Basics



1 | AUTOMATION, ARTIFICIAL INTELLIGENCE (AI) & MACHINE LEARNING: THE BASICS

Automation, artificial intelligence, and machine learning are changing the way many organizations do business – but what does this mean for HR’s undeniably *human-centric* work? The reality is AI is quickly becoming a part of normal, everyday life both at home and in the office.

Contrary to some fears, the increased use of technology and AI in business does not mean the end of humans (or HR) in the workforce: While AI is expected to eliminate 1.8 million jobs by 2020, this technology has also been predicted to *create* 2.3 million more.²

Automation makes headlines for disrupting industries and eliminating some jobs (such as factory or warehouse workers being replaced with robots), but the concept of the human employee is far from becoming obsolete. Instead, the very nature of work is shifting away from repetitive and physical tasks (food preparation, production, and office administration, for example) towards work that is more complex, creative, or that requires social and emotional intelligence (engineering, education and training, and business and financial operations are among the occupations least likely to be automated in the future).³ In fact, 60% of employers believe that their employees’ value will increasingly be tied to their creativity.⁴ However, according to a recent survey of HR and finance leaders, one of the toughest challenges around analytics has been making sense of the results and implications of their data in the first place.⁵

Human innovation ensures technology is employed in the best way possible. As business leaders increasingly expect smarter technology utilization, HR has the opportunity (and responsibility) to lead this change. HR leaders can and *should* leverage advanced technology and data to support their business and workforce goals.

Before you can take advantage of the latest technology, it helps to understand it. What is artificial intelligence? How does AI differ from automation? How does AI utilize machine learning? **And how can HR take advantage of this technology *right now*?**

1 | AUTOMATION, ARTIFICIAL INTELLIGENCE (AI) & MACHINE LEARNING: THE BASICS (CONT.)

Automation

Automated technology is programmed to complete routine, predictable, and often physical tasks – think factory robots on an assembly line. Automation increases efficiency and helps eliminate human error that can occur as a result of manual processes.

In its most basic form, benefits administration technology is an example of automation at work. Rules-based gatekeeping, scheduled file transfers, and basic employee benefits enrollment are all automated processes that (ideally) make life easier and eliminate potential errors for benefit teams and employees.

Just because a technology is automated, however, does not mean that the technology is smart.

On its own, basic automated technology lacks the ability to understand concepts, recognize problems, or identify patterns that may arise over the course of its use. For technology to be smart, it needs artificial intelligence.

Artificial Intelligence & Machine Learning

Artificial intelligence (AI) programming empowers technology to identify concepts, recognize patterns, and analyze complex rules to quickly develop and offer solutions for a multitude of challenges. AI has a wide range of applications, with some estimates suggesting that practically all industries and occupations will be impacted in some way by automation and AI technologies in the future.³ The goal of AI is to create smarter technology that can “think” and solve problems like a human, but with the computing capabilities and speed of modern machines.

Adding AI to a technology is like equipping a body with a brain. Whether human or AI, however, getting smarter requires the ability to learn. **Machine learning is a component of AI, enabling AI-equipped technology to better analyze and learn from data** – which widens its applications and offers consistent opportunities for improvement and optimization.

1 | AUTOMATION, ARTIFICIAL INTELLIGENCE (AI) & MACHINE LEARNING: THE BASICS (CONT.)

So how do these concepts apply to – *and improve* – the execution of your benefits strategy? When it comes to benefits, **what is the most valuable application for this new generation of technology?**

Putting AI in Perspective

It's important to pay close attention to what you define as “valuable” when considering an AI-powered solution to add into your benefits process. There are a number of recent technologies and third-party add-ons that seem interesting, entertaining, and even playfully appealing, but ultimately these approaches overwhelm employees or fail to holistically integrate into the numbers, data, and overall presentation of your employee benefits package. AI should make benefits easier to understand and utilize for both your employees and your team.

The key questions when evaluating technology options are:

- *Will this help my employees make better decisions and drive better outcomes for their coverage, costs, and engagement?*
- *Will my employees better understand their benefits, and better appreciate the bottom-line value of both their own investment and our company's contributions towards their benefits?*
- *Am I leveraging AI to help employees easily understand and utilize their coverage on a deeper level – or are my employees still having to use disconnected systems or dig around for information?*
- *Will this solution proactively alert my employees about changes or cost comparisons related to their current plan, providers, or prescriptions that they can take advantage of?*
- *Will this solution offer an integrated experience so that every minute of my employees' limited attention is maximized and not wasted?*
- *Will this make my job easier and more predictable, and will it reduce the everyday “noise” of benefits administration so I can focus on larger priorities?*

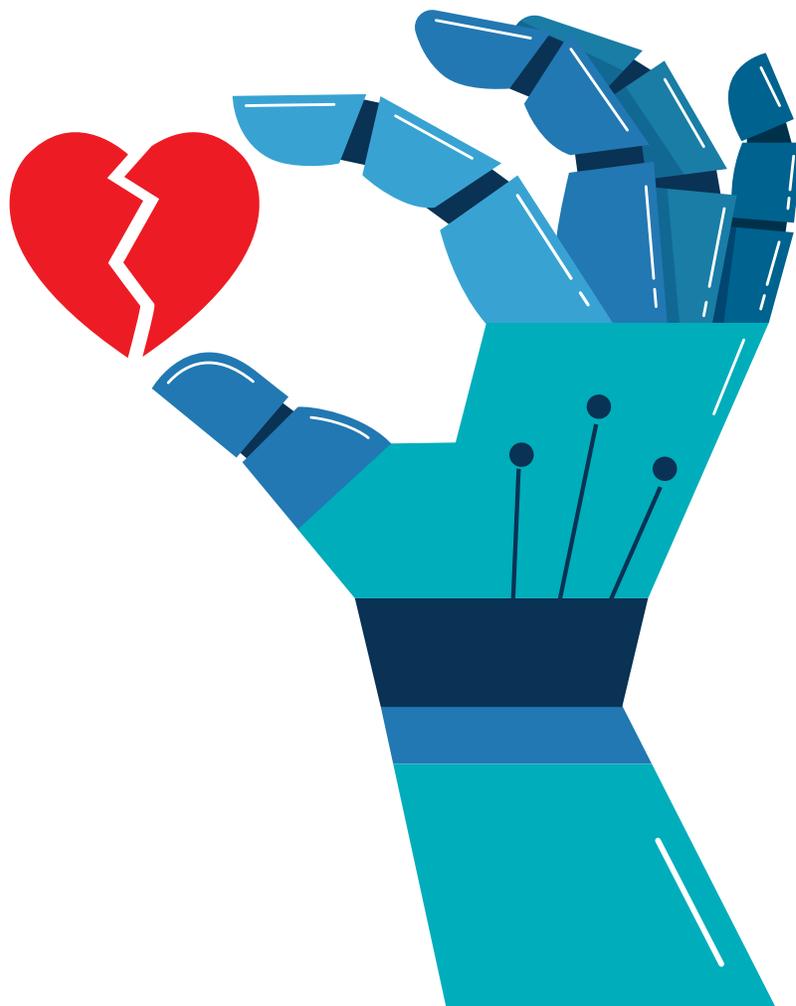
1 | AUTOMATION, ARTIFICIAL INTELLIGENCE (AI) & MACHINE LEARNING: THE BASICS (CONT.)

Value means results and tangible ROI. When discussing AI and machine learning, it's important to note the difference between true value and what may spring to mind with the latest technology-related buzzword *du jour*. For instance, when you think of more immediate applications of AI, you most likely picture one of the many popular “smart assistants” (such as Amazon’s Alexa, Apple’s Siri, or Google Assistant) that have become a staple in many homes and businesses. These AI assistants recognize and interpret voice commands to carry out actions, set schedules and reminders, or look up information.

Some technology vendors are aggressively employing **chatbots** in a similar way for HR and benefit enrollment and support. On paper, it makes sense. But as we will see, chatbots may not be the best fit for the purposes of employee benefits.

2

Thinking Outside of the Chatbot Box



2 | THINKING OUTSIDE OF THE CHATBOT BOX

In the employee benefits space, chatbots are often marketed as an alternative to live customer service. At first glance, providing 24/7 assistance through a chatbot may seem like the right solution to leverage AI (and maybe save money) – and there are certainly simple instances where such support may be helpful.

Now that we are a few years into chatbot adoption and use in business applications, however, some telling user experience trends have emerged.

Namely, **employees' anxiety and stress levels can increase when using chatbots in high-anxiety situations,⁶ such as navigating their benefits options.** Chatbots handle automated responses well. But when dealing with their benefits, people are often looking for complete and accurate responses to specific questions. These questions are often laced with nuance or specific context, and their answers may also be subject to caveats like network restrictions. In these cases, your employees, retirees, and other participants are searching for more than automated answers from a list of FAQs. Without access to the right guidance, anxious users can be left feeling isolated and angry right when they need help the most.⁶ This can negatively affect your participants' satisfaction with their benefit choices *and* their satisfaction with your company.

In the case of technology providing a better benefits experience to help employees make smarter decisions and potentially save money, chatbots currently lack the ability to provide intuitive and proactive guidance, and instead rely on employees to ask the right questions about their benefits. Therein lies the gap: 75% of employees have an incomplete grasp of how their benefits work to begin with.¹ Whereas employees can have a true and informative dialogue with a knowledgeable service representative, the same cannot be said with chatbots – at least not yet.

Until chatbot AI can compensate for the complexity of employee benefits and a nearly infinite combinations of questions, acronyms, and proper names, client-dedicated live support remains the safe, reliable gold-standard for resolving participants' issues and questions.

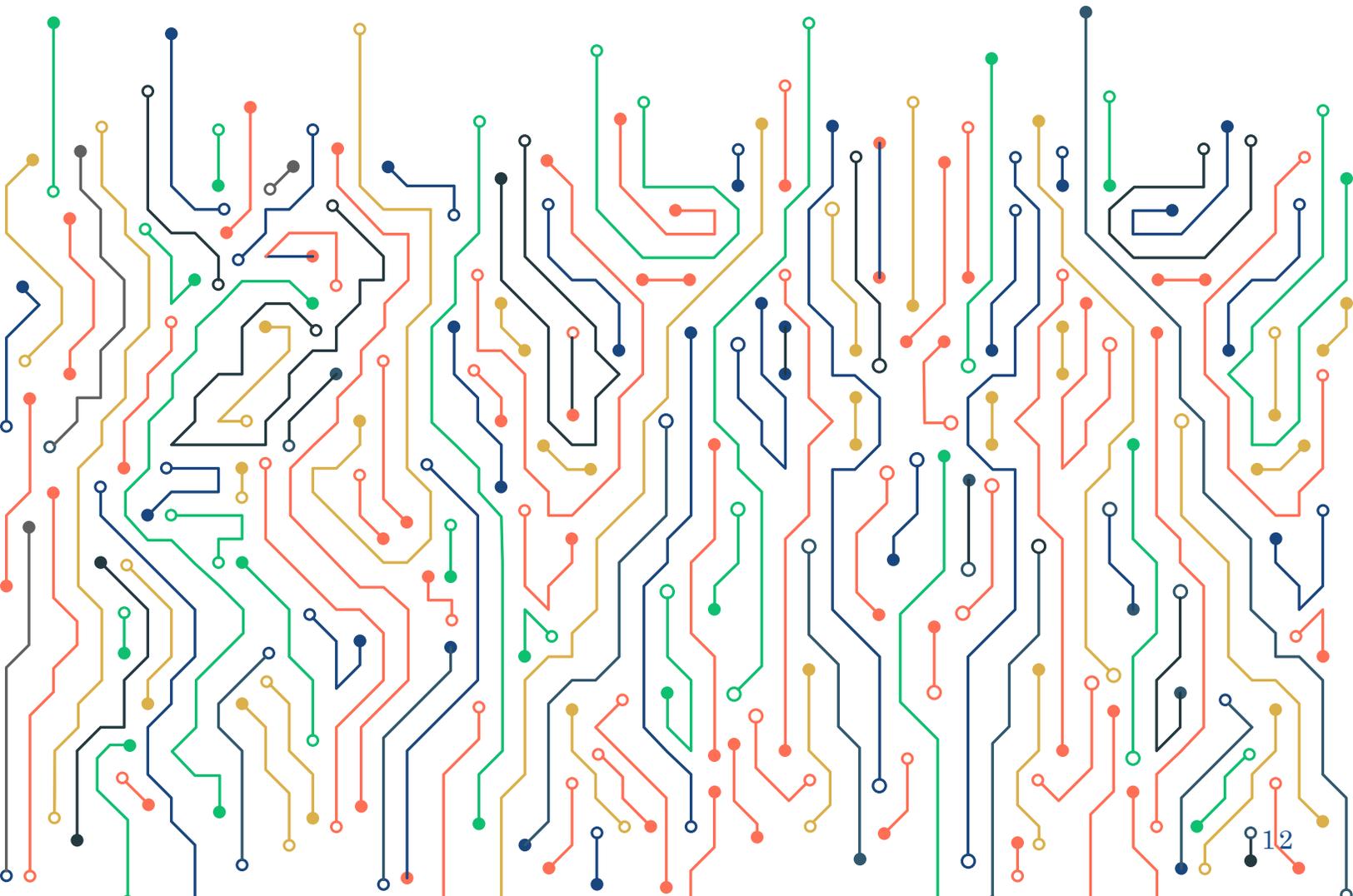
2 | THINKING OUTSIDE OF THE CHATBOT BOX (CONT.)

Current chatbot adoption reflects this. Nearly one-third of HR professionals name artificial intelligence as one of their most widely utilized analytics technologies, but only 7% list chatbots as their top choice for currently utilizing AI.⁵

But what if you could utilize AI to provide proactive guidance for better outcomes to both you and your employees, and truly minimize employee confusion? Your benefits data allows you to do just that.

3

Data: The Key to Unleashing Your Benefits' Potential



3 | DATA: THE KEY TO UNLEASHING YOUR BENEFITS' POTENTIAL

While analytics may have been previously viewed as something mainly utilized for operations and finance departments, the reality is that data analytics is now a critical aspect of today's successful benefit programs.

Employee benefits produce a lot of data, and one of the essential responsibilities of your benefits technology platform is to **maintain clean, accurate, and transparent data** to see how your strategy is performing in real-time.

Has your benefits enrollment and administration vendor advanced beyond automation? How does your technology vendor facilitate the use of your data in driving strategic decisions and outcomes?

Instead of using data to simply report on what has already happened, however, HR's growing influence throughout a company is due to the analysis and direction HR leaders can now provide to make better and potentially cost-saving decisions for the future.

With regards to future proofing your career, **HR's most pressing skill gap surrounds the ability to leverage data and analytics to solve the issues facing your organization.**⁵ In other words, *exporting* a report is one thing. *Using* that data to lead your company to better forecasting, employee engagement and retention, and cost mitigation will be "table stakes" for the modern HR leader's responsibilities.

Data and AI can also come together to positively influence the employee experience. Employees need tools and guidance that (unlike chatbots) *do not* require them to first know the questions they need to ask. Building on the concept of a personalized recommendation engine, decision-support technology analyzes current and past data of employees' individualized needs to ensure their family receives the right guidance and coverage at the *right time*.

Basic recommendation engines require employees to self-report much of the information on which their recommendations are based. Modern and more robust decision support uses **claims data, consumer data, and health indicator data** to provide a clear and objective view of employees' care-related spending, coverage utilization patterns, purchasing patterns, and opportunities for consumer-centric plan utilization and selection.

3 | DATA: THE KEY TO UNLEASHING YOUR BENEFITS' POTENTIAL (CONT.)

By offering a more **data-driven, decision-guided, and engaging enrollment and benefits experience throughout the entire year**, you will create a more supportive and positive environment for employees while building upon your own success.

Employees are often overwhelmed by benefit complexity, and want an easy answer to the question, *“What’s the best plan or path to care for me?”*... But of course, the answer to this question is highly personal and dependent on each employee’s unique circumstances. By analyzing employees’ very own data and behavior, the answer to this question is more accessible and more accurate than ever.

Combining a data analytics engine into your decision support enables employees to finally make use of their own data - without the need for spreadsheets, number-crunching, or a statistics degree. Your benefits administration platform should offer a seamless solution that allows you to easily incorporate this technology and its capabilities as part of your benefits offering.

Real-World Applications

For example, imagine that an employee has just welcomed a new child to their family. Now, they are tasked with enrolling in their benefits, but are unsure if they should change their coverage after this major life event. How might their anxiety and experience change if they encountered the following message when they went to enroll on your benefits platform?

“Congratulations on your baby delivery this year! Despite it costing you \$6,500, the plan you had this year was the best option for you, and you saved \$500 overall. Keeping your plan will save you money next year too.”

This message not only provides a clear recommendation to your employees, as well as offer a cost-savings prediction in the year ahead, but also provides understanding support and encouragement that your employees crave and will appreciate.

3 | DATA: THE KEY TO UNLEASHING YOUR BENEFITS' POTENTIAL (CONT.)

In addition to supporting decision-making during enrollment, an advanced analytics engine should also help facilitate year-round engagement and look out for your employees' financial and health care needs. Personalized messages based on recent claims and utilization patterns will help employees better understand how they can utilize their healthcare coverage, provider choices, voluntary benefits, and savings account options in the most cost-effective and efficient manner. One such message might look like this:

"Your bill from your recent leg injury just posted. You have enough to cover it through your HSA. And by the way you can save \$1,200 on your bill by filing for reimbursement using your accident coverage!"

Technology can also help employees determine the best path to accessing care, whether they are searching for high-quality doctors or comparing costs between a virtual visit and an in-office appointment, or even delivering alerts to save on prescriptions.

Although employees may have access to plan information and programs through literature or online, this information is often scattered and requires awareness of multiple websites, logins, passwords, and affiliate programs. Aggregating personalized information about participants' plans, networks, provider rankings, and more within one central point-of-access improves the likelihood that employees will actually take advantage of all the benefits available to them.

Imagine the benefits of providing the following information to an expecting employee – *automatically* – via your benefits platform:

"Congrats on your pregnancy - Connect with your gynecologist through telehealth to save time and money. And for your upcoming ultrasound, you can save \$200 at one of these nearby imaging facilities instead of the closest hospital."

Providing easy access and cost transparency is a key part of bringing your benefits support full-circle: In fact, 84% of participants say they find comparison shopping for health care online or via a mobile app helpful. More than half of Millennials, the largest generation in the workforce, use online tools to shop around for health care services.⁷

3 | DATA: THE KEY TO UNLEASHING YOUR BENEFITS' POTENTIAL (CONT.)

Leveraging new technologies in conjunction with data has big advantages for your business: **Employees can save a median of \$1,500, and employers can save up to 7% on their healthcare costs.** With companies spending an average of nearly \$6,900 on a single employee's health coverage (and almost \$20,000 for families)⁸ the possibilities offered by this technology can translate into powerful savings for your business – and offer an opportunity to radically transform the benefits experience for your employees. And with machine-learning, these tools (and your results) will only improve over time.

CONCLUSION

Technology is moving faster than ever, and has the potential to bring meaningful change to the way employees and employers approach benefits. Data, technology, and innovation are at the heart of this shift, but adoption is the first step. How your organization leverages key advancements will determine how well your business can keep up with your competition.

In a world where algorithms help us decide the next article to read, next song to listen to, and even the next job we'll hold, it is critical that HR paves the way for technology to better the lives of employees and their families. As benefit leaders achieve greater visibility and influence across organizations of all sizes and complexity, they are expected to bring new solutions to classic challenges and emerging problems alike. *How well are you prepared for HR's new chapter?*

Employing artificial intelligence within your benefits experience should increase efficiency, offer insights, and help meet employees' demand for guidance and encouragement during enrollment as well as year-round.

With the right technology partner, and using the right combination of AI with clear expectations on better outcomes, not just a flashier user experience, your team can become proactive, prescriptive, and poised to get the most from your benefits strategy.

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ABOUT EMPYREAN

Empyrean Benefit Solutions manages employee health and welfare benefits programs, combining the industry's most modern, client-adaptive, and configurable benefits technology platform with expert, responsive service to deliver Hi-Touch Benefits Administration.

Empyrean provides market-leading enrollment, eligibility management, ACA reporting, and other plan administration services that empower employers, insurance brokers, and healthcare exchanges to meet ever-evolving benefit challenges.

Founded in 2006, Empyrean's integrated platform serves over three million annual participants across a wide spectrum of sizes, industries, and complexities

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