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AI:10

GET INSIGHTS ON AI UNDER 10 MINUTES

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- Too Much Email? Let Your Bot Answer It
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WHAT'S HOT

GARTNER: SIX KEY EXECUTIVE-CIO CONVERSATIONS TO HELP AI SUCCEED

INDUSTRY FOCUS

HOW TO GAIN REAL ROI WITH SPECIFIC AI USE CASES AND THE RIGHT TEAM

GARTNER: SIX KEY EXECUTIVE-CIO CONVERSATIONS TO HELP AI SUCCEED

The promise of artificial intelligence often fails to materialise in businesses, so how do you maximise your chance to succeed?

The promise of artificial intelligence (AI) often fails to materialise in our businesses – not because of technical limitations, but because of the executive leadership failing to achieve clarity on what AI is, and where and how it can add most value in their organisations.

CIOs have a powerful leadership opportunity to take their businesses through six executive conversations to address this gap.

1. What does AI mean in our business?

First, ensure everyone shares a common understanding and language about what AI is in their business context. Bring it down to simple use cases and examples. Talk about three AI categories: systems that behave like humans, such as chatbots; systems that automate humans out of the loop; and systems that generate next-level insight.

2. How does AI work with our workforce to achieve results?

Discuss how AI will work with your employees – does it replace them, help them work better, or work alongside them? All three can work well, but the shape of value and risk is different for each. Get executives used to categorising AI opportunities like this.

3. How transparent is AI?

Consider how much you need to understand how AI is doing its job. Businesses must avoid unhelpful, unintended, maybe even dangerous or illegal bias in algorithms. Imagine an intelligent marketing algorithm that was shown to accidentally discriminate based on race or gender. The need for transparency may cause us to choose one AI technique over another, even if it performs less well. Executives must develop an acute awareness of this issue.

4. Which AI-powered business opportunities should we pursue?

Based on the answers to the above three questions, executives should decide where to focus AI activities. Decisions here can use the three-part typology of AI mentioned in question one, mapped against the different domains of the internal supply chain and ecosystem. This ensures we are not AI "fashion victims", but instead consider the most valuable artificial intelligence opportunities across our whole business.

5. How much are we prepared to rely on AI?

Combining the results of questions two and three above, executives can make high-level decisions and commission policies on how much AI-enabled automation is desirable and how transparent AI needs to be in different parts of the business. For example, a business might be comfortable with a completely automated "black box" that flags possible fraudulent transactions, but systems that make decisions about hiring might need to be much more "human in the loop" and transparent.

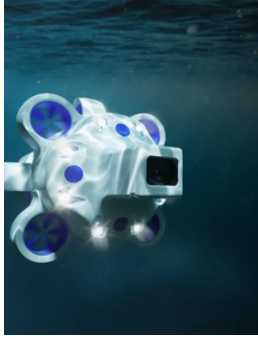
6. How will we manage and mitigate AI-related risk?

Despite making smart decisions about where to deploy which types of AI, there will be residual risk. The sixth executive conversation should cover types of risk, how to mitigate them and where accountability lies. Types of risk vary from injury or even loss of life, say from autonomous vehicles, through financial, brand and reputation risks. Developing a portfolio of techniques such as hedging with insurance and creating radical transparency with stakeholders is essential.

Source: computerweekly







HEALDLINE NEWS IN A FLASH

SORRY, DEVELOPERS: MICROSOFT'S NEW TOOL FIXES THE BUGS IN SOFTWARE CODE WRITTEN BY AI

To address the question of code quality from these language models, Microsoft researchers have created Jigsaw, a tool that can improve the performance of these models using "post-processing techniques that understand the programs' syntax and semantics and then leverages user feedback to improve future performance." It's currently designed to synthesize code for Python Pandas API using multi-modal inputs, says Microsoft. Pandas is a popular data manipulation and analysis library for data scientists who use the Python programming language. The language models like Codex can allow a developer to use an English description for a snippet of code and the model can synthesize the intended code in say Python or JavaScript.

Source: zdnet

AI POWERS BREAKTHROUGH IN FASTER-THAN-SOUND JET ENGINES

Almost 75 years ago, U.S. Air Force pilot Chuck Yeager became the first person to fly faster than the speed of sound. Engineers have been pushing the boundaries of ultrafast flight ever since, attaining speeds most of us can only imagine. On April 11, military fighter jets like the F-15 routinely surpass Mach 2, which is shorthand for twice the speed of sound. That's supersonic level. On a hypersonic flight — Mach 5 and beyond — an aircraft travels faster than 3,000 miles per hour. At that rate, you could make it from New York to Los Angeles on a lunch break. The same propulsion technology that goes into rockets has made hypersonic speeds possible since the 1950s. But to make hypersonic flight more common and far less expensive than a rocket launch, engineers and scientists are working on advanced jet engine designs.

Source: thebrighterside

TOO MUCH EMAIL? LET YOUR BOT ANSWER IT

What will it be like when you have your own bot, and it is as good as or better than you at many daily tasks? The answer may come sooner than you think. Google's new Pathway Languages Model, which is not yet open for public testing, is the latest advance in artificial intelligence. The technical explanation is that neural networks have been scaled to 540 billion parameters for "breakthrough performance." The practical effect is that AI is now better at engaging in natural conversation, explaining novel jokes and writing code. I expect most written communication will eventually be done by bots. I could train my bot by letting it read all my previous email and other writings. Eventually my bot would answer most of my email directly, though it could hold some aside to ask me whether they merited a personal response.

Source: washingtonpost

TESLA ACCELERATES HIRING FOR OPTIMUS ROBOT PROJECT, DEVELOPS 'OVERALL HUMANOID SOFTWARE ARCHITECTURE'

Last week, Musk said that Tesla is aiming to start production of its Optimus humanoid robot in 2023 – much faster than anyone anticipated. The company would be going from concept to production on what is arguably its most ambitious project yet – in about 28 months. Tesla is going to have to significantly ramp up hiring for the project in order to make that happen, and it looks like that's exactly what it is doing. Over the last few weeks, Tesla has listed several more jobs related to the humanoid robot project. In the first few months of the project, Tesla listed several jobs, but they were related to developing actuators and the mechanics of the robot.

Source: electrek

AI PREDICTS IF AND WHEN YOU MIGHT HAVE A FATAL HEART ATTACK

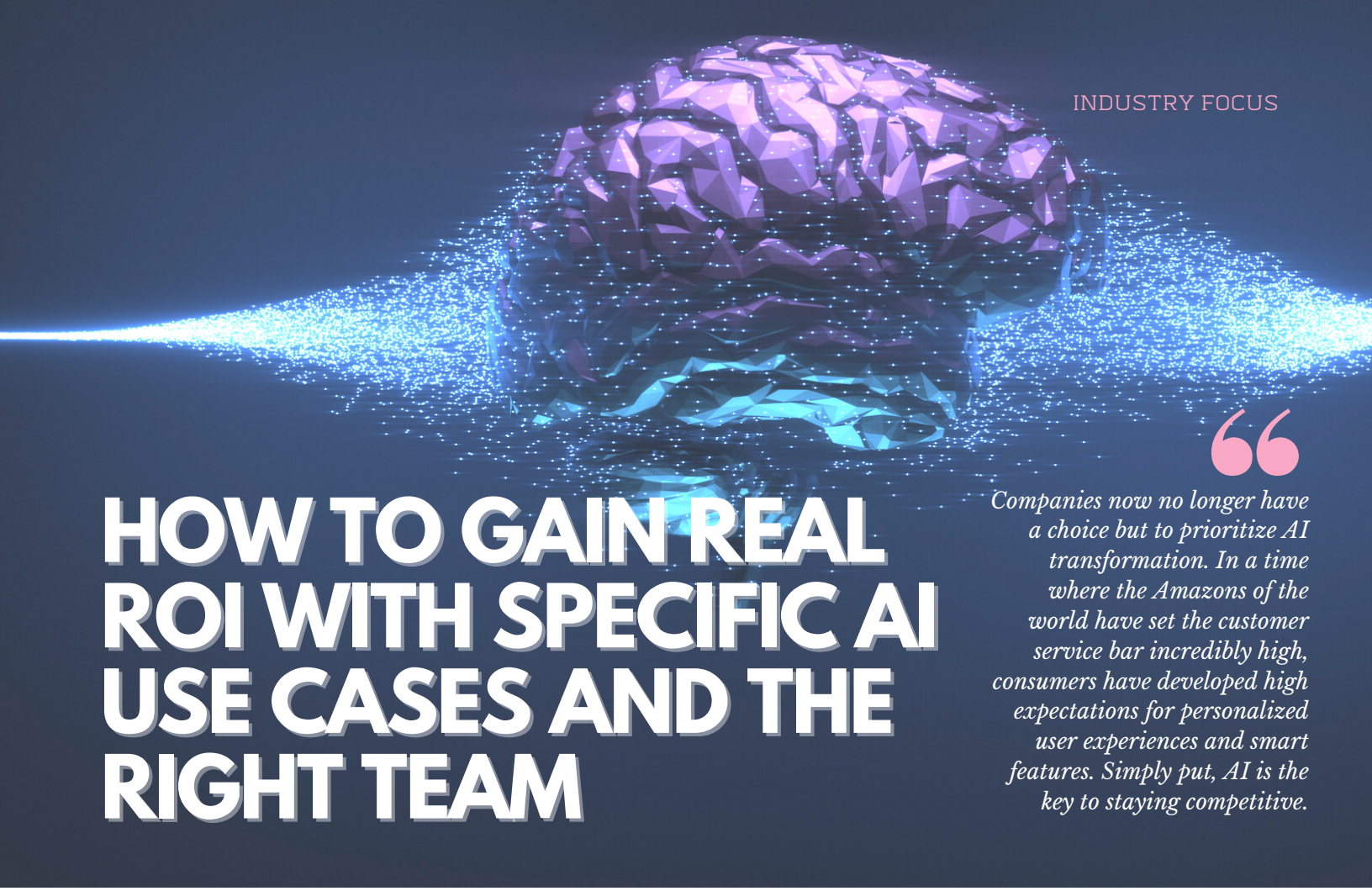
A new artificial intelligence-based approach can predict if and when a patient could die of a heart attack. "There are patients who may be at low risk of sudden cardiac death getting defibrillators that they might not need and then there are high-risk patients that aren't getting the treatment they need and could die in the prime of their life. What the new algorithm can do is determine who is at risk for cardiac death and when it will occur, allowing doctors to decide exactly what needs to be done." The Johns Hopkins University team is the first to use neural networks to build a personalized survival assessment for each patient with heart disease. These risk measures provide with high accuracy the chance for a sudden cardiac death over 10 years, and when it's most likely to happen. The deep learning technology is called Survival Study of Cardiac Arrhythmia Risk, or SSCAR.

Source: futurity

CHINA TACKLES TOWERING GARBAGE HEAPS WITH ARTIFICIAL INTELLIGENCE

Alibaba Cloud is using artificial intelligence to make waste incineration more energy efficient in China. Automation is sweeping the nation with more than 100 waste-burning facilities in 30 Chinese cities – roughly one in ten of the country's garbage incinerators – using AI. Traditionally, garbage burning was a labor-intensive task requiring operators to constantly adjust control emissions, temperatures and the air pressure in the furnace. "Through automation, we've changed how garbage treatment plants operate, [to] reduce work pressure on the operators, slash environmental pollution and lower costs for equipment maintenance," Zeng Zhenyu, Vice President of Alibaba Cloud told Alizila. Alibaba Cloud uses AI to automate incineration monitoring at waste-burning facilities, leading to more stable combustion temperatures and greater efficiency, meaning there is less need to shutdown and restart furnaces.

Source: yahoo Finance



HOW TO GAIN REAL ROI WITH SPECIFIC AI USE CASES AND THE RIGHT TEAM

Companies now no longer have a choice but to prioritize AI transformation. In a time where the Amazons of the world have set the customer service bar incredibly high, consumers have developed high expectations for personalized user experiences and smart features. Simply put, AI is the key to staying competitive.

"But AI is not a silver bullet — it's just an instrument, like the cloud or like the web," says Stepan Pushkarev, co-founder and CTO/CEO at Provectus, Inc. "And it will become just another expensive technology unless you start with a mission, map it to a real business need, and then break down your overarching strategy into specific use cases, with specific ROI."

But while company leaders are eager to leverage AI for its well-documented benefits, the leadership team can often struggle with where to start. This can stem from the misleading hype around how the technology works, the result of leaping ahead based on a gut feeling instead of data, or out-of-date perceptions around AI as a sci-fi technology.

Leaders can end up prioritizing the wrong projects or with skewed use case objectives. For instance, a social media campaign that surfaces viral content can improve engagement metrics, but in the long term, harm the customer experience. Or a call center customer-support strategy focused only on cost reduction might improve the bottom line in the short run, but over time, customer experience will take a hit.

An AI strategy is most successful, and most transformative, when it is backed by strong, top-down vision and objectives for AI transformation, real business knowledge, and guided by a company's mission.

Where to start

Depending on the type of enterprise, AI use cases come from three main sources in the organization:

Top management, usually a result of strategy sessions and executive offsites, and driven by the most broad understanding of the company opportunities and market drivers. For instance, a set of customer-360 use cases that support the company's mission to become a customer-centric company.

Business units, usually driven by specific business processes and KPIs. For example, introducing AI-powered automation in the call center in order to improve metrics like time-to-resolution and customer satisfaction scores.

Bottom-up ideas, which come from innovative leaders at all levels. This is the most powerful and creative source of the use cases.

However, ideas should be encouraged from all levels of the company — every engineer and analyst should have the tools and the access to generate ideas and push them to management to be prioritized for execution.

"The goal is to commoditize AI within the enterprise and make it available and accessible for every single department, every single team member to digitize, optimize, and improve their business processes," Pushkarev explains. "But in the early stages of AI transformation, an organization needs to define a strong top-down vision and objectives for AI, and the process needs to be kickstarted with a top-down push, from the C-suite or the executive leadership across functional leadership teams."

The AI use cases to prioritize first

Where should the C-suite's vision start? Here are some of a company's most urgent calls to action.

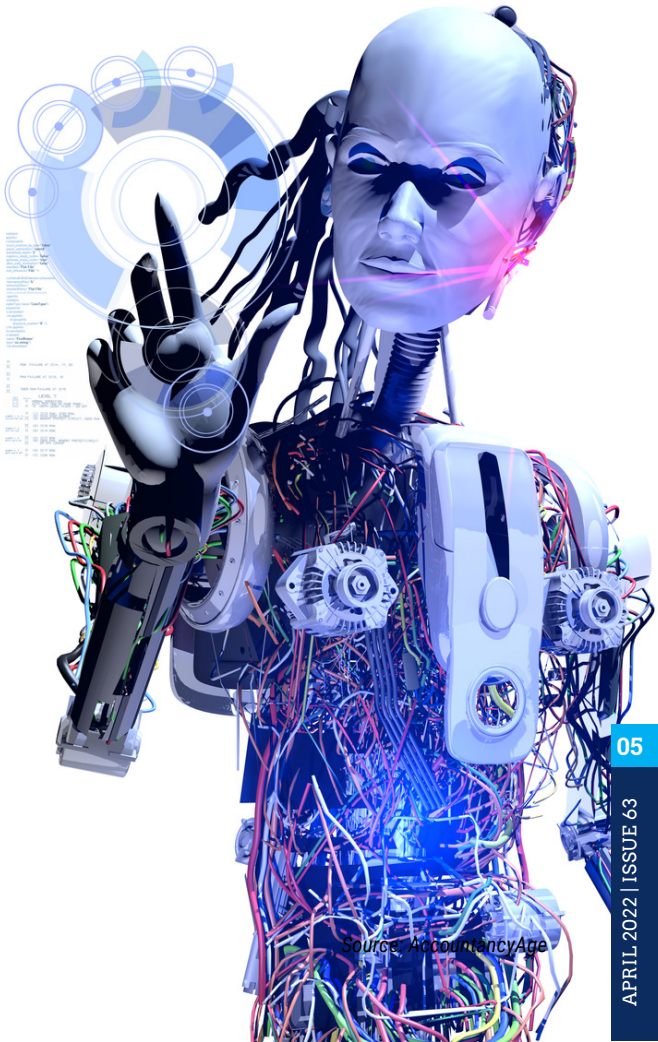
Customer-centric use cases. Over and over, the pandemic has highlighted the need for companies to go from product- or brand-centric to customer-centric, and many enterprises are trending that way, selling directly to consumers and realizing they need to find ways to manage the customer journey end-to-end. How a company treats its customers has become a competitive advantage — and AI can give companies a leg up in that arena.

"Customer-centric companies win," Pushkarev says simply. "AI use cases should be evaluated on their own, based on individual business circumstances, but we've seen that it's helpful to prioritize customer-focused use cases. And if you start framing your problems from the customer's perspective, you'll start to align a cascade of use cases."

Customer-360 or customer-centric AI embraces all possible use cases and point solutions for providing better and personalized customer experience with the brand directly or indirectly, across all channels and touchpoints. That includes areas like personalized product recommendations in ecommerce operations and optimizing supply chain and last-mile delivery logistics. Pharmaceutical companies accelerate the drug discovery process with deep learning models and, at the of the day, deliver new and personalized drugs to patients faster and more reliably by going directly to consumers.

Airlines reimagine customer experience by personalizing the user journey from booking to post-booking, customer service, airport, and on-the-plane services. The same goes for banking, retail, CPG, automotive, and even manufacturing industries.

Employee or workforce-centric use cases. Post-pandemic, the number of jobs is skyrocketing but there's a shortage of workers. This gap is exacerbating supply chain disruptions, and hampering economic growth, with leading industries struggling to regain momentum. AI is a key to solving those challenges. Automation helps employees work smarter, and take on more interesting tasks while algorithms eliminate the repetitive, boring aspects of their work. In the science world, computer vision and machine learning are helping doctors and researchers scale their diagnostic work to improve results. And in the manufacturing industry, AI is key to dramatically improve employee safety.



Source, AccountancyAge

Operational excellence use cases. While ambitious ideas for new business, customer- and workforce-centric use cases may have a high return on investment, they can also require a long-term vision and transformation of the entire company. However, operational use cases have the highest probability for success and the most clear path to ROI.

There are endless areas in which AI can optimize operations, including customer support automation, which ensures that customers get fast, reliable service from plugged-in support employees. Or inventory optimization, which can give you real-time global visibility across all your inventory, which, in turn, improves service levels and maximizes your on-time in-full performance. Intelligent document processing lets you capture, extract, and process data from a variety of document formats, helping automate manual processes and slash costs, unlock key insights, and more.

How to begin ideating

When you sit down and talk about real, specific use cases, it's important to have the right team in place: the executive sponsors, product managers, AI solution architect and the subject matter experts.

From the start, you need to take into consideration a number of things. Is the data available, and if it's accessible, is it structured or unstructured? You need to assess if it's a commoditized AI use case, and what kind of tolerances your use case has or not — in other words, how accurate does your model need to be in order to make an impact?

It's also crucial to assess the length of the timeline of adoption for different use cases. With AI and machine learning there is an adoption curve as data comes in, and each iteration of a machine learning model is trained, and the timeline and corresponding business expectations need to be set in these early prioritization sessions.

How leaders can launch the AI transformation journey

To launch an AI strategy, above all, you need to be hands-on. But that doesn't mean going and getting a PhD in computer science.

"First of all, develop an intuition about how AI works, how exactly it could be applicable to your business, and be able to execute and operate," Pushkarev explains. "You need to know exactly how each piece of the business works, how it's going to be improved by AI, and be hands-on in prioritizing use cases with the help of your subject-matter experts."

You also have to be hands-on in managing expectations of any potential use cases — not just your team's, but your own. And you need to work to ensure that the project never loses its primary objective: to support real business users.

And finally, you need to be hands-on in building a cross-functional team and ensuring executive sponsorship. Domain experts, AI solutions architects, and hands-on business people will drive your projects from the top down, and ensure that your key objectives are achieved, as well as uncover new possibilities along the way — kicking off a full-scale AI transformation journey.

Source: venturebeat

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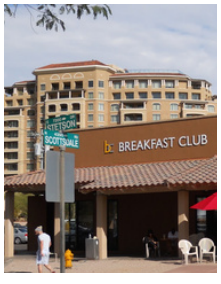

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