web platform.

# How to think—and act like an Al-native business Existing businesses can't become Al natives themselves. But they do need to stay vigilant as these Al

upstarts seize new market opportunities. By actively studying how Al-native businesses put Al into the core of their operations and technology, established companies can reap the benefits of thinking and acting like their newest competitors.



Within a few years, however, along came a new set of disruptors—from Indeed to LinkedIn to Glassdoor—each of which offered progressively more innovative features.

online job site was a godsend for job seekers everywhere who happily gave up their newspaper classified ad subscriptions for the new, ink-free

Soon, however, we may be asking a different question: Remember online job boards?

new approach to finding a job—or getting a date, mapping a route or booking a hotel. It seems like just yesterday these activities morphed into

for a job, candidates would tell it their skills and goals, even their ideal company culture. In return, beyond offering up matches, it would analyze hidden patterns in job postings, news articles and social data to uncover opportunities at companies that hadn't even advertised yet. Better yet, it would generate tailored cover letters, conduct practice interviews, even

suggest negotiation tactics based on the potential employer. Who would make this happen? Most likely an Al-native business. While Al-native businesses as we've defined them don't exist yet, they soon will. These Al-first upstarts will insert Al (and increasingly generative Al) into the fabric of everything they do. And because their whole mindset is centered on Al-driven capabilities, the technology will drive how they think and do things.

Unburdened by the constraints of legacy systems and entrenched approaches, Al-native businesses will see Al not as a tool to be bolted on, but as the fundamental building block of their operations. This pure AI mindset will allow them to capitalize on generative AI's strengths, from the tailored experiences customers crave, to blazingly fast internal processes, to business models that, to a traditional business's eye, appear inside-out and upside-down. Like the digital-native businesses before them (Uber, Netflix, Venmo), Al-native businesses will also change how consumers

From niche specialists to game-changers: three profiles of Al-native

businesses

Widescale disruption in two

years: our research reveals

when real change will start

Tech lessons from Al-native businesses: get ready for the new Al tech stack

considerations for businesses in an Al-native world

Build, partner, utilize: strategic

Cross-enterprise use

Nearly half of businesses will adopt gen Al by this timeframe

ultimately changing the way in which they interact with the digital world. And that's why traditional businesses need to pay attention. As consumers change their behaviors, businesses will need to

· Existing companies might partner with Al-native businesses for specialized solutions, filling crucial gaps with capabilities they can't build in-house.

processes. Consider the Al-powered writing assistant that challenges traditional advertising agencies, or the predictive logistics platform that outperforms legacy supply chain management tools. To execute newly hatched business models, organizations will need new governance policies, organizational structures and

This is where thinking like an Al-native business comes in. Existing companies can't become Al-native businesses—that's logically impossible. But they can and should learn from how Al-native businesses operate. By actively studying these

Widescale disruption in two years Our research reveals when real change will start It's not today but soon that these levels of generative Al disruption will gain a foothold. To better understand how generative Al will change the future of work, we partnered with Oxford Economics to create an economic model analyzing the technology's impact on business productivity and the workforce itself. (For the full study, see our recent report New work, new world.)

Based upon our findings on how quickly businesses will adopt generative AI, and our analysis of past technology advances, we've determined that generative AI adoption will follow an s-curve trajectory: a gradual rise, to a dramatic spike, to a plateau in which the technology becomes refined and pervasive. That dramatic spike will take place over the next decade, rolling out over

## Fast uptake in the next decade Adoption of generative AI could move quickly in the decade ahead.

25%

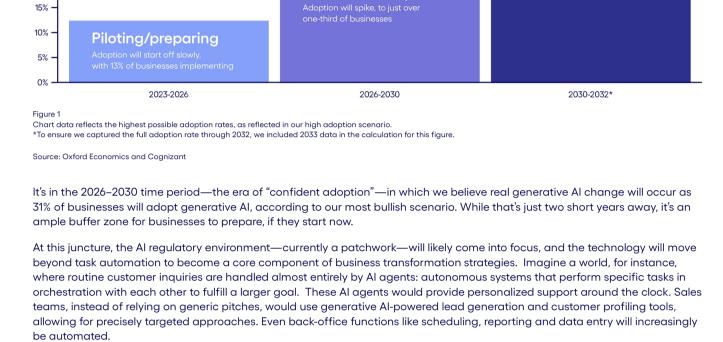
three key phases (see Figure 1).

**Adoption rate** 

50%

45%

20%



But beyond imagining this world, our study brings many of these changes to light. As part of our analysis, we assigned "exposure

This score doesn't reflect the percent of workers who will be out of a job or their chance of losing a job. Rather, it's the maximum

–and represent prime areas for Al natives to both enter new markets and emerge as lean businesses. When looking at the areas above, for instance, customer service representatives will see exposure scores of 63.7%, sales representatives 65.6% and

Confident adoption

percent of job tasks that could theoretically be automated or assisted by generative AI by the year 2032, weighted by the relative importance of those tasks. A look at our exposure scores reveals occupation groups that are due for the most change with the emergence of generative Al

scores" to 1,000 jobs currently being done by the US workforce.

office and administrative workers 85.9%, all by 2032.

encourages continuous innovation. For that, we can turn to Al-native businesses, which can offer lessons on how and where to make these important shifts.

This is why—starting in the next two years when confident adoption of generative AI begins—forward-thinking companies will need to have a robust technological infrastructure, a strategy in mind for redefining the business model and a culture that

From niche specialists to game-changers



#### for large workforces and allowing for rapid decision-making. (For more on this topic, see Cognizant CTO of Al Babak Hodjat's recently published article, "Al and agents.") Platform builders, meanwhile, will function like architects, crafting the foundational technologies that enable other businesses to harness the power of Al. These innovators will build ecosystems designed to elevate the employee and customer experience.

Some platforms will focus on anticipating customer needs, offering personalized recommendations and solutions before they're even asked. Others will focus on decision-making, transforming raw numbers into actionable insights, moving far beyond simple

But perhaps the most impactful of all are the game changers. These visionaries won't see boundaries—they'll only see potential.

They will wield AI to disrupt entire industries by defying traditional limitations: providing affordable healthcare to remote communities, reinventing financial investments with Al-driven algorithms, or using the power of generative Al to unlock the full

Let's explore three hypothetical examples of how each type of Al-native business could reshape everyday experiences and

potential of personalized education accessible to everyone.

This Al-native business would flip traditional supply chain planning on its head. Instead of addressing problems reactively, it would anticipate

It would also proactively suggest opportunities, identifying surplus inventory or transport routes newly opened due to shifting geopolitical situations. Different stakeholders would get tailored reports: key risks for executives, sourcing options for procurement teams, and logistics route

stockers and order fillers (26.4% exposure scores), might see their work augmented by Al-optimized inventory management and warehouse

The prescriptive supply chain oracle's strength lies in continuous learning and adaptability. As global situations evolve, the platform evolves with

educational administration or teaching role—and challenge the one-sizefits-all model of education. In our study, education administrators will see

Forget standardized tests and rigid lesson plans—these tools would become obsolete. Instead, the platform would begin with an interactive

a 36.3% exposure score by 2032, and teachers up to 30.8%.

disrupt how work gets done:

Niche specialist

A prescriptive supply chain oracle

adjustments for on-the-ground managers.

navigation.

slowdowns and risks and suggest ways to avoid them.

orchestrating tasks to get work done. These armies of internal Al agents will become integral team members, reducing the need

three types of Al natives, much of what goes on behind the scenes will also be done by Al agents that collaborate on

weather patterns, port congestion, raw material prices, local events, political instability and even social media sentiment. It would then uncover correlations invisible to human analysts, like a spike in online discussions about a specific ingredient, signaling an impending shortage

With platforms like this, management roles in transportation, storage and distribution (all with a 38.1% exposure score by 2032) could see significant change. The need for human intuition will remain, but Al could streamline data analysis and scenario planning. Even highly physical roles that in general will see relatively lower disruption from generative AI, such as

lasts a lifetime. This type of tool would also find its way into the business world, acting as a personal tutor for employees as continuous learning becomes a critical skill for the workforce in the Al age. Game-changer An on-demand sustainable fashion house

This Al-native business would disrupt the wasteful model of fast fashion by combining generative AI with sustainable, made-to-order production. Al-powered design assistants would help customers articulate their style

transparency and design elements that prioritize longevity would be emphasized. As Al continues to evolve, it's feasible that tasks traditionally performed by fashion designers (43.5% exposure score by 2032) and models (41.6% exposure score) could be streamlined by a platform like this. Rather than just selling clothes, the platform would offer a radically personalized and ethical fashion experience.

Once design is finalized, the platform would optimize clothing patterns for minimal waste and connect directly to an on-demand manufacturing facility. Individually made garments would eliminate the overproduction that plagues the industry, and instead, sustainable fabrics, supply chain

## Platform builder An adaptive learning engine This Al-native startup would seize on the opportunities created by generative Al's ability to take on at least one-third of the tasks within an

preferences and body measurements and suggest initial design variations, tweaking them in real-time based on customer feedback. Photorealistic visualizations would allow customers to "try on" the garment virtually, seeing it on their own bodies under different lighting conditions.

**Tech lessons from Al-native businesses** Get ready for the new Al tech stack To deliver on these new capabilities, Al-native businesses will build a technology stack that, in many ways, is unrecognizable to businesses operating today. This is because—unlike traditional businesses that typically see new technologies as a way to do existing things better—Al-native businesses see technology, particularly generative Al, as a way to do things that have never been done before.

# connections and creativity

For Al-native businesses, the user interface (UI) is a fundamental rethink of how users (both customers and employees) interact with the services the Al-native business provides. Beyond considering button placement and

screen design, an Al-native UI will be driven by well-crafted prompts that initiate complex actions across multiple systems or generate rich,

With the emergence of generative AI, we may soon experience a whole Imagine, for instance, an Al-powered career coach. Rather than searching

a new normal. Now, once again, they're up for disruption.

behave. Consumers will begin to choose products differently, seek information differently and assess options differently,

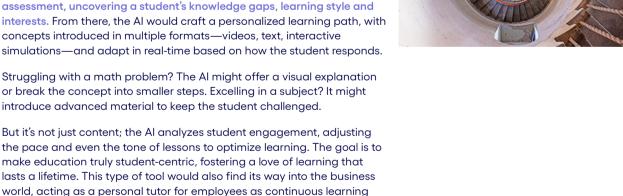
accommodate these new ways of selecting, engaging and transacting. These changes will also open up opportunities for Alnative businesses to infiltrate enterprise functions, both collaboratively and competitively: · They might also compete with Al-native businesses that offer products and services that completely upend established

operating processes to deal with massively accelerated, dynamic and autonomous operations. And—vitally—they'll also need to rethink their technology infrastructure to power the new Al-driven capabilities they offer. newcomers' innovative approaches, understanding their technology stack and adapting their own Al strategies, established companies can start to think—and even act—like the disruptive businesses that will put AI at the heart of all they do.

### 40% 35% 30%

## In our view, Al-native businesses will come in three main forms, each with the potential to reshape established industries. Niche specialists—similar to the career coach described earlier in this report—will focus on solving specific pain points with laser-like precision. An Al tool might work beside a skilled doctor, for instance, assisting in diagnosing rare diseases with an accuracy that surpasses the efforts of entire medical teams. Or, a manufacturing tool might be so tuned to the rhythm of an assembly line that it can predict impending breakdowns, preventing costly downtime and maximizing efficiency. These purpose-built agents will likely be the first area where we'll see AI natives emerge. But that's just on the front end: For all





From an Al-native business perspective, the tech stack is not a static thing that's occasionally tweaked or updated. It's a living,

continuously evolving entity, built for a world where agility and continuous innovation are key to a business's survival.

visibility and control over the results. Established businesses should begin experimenting with this paradigm shift in UI design. It's less about clicking through menus and more about conversational interaction to achieve goals. To make this mindset shift,

> • Where in our existing workflows could a prompt-based UI streamline the experience for customers and employees?

Al model layer An ecosystem of AI models and tools

multifaceted outputs. The UI design will facilitate a new human-to-Al interaction style, ensuring users can effectively guide Al agents and retain

businesses can start by asking themselves: • How do we design a prompt-based interaction that is human-oriented and engaging?

Enables evolution, not stagnation 1. The application layer A new way to think about UI Well-crafted prompts will initiate complex actions across multiple systems and generate rich, multifaceted outputs.

**MLOps** layer

By pulling back the curtain on what an Al-native tech stack might look like, traditional businesses can begin thinking about the changes they need to make to bring generative AI capabilities into their own workplace and, ultimately, their business and operating models. Application layer A new way to think about UI 10101 **Data layer** 01010 10101 Access,

Infrastructure layer Built for speed

and scale

- How can we design a UI that balances the power of generative AI with effective user control and clear feedback on outputs?
- In what ways could a conversational Al interface, directly linked to actions, fundamentally change how users interact with our business and the services we provide?

## 2. The Al model layer An ecosystem of Al models and tools

Al-native businesses won't think in terms of a single, monolithic Al model.

Instead, they will strategically employ a suite of models, each specialized for a variety of tasks. Such tasks could include text, image and process generation, as well as structured data modeling, prediction and decision optimization, uncertainty modeling, explainability and code optimization. A diffusion model, for instance, might create stunning product visuals,

while a large language model (LLM) would generate tailored marketing messages. Additionally, traditional machine learning (ML) models will be integrated intelligently to address specific problems and leverage the unique advantages of different Al approaches. Similarly, established businesses should avoid viewing an Al model as a

one-size-fits-all solution. It will be crucial to understand the strengths of each model type and select the right tool for the job. Businesses should

invest in the expertise needed to determine what purpose these models genuinely serve and how they can be best deployed. To enter a multimodel world, businesses should consider the following: • Are we limiting ourselves by focusing only on the latest, trendiest generative AI model? Which specific problems within our business are

best solved by a diverse range of AI techniques?

- Do we have the in-house expertise or partnerships in place to understand the strengths and weaknesses of different models, including traditional machine learning?
- How can we strategically integrate various types of models? How will insights from generative models be combined with outputs from other Al or analytics tools?
- 3. The data layer

Access, connections and creativity

generative AI models as a one-size-fits-all solution.

Avoid viewing

## Leverage vast quantities of

information while

ensuring transparency

in data acquisition.

Additionally, they'll use knowledge graphs (a way of representing data, entities and how they interlink) and vector databases (which are optimized to work with LLMs for fast, easy searches and data retrieval) to grasp complex relationships between data points. For established businesses, it will be crucial to leverage vast quantities of information, both structured and unstructured. Regardless of how they do this, ensuring transparency in data acquisition will be critical.

Al-native businesses will thrive on information—the wider they cast their net, the more powerful they will become. That's why Al-native businesses

will prioritize access to both structured and unstructured data over concerns about data cleanliness. Once they've established clear consent

and transparency on how data will be used, they might tap into vast

public datasets, third-party resources and customer data.

However, acquiring massive datasets can be challenging. This is where businesses can get creative. They can use techniques like synthetic data generation, where realistic but artificial data sets are created, often using generative Al itself. They could also use semi-supervised learning, where models learn from a combination of labeled and unlabeled data. By

prioritizing access to diverse information and employing these techniques, businesses will empower their generative models to perform at their best. To improve their data IQ, established businesses should consider:

Beyond data, are we fully utilizing the information and knowledge embedded within our organization? How can we improve knowledge

 What internal data do we possess that no competitor could replicate, and how could that data power our AI models? · Where do we face data limitations, and could synthetic data generation or semi-supervised learning techniques be viable solutions?

sharing and information flow across departments?

#### Generative AI models can be extraordinarily demanding from a computational power perspective, especially during training and fine-Consider infrastructure

projects.

performance and costs

well before scaling Al

#### scaling Al projects, businesses can prevent cost overruns and ensure smooth operations. To make this infrastructure shift, businesses should ask themselves:

• Have we engaged IT teams in proactively forecasting the

4. The infrastructure layer

tuning. Al-native businesses will understand that their infrastructure needs to be both scalable and cost-effective, often opting for a hybrid

cloud approach. This allows them to ramp up resources for intensive tasks and scale down when usage ebbs, achieving an optimal balance

between cost control and performance. Hardware acceleration, utilizing

specialized graphics processing units (GPUs) or tensor processing units

Established businesses will need to proactively strategize for this level of flexibility and agility. By considering infrastructure implications well before

Built for speed and scale

(TPUs), will be essential.

and performance issues?

language processing, etc.)?

Invest in MLOps to

· Could we benefit from a hybrid cloud approach for our specific AI use cases? When should we prioritize on-demand resources versus reserved instances?

computational demands of future AI projects, avoiding cost surprises

• Does our hardware acceleration strategy (GPUs/TPUs) align with the types of Al models we will be depending on (image generation, natural

- 5. The MLOps layer Evolution, not stagnation
  - ensure your Al systems continuously evolve.

cornerstone of maintaining a competitive edge. It isn't a luxury, but rather the framework that allows these businesses to stay agile and responsive. Robust MLOps pipelines enable experimentation, fast deployment of new and improved models, and comprehensive production monitoring. These pipelines will ensure that Al-powered workforces are constantly learning, automatically retraining as new data becomes available, and seamlessly updating to optimize performance. Established businesses need to shift their thinking toward AI as a dynamic system rather than a one-time project. By investing in MLOps, they can automate processes and shorten the critical feedback loop between realworld results and model improvements. Doing so will ensure their Al

For Al-native businesses, machine learning operations (MLOps) is the

systems are continuously evolving to match the dynamic market

• How can we shorten the time between an idea for model

To make the MLOps shift, businesses should consider:

improvement and deploying it in production?

accuracy, but for real-world business impact?

Ultimately, Al-native businesses will instinctively grasp an entirely new way of developing, evaluating, understanding and deploying AI systems. They won't approach AI solutions with the mindset of building rigid, deterministic machines designed for perfectly replicable results. Instead, they will view their Al agents as evolving collaborators with the potential to be far more than

• What are the key metrics to monitor in production, not just for model

• Does our company culture empower data scientists and engineers to experiment rapidly, even if there are occasional failures along the way?

# A mindset shift

an Al paradigm shift in the making?")

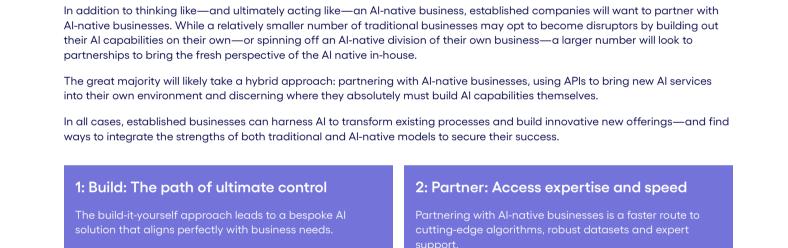
human specialist.

mere tools. (For more on this topic, see Cognizant VP of Al Research Risto Miikkulainen's recently published article, "Generative Al:

This approach will shape their strategies in fundamental ways. Al-native businesses will prioritize building systems capable of continuous learning, understanding that "training" is never truly over. And they will design interactions that leverage the power of prompts and iterative feedback, guiding their Al agents with the finesse one might use when working with a highly skilled

Similarly, established businesses should look to truly harness the power of generative AI rather than shoehorning AI into existing processes or evaluating it through the lens of old metrics. Doing so will require technology teams to think in a completely new way: a relentless willingness to experiment, shift away from a need for total explainability and accept that trust in the Al agent

Build, partner, utilize



building robust infrastructure and slower time-to-market.

competitive advantage or when highly sensitive data

3: Utilize: Rapid prototyping and agility

Utilizing pre-built Al solutions via APIs and services is ideal for businesses looking to supercharge development,

Speed and cost-effectiveness often outweigh the trade-off

mandates in-house protections.

The coming of an Al-native world Al-native businesses aren't here yet. But there's no doubt they're taking shape as we speak. When they do emerge, they will quickly make our everyday actions look and feel very different, from how we prompt for information and ask for action, to what

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in 🖂

From Cognizant

Mary Brandel, Editor

efficiently, productively and unexpectedly than anything seen today.

generative AI into their own operations and, ultimately, do business in a whole new way.



we get in return. In the background, it will be armies of Al agents, orchestrating and collaborating to get work done more

The thing about being a native is you've got to be born into it—no legacy technology, deep-benched workforces or entrenched mindsets to modernize, reskill or evolve. But what existing businesses can do is learn from these emerging businesses to insert

# cognizant

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Strategic considerations for businesses in an Al-native world

will be earned through rigorous observation rather than upfront programming.

While integration and vendor lock-in must be considered, this strategy shines when speed is critical and Al expertise

Al-native businesses themselves rely on partnerships for

4: The hybrid approach: A little bit of

Most established businesses will find success by

This might mean building bespoke models for core differentiators and relying on pre-built solutions for

strategically combining elements of all three approaches.

The ability to pivot as needs evolve is a hallmark of the Al-

everything

native business mindset.

By doing so, existing businesses won't just be part of a "remember when" exercise. They'll be a full-fledged part of what is yet to come as Al-native businesses and the organizations of today, together, imagine and create our next new normal.