MANY MINDS ONE FUTURE

Reimagining CPG Through the Power of Connected Intelligence

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Editor's note

Learning from the past, moving with the future

How the CPG industry is striding forward with AI initiatives

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> ## Today, the message couldn't be clearer: move too slowly, and even the mightiest can fall.

We don't have to look far back in history to find cautionary tales of what happens when innovation outpaces action. Global icons once thought invincible, Eastman Kodak and Toys R Us among them, stumbled fatally by failing to recognize and respond to a technological shift already reshaping the world around them. Kodak's 120-year legacy and Toys R Us's near-70-year run couldn't withstand the tidal wave of digital transformation.

Today, the message couldn't be clearer: move too slowly, and even the mightiest can fall.

That's why business leaders across industries are watching the rise of artificial intelligence with both excitement and urgency. AI isn't coming, it's already here. And unlike the digital wave that caught some off guard, this one offers no room for hesitation. From retail to finance, and especially in Consumer Packaged Goods (CPG), organizations are leveraging AI to transform their understanding of and service to consumers. In this volume of ai:sight, we shine a spotlight on how the CPG industry is embracing this transformation. One of the biggest challenges it faces is turning the enormous volumes of consumer data, structured and unstructured, streaming from every digital touchpoint, into actionable insight.

"Companies are dealing with huge amounts of unstructured data, coming from all angles," says Prabal Chaudhri, Vice President, Commercial and Strategic Growth at Fractal Analytics. "AI can bring those threads together and create context and relevance."

From Mars to Unilever to Procter & Gamble, we explore how global leaders are using AI in demand planning, digital twins, and intelligent agents to accelerate their journey into the future. But as our contributors point out, speed alone isn't enough.

"Speed is important, but the real winners are those who take a step back, think things through, and plan carefully," advises Howard Yu, LEGO Professor of Management and Innovation at IMD Business School in Switzerland.

You can hear more from Howard in our exclusive interview, along with stories that unpack. Nestlé's recipe for CPG success, how simplifying SKUs can save millions, and much more.

So, as you turn the pages, consider this: AI isn't just another wave of change, it's the current pulling the future forward. The question is, how fast, and how smart will we move with it?

Enjoy the read!

Susmita Roy
Managing Editor

MEET THE TEAM

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Human ingenuity and AI are

PARTNERING TO TRANSFORM CPG

When James Joyce penned the phrase "Here Comes Everybody" in his labyrinthine novel Finnegans Wake, he wasn't just naming a character; he was summoning an idea. His protagonist was a shapeshifter: many-named, many-voiced, slipping between identities with every turn of the page. He was an everyman and any man, at once singular and universal, a figure who contained the noise and nuance of the crowd.

Eighty-six years on, Joyce's chorus of multiplicity finds an unlikely echo in the aisles of the supermarket. The Consumer Packaged Goods (CPG) industry has become its own stage for everybody, a place where the desires of millions surge forward, clamoring to be answered in real time. The CPG world doesn't deal in abstract characters, but in toothpaste, snack bars, laundry detergents, and cosmetics, yet each product must perform the same trick Joyce's hero did: be one thing and many things at once.

In today's market, the stakes are dizzying. Consumers expect products that don't just serve a function, but anticipate moods, mirror

identities, and whisper back personal affirmations. Manufacturers must interpret these shifting signals and spin them into offerings with breathtaking speed. Retailers and brands must carry those products across continents, collapsing the time between impulse and acquisition.

And then there's the new player in the drama: AI. Algorithms now behave like Joyce's ever-changing narrator, generating insights, remixing patterns, and predicting the next craving before consumers themselves know it. Data isn't just a record; it's a creative partner. Together, consumers, machines, and makers form a restless cast, rushing the stage at once, driven by a single demand: everything, everywhere, right now.

The result is a business in perpetual motion. The CPG industry has always been about scale, but in the twenty-first century, scale has acquired a new quality: intimacy. It's mass production with a personal touch, a global supply chain tuned to the frequency of individual desire.
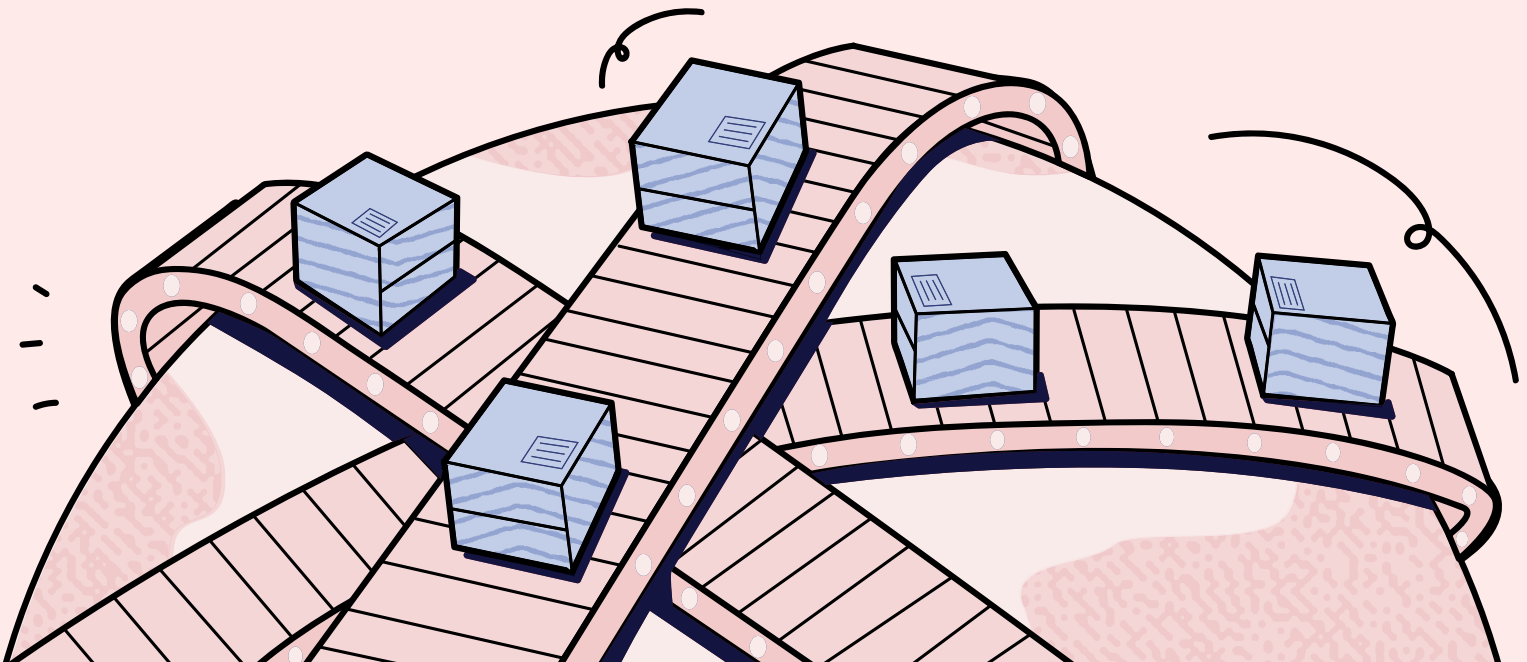
In short, Joyce's words still resonate. "Here Comes Everybody" could just as easily be the rallying cry of modern CPG, a reminder that in every product on the shelf, there is no single consumer, but the crowd, the chorus, the infinite multiplicity of us all.

A BRIEF HISTORY OF CPG MARKETING

A quick look at how brands have reached consumers in the past shows the scale of the mindset shift that is happening in CPG now.

1950-1995
Mass Marketing

Enterprises like **Kellogg's** and **Procter & Gamble** used TV and magazines to reach consumers at scale; a one-way, scattergun approach that made their products into household staples.

1980s-1990s
Data & Segmentation

One-size-fits-all messaging gave way to more targeted approaches as businesses sliced audiences into segments. However, continued reliance on TV advertising caused creative production bottlenecks.

2016-2024
Social-mobile

Always-on feeds enabled immediate, two-way conversations between brands and their customers, ushering in a new era of personalization. Businesses could react swiftly to customers' signals, but they couldn't anticipate them.

Now, 2025 onward
Contextual & Predictive Commerce

Generative and Agentic AI is collapsing the time lag between insight and action, so brands can predict and contextualize customers' moods and make real-time adjustments.
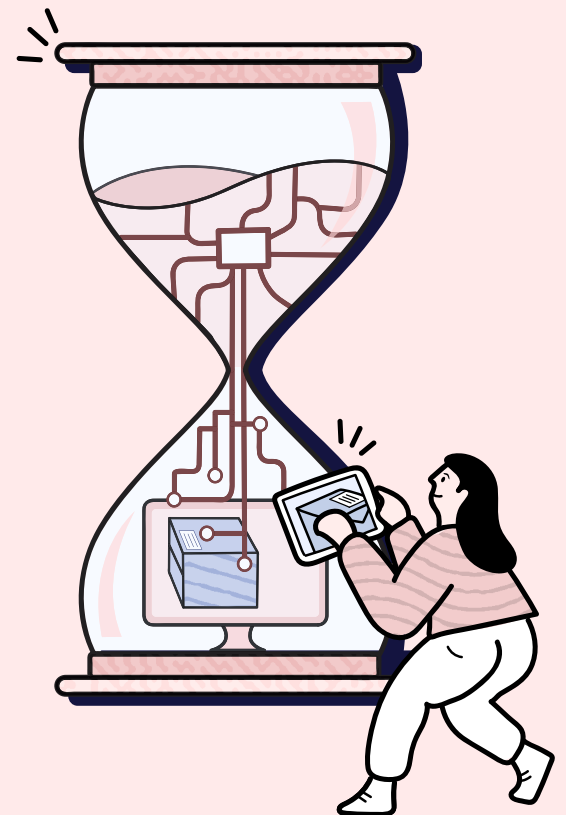
"Traditional marketing media centered on controlling the narrative. Today, with GenAI agents and autonomous systems, the focus is shifting to orchestrating dynamic, adaptive experiences," explains Prabal Chaudhri, Head of CPG Products at Fractal Analytics.

"Enterprises today are inundated with an avalanche of unstructured data and signals from every direction. AI is transforming that noise into context and meaning, weaving disparate threads into a coherent picture. This shift empowers people to move at the speed of insight, engaging consumers with unprecedented relevance and building deeper, more human connections than ever before."

CPG'S AI MOMENT HAS ARRIVED

Any big-name CPG firm you can think of is likely to have made at least one AI move already. Autonomous price optimizers, dynamic shelf allocators, and generative brand storytellers are all becoming part of the CPG crowd. They are not all humans – they are AI agents that can contextualize information, plan, and act on it instantaneously.

These tools are helping to create a world where everything – pack design, promotion, shelf layout, even portfolio decisions can be sensed, simulated, and served to every customer moment-by-moment, and at a speed and scale that wasn't possible before. **Here are some examples:**

Supply chains don't just move, they think

Stockouts, pricing errors, promotional errors, and last-mile issues bring costly sales losses. In North America alone in 2024, these issues cost CPG companies $60 billion. That's why companies are using AI to create more intelligent, dynamic supply chains that can respond quickly to changing trends.

At Mars, the Atlas AI demand-planning suite has unified forecasts across 60 countries, replacing hundreds of spreadsheets with a single AI report. It is wired into the company's new $450 million smart factory for Royal Canin pet foods, where it flexes production the instant there is a spike in demand.[1]
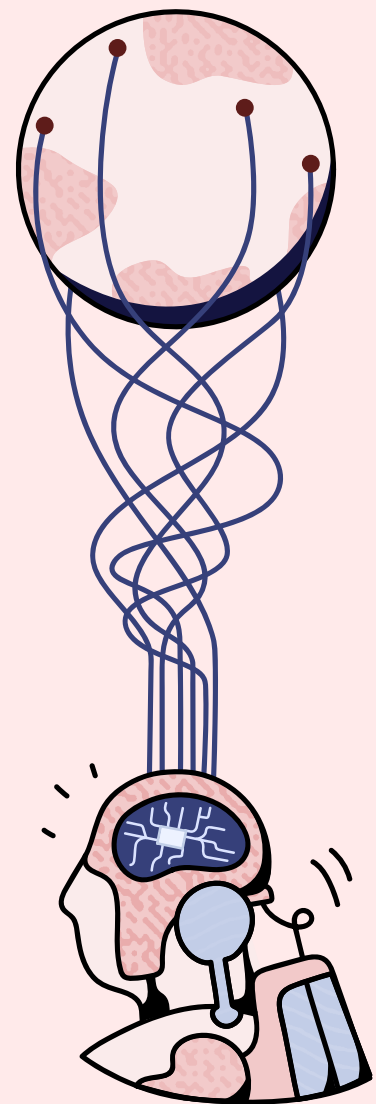
[1]Mars builds on long-term U.S. investment with the opening of new $450 million Royal Canin facility in Ohio: https://www.mars.com/news-and-\stories/press-releases-statements/mars-opening-new-royal-canin-facility-ohio
MARS Leads a Global Digital Transformation: https://johngalt.com/learn/case-studies/mars-case-study

Content speed beats media spend

Social media and streaming services move at lightning speed. GenAI can help CPG companies to keep pace with consumers' moods – look at what Unilever is achieving as it partners with thousands of social media influencers.

Unilever's Beauty AI Studio combines AI with physics, data, and material science to create digital twins of its products. Those twins are then fed into the company's Gen AI Content Studios and Sketch Pro design unit to generate social-first creative content.

The system can spin hundreds of influencer-ready assets for a brand in under 48 hours – twice as fast as traditional methods, at 50% of the cost. A recent campaign for a Dove limited edition racked up 3.5 billion impressions at a fraction of the cost of TV advertising.[2]

10,000
Product Twins
expected to be created by 2027

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70%
Cost Savings

across imagery and shelf tests — enabled by design once, localize infinitely.

Digital twins erase the cost curve

Generating content for always-on feeds can also prove expensive – until you put GenAI on the job. Nestlé is combining digital twins of its products with an AI-powered content service, to stay ahead of the game. The system can instantly tailor product assets for different platforms or audiences, without the need for manual effort. It speeds up time to market for seasonal or localized campaigns, while enhancing consistent branding across markets and channels.

Nestle's digital twins also connect directly to planograms, shopper data, and retail testing. This means that the company can rapidly roll out virtual shelf tests and better position its brands in response to consumer behavior.

Some 10,000 product twins will be created by 2027, but the ones in use today have already cut the company's e-commerce imagery and shelf-test costs by around 70% - making "design once, localize infinitely" a reality.[3]

[2]Unilever reinvents product shoots with digital twins and AI: https://www.unilever.com/news/press-and-media/press-releases/2025/unilever-reinvents-product-shoots-with-digital-twins-and-ai/
Unilever reinvents product shoots with AI for faster content creation: https://www.unilever.com/news/news-search/2025/unilever-reinvents-product-shoots-with-ai-for-faster-content-creation
How Unilever Used AI to Make Soap Go Viral: https://www.wsj.com/articles/how-unilever-used-ai-to-make-soap-go-viral-8e723717
Unilever debuts AI-driven design unit to wean brands off TV-first model: https://www.marketingdive.com/news/unilever-debuts-ai-design-unit-wean-brands-off-tv-first-model/752298

[3]Nestlé is creating AI-powered 'digital twins' for brands like Purina, Nescafé Dolce Gusto and Nespresso: https://www.nestle.com/media/news/brands-ai-digital-twins-content-service
Nestlé's Digital Twin Rollout: A Wake-Up Call for Brands: https://incontextsolutions.com/blog/nestles-digital-twin
Nestlé Deploys AI and Digital Twins to Scale Global Content Creation: https://www.remixreality.com/nestle-deploys-ai-and-digital-twins-to-scale-global-content-creation

HUMAN X MACHINES = EXCEPTIONAL

We predict that AI agents will outnumber humans in the enterprise by 2027 – so where does that leave humans? The truth is, AI cannot replace human ingenuity. Its true value lies in augmenting it.

The future is not humans or machines.
It is humans x machines.

Picture the scene:

- At the breakfast brainstorm, a strategist frames a new purpose for a snack brand – and by 10 AM, an AI model has drafted 100 culturally-tuned storyboards.

- At the mid-morning shelf check, a planner spots an out-of-stock alert in Lagos – so digital twins reroute the inventory before the first afternoon shopper arrives.

- During an afternoon R&D sprint, food scientists sketch a new plant-based meal idea – and GenAI simulations test 1,000 ingredient permutations overnight.
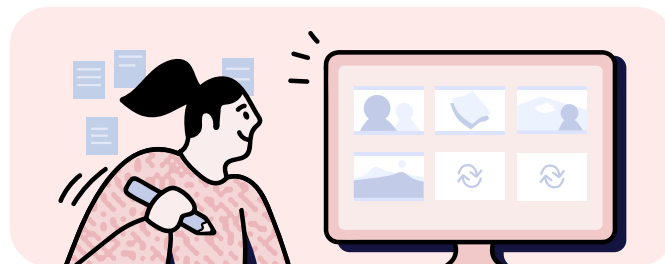
Consumers aren't the only winners in this scenario. With AI agents on the team, people can give their creativity free reign.

Here's a real-life example:

Procter & Gamble is proving the power of humans x machines with Project Genie, its company-wide GenAI program, which harmonizes point-of-sale, media, and supply data in one place. It has already helped to reduce ad-testing costs by around 90% – but the company wanted to test its value in human, as well as monetary terms.

To do that, it took part in a field study run by Harvard Business School. In a one-day virtual workshop, Procter & Gamble employees were tasked with developing solutions to solve real business challenges facing the company's brands. The results were impressive. Teams equipped with the data-fed GenAI assistant didn't just work 12% faster than control groups; they also generated more "exceptional" ideas than either humans or AI alone.

But that wasn't all. The study found that AI helped employees with different backgrounds to develop more balanced solutions, regardless of their individual expertise. And on a socio-emotional level, AI helped to elevate employee experience and boost morale.[4]

[4]The Future of Collaboration: How AI is Supplementing Teamwork and Innovation at P&G: https://us.pg.com/blogs/how-ai-supplements-teamwork-and-innovation P&G, Harvard Study Says Gen AI Gets CPG Teams Working 12% Faster: https://consumergoods.com/pg-harvard-study-says-gen-ai-gets-cpg-teams-working-12-faster

AI improves both individual and team performance, new study finds. Will companies draw the right lessons from it? https://fortune.com/2025/03/25/ai-teamwork-study-collaboration-mollick-procter-gamble

FOUR MOVES TO MAKE NOW

Joyce's line was both an invitation and a warning: the crowd – both human and AI – is coming whether you open the doors or not. Consumers are routinely using tools like ChatGPT to augment their skills, create content, and boost their purchasing power. Increasingly, they expect the same personalized, instantaneous interactions from their favorite brands. GenAI agents are helping CPG companies to meet those expectations and more.

For those that haven't begun this journey, now is the time to start. AI is already rewarding the brave, and penalizing the hesitant, at algorithmic speed. Brands that are not onboard will rapidly get left behind.

Of course, it's not that simple for an enterprise to transform decades of knowledge systems and processes. CPG organizations are still figuring out the role that GenAI agents should play in their business, and the agents themselves are still evolving.

So, how can companies begin to navigate this emerging territory? **Here are four key steps to start the journey:**

1. Set a 12-month "AI ambition" that links directly to consumer value, not tech experimentation.

2. Invest in a cross-functional command center – data scientists sitting beside brand managers, supply planners beside media buyers – to turn real-time insight into real-time action.

3. Codify a "promise–tool–bargain" – the consumer promise, the AI toolset, and the ethical bargain that governs data use. Transparency breeds trust.

4. Consider how human x machine teams will work for the business and its people – and invest in governance models to maintain the right balance.

"CPG organizations are taking the first step in a long journey," says Chaudhri. **"AI is still evolving, and there is no blueprint to tell them how they should use it. A lot of testing, piloting, scaling, learning and pivoting will be needed to find the answers, and a lot of value can be created by being curious.**

That's where Fractal's deep expertise and domain knowledge come in. We're partnering with brands to define what AI truly means for their organizations across their people, processes, and infrastructure. And we're already proving that when humans and machines work together, they can unlock outcomes far greater than either could achieve alone. Fractal is helping enterprises design the future of work today."

Prabal Chaudhri is the Head of CPG Products at Fractal, driving transformation for consumer goods enterprises toward a future where humans and intelligent agents collaborate to create value.

With over 20 years of experience across consumer goods, food, retail, technology, and eCommerce, he combines deep CPG expertise with a passion for innovation, brand building, and product development. Prabal holds an MBA from Northwestern University's Kellogg School of Management and is based in Fractal's New York office.

Designing for a better world

DON NORMAN

In his latest book 'Design for a Better World', Don Norman envisions a future where design embraces the well-being of humanity, encompassing diverse cultures, the environment and all living beings. Here, he shares how, through his summit and awards programme, he strives to inspire a new generation of designers and educators to make positive change.

Don Norman's career spans academia, government and business, including time at UC San Diego, the US Department of Defense, Apple and Hewlett-Packard.

He co-founded user experience consultancy Nielsen Norman Group in 1998, and remains on its Board of Directors.

The thread connecting this varied career is an obsession with design. Here he explains how, at 89, he remains passionate about helping designers create a better world for us all.

Tell us about your journey in design.

It hasn't been traditional. I started as an engineer, then accidentally became a psychologist and cognitive scientist, before working as an industry executive at Apple, where I started the User Experience Group.

Design is something I've been passionate about in all these roles. In 1988, I wrote a book called 'The Design of Everyday Things', about how people interact with technology. The principles of that book are mostly unchanged – they still apply today.

After my experience at Apple and starting the Nielsen Norman Group, I followed a client to Chicago in a company that didn't work. I ended up teaching at Northwestern University, where I found two good friends who were working in emotion. That's where I developed the idea for the book 'Emotional Design: Why We Love (or Hate) Emotional Things'.

I have a deep training in technology, both as an academic and as a vice president of a technology company. And so my focus really is on taking technology and making it usable and effective for people. I know that aesthetics and emotion are also critical to good design, but these are things I'm bad at – I let others take care of those things.

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I don't believe in asking them, because people don't often know why they're doing what they're doing.

How do you think designers can create more effective products for their users?

First, you have to go and watch what people are doing. I don't believe in asking them, because people don't often know why they're doing what they're doing. In fact, the more expertise they have, the less they understand about why they're doing what they're doing. That's because by the time you're an expert, you do things intuitively.

If you look at sports people – tennis players, for example, they are often bad coaches. They don't know why they're good. But all the best tennis players in the world have coaches. The coaches are not as good at the sport as the person they're coaching, but they understand the principles and they can see how the tiniest tweak to how a player holds a racket, for example, can make a big difference.

In the design industry, I play the role of coach. In fact, at a recent conference, I was asked what I had designed. My reply? I haven't designed anything of any great significance. But what I have designed is plenty of outstanding designers.

My focus now is to help designers move beyond what I wrote about in 'The Design of Everyday Things' and look at how, through much of the design we see today, we are destroying the environment. Products are being designed that are very difficult to repair. And they are being designed deliberately so that they must be replaced every couple of years. Even if they're just digital products or services, we are destroying cultures. We're addicting people in ways that are not good for them or for society.

It is time that we pay more attention to the way we source materials and the way we manufacture products. And this can only really be done at the design stage. That's why I have written 'Design for a Better World'. It's also why one of my key goals now is to advance the development of humanity-centered design education and projects across the world.

How do you approach design in a way that will influence human behavior?

The goal of any design is to change human behavior. We're trying to devise things that people will use and help them do things differently.

In many instances, people won't even complain about the way they are doing something because they assume the current way is the only way it can be done. So, we use anthropological techniques to go out and observe people, see what they're doing, and understand why and how they do it. And what we can do is we can watch and say, maybe you don't have to do it that way. Maybe there's a whole different way, in fact. It's our goal to help people do their jobs easier and to give them a better quality of life.

When I'm consulting, I have a rule: I do not solve the problem I'm asked to solve. Why? Well, because almost always that means I'm treating the symptoms and not the real issue. If you figure out what the real cause of these symptoms are, the symptoms disappear. But this often means making larger changes than people would think necessary.

How do you see GenAI shaping human behavior and cognition? What could be the positive and negative aspects of it?

I think there are huge benefits. For example, I don't do searches anymore. The whole notion of searching stems from a technology that got developed 30 years ago. It was about finding the right keyword that will find the right website that carries the answer to our problem. We got to be good at that. But today, that's not what we do anymore. I don't want to find a website that has my answer. I want to find the answer.

GenAI is already changing the way work gets done. I get a lot of designers thinking that it will replace them. However, they are looking at it the wrong way. If they can become an expert in the use of AI, they will find it won't replace them – instead it will make them more creative and more productive. They won't have to do any of the dull, boring work they have had to do in the past.

Not only will designers become more valued if they become experts at using these tools, but they will find that design can be used in much more powerful ways than in the past.
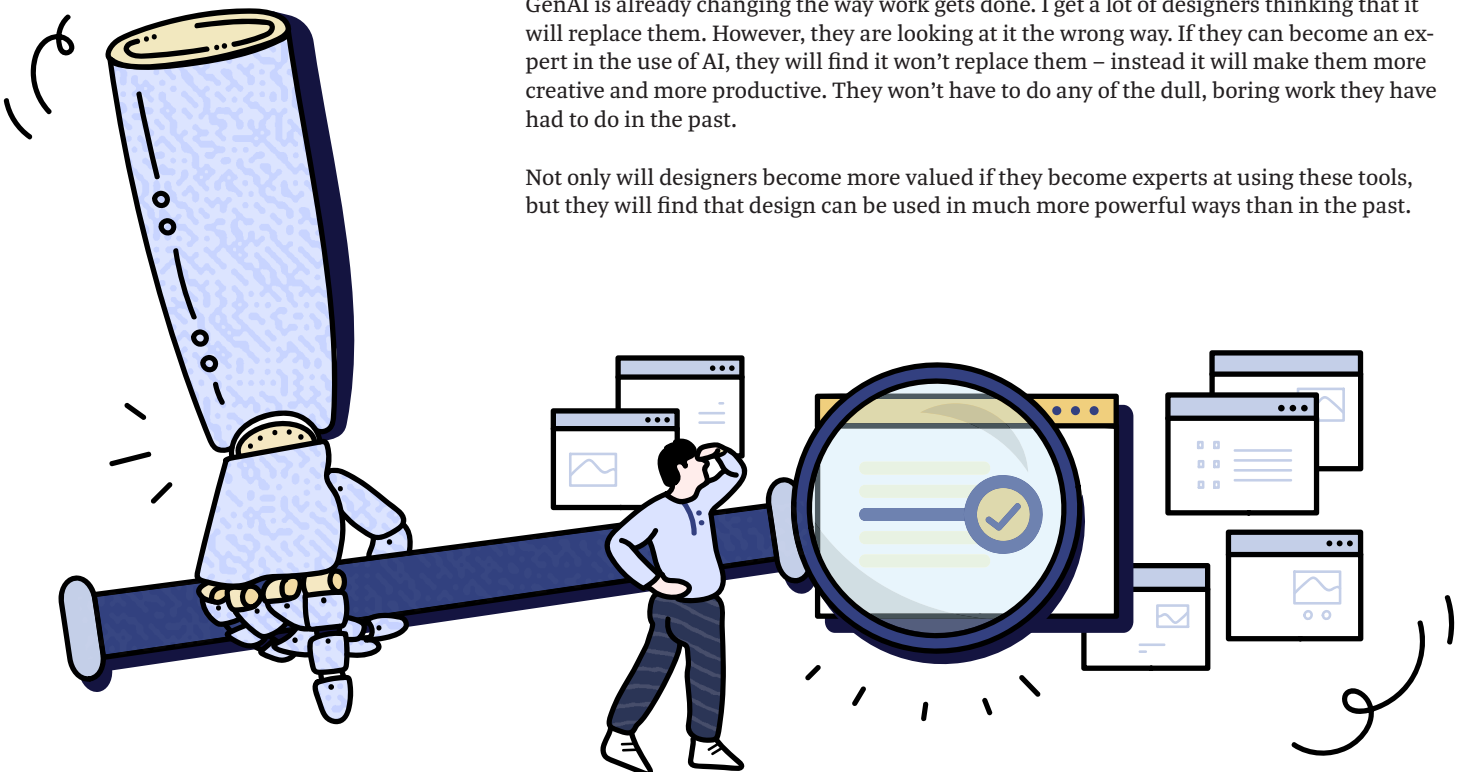
What are your thoughts on the ethical implications of AI and its impact on design? How can we ensure that AI is used responsibly and ethically in design?

Most technical fields have ethical statements. Engineering societies all have strict ethical statements. Healthcare has strict ethical statements. But design doesn't have this. There are no ethical rules. There's no design society that I'm aware of that has a set of ethical statements.

This must change. That's why I'm just starting an enterprise to establish ethical guidelines for designers. This isn't an easy thing to do. I once tried to organize an ethical group on a project, but the group gave up, declaring that it's obvious what's ethical and what's not. That's not true at all. What's obvious to me about what is ethical may for you be unethical. Different groups, people and societies with different needs have very different views about what's right and wrong. And we must accommodate those different views.

Can you tell us a bit more about the launch of the Don Norman Design Award (DNDA) and Summit? What do you hope to achieve with it?

The idea began life as an award for people who do wonderful work. However, I recognized that at the point at which a designer has done wonderful work, getting an award doesn't change anything.

That's why I have chosen to recognize early career professionals – those who are just starting out – because that's when encouragement and accolades can really make a difference.

The awards are there to showcase projects that profoundly impact society through humanity-centered design. So far it has been a great success. We had entries from 26 countries to the 2024 edition of the DNDA and over 200 people attended the Summit in San Diego.

The 2025 summit (DNDA25) was held in Singapore from November 19-21, 2025.

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Don's latest book 'Design for a Better World' is now widely available.

If you are interested in becoming an industrial sponsor of the DNDA Summit to help it continue to do its philanthropic work, connect here: donor@dnda.design

MEANINGFUL, SUSTAINABLE, HUMANITY CENTERED

DESIGN FOR A BETTER WORLD

DON NORMAN

Author of *The Design of Everyday Things*
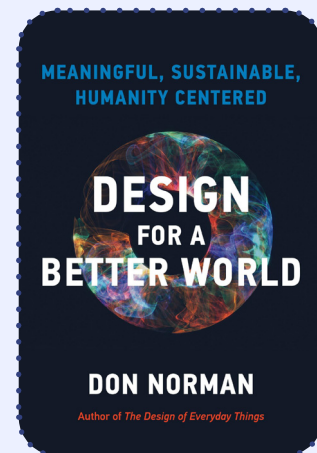
About Don Norman

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I am co-founder and principal of the User Experience/ Usability consulting firm, the Nielsen Norman group, where I am now emeritus.

I have been an IDEO fellow and a member of the Board of Trustees of IIT's Institute of Design in Chicago (now emeritus at IIT). Along the way I've been a VP at Apple, an executive at HP, with experience at startups ranging from investor, adviser, and member of the board of directors.

I've received three honorary degrees, the Franklin Institute medal for Cognitive and Computer Science, and membership in the National Academy of Engineering.

In October 2021 I went to London to receive the Sir Misha Black Medal for Distinguished Services to Design Education for 2021. While in London I spent three days with people from the Ellen MacArthur Foundation and at the London Design Museum which just opened its exhibit on "The Waste Age." The major topic at both places was "What Can Design Do?" as we discussed how to convince manufacturers and designers to design for the Circular Economy with Circular Design principles. This visit was critical to the book Design for a Better World: Meaningful, Sustainable, Humanity Centered. Sustainability is roughly 1/3 of the book.

What am I doing now? My entire focus is on the Don Norman Design Award (DNDA) a non-profit, organization that rewards early career individuals and organizations that practice Humanity-Centered Design (HCD+) for societal good.

The human side of AI

VIKRANT BHAN

In conversation with Vikrant Bhan, Nestlé's Group Head of Analytics, Data and Integration, to uncover how the CPG giant harnesses AI to connect with the universal everyman. Here, Bhan explains how Nestlé bridges global reach with local impact by breaking silos and democratizing data and AI tools.

How Nestlé is stirring data, purpose, and global flavor into one recipe

In the spirit of Nestlé's 'Take a Break' campaign, what's your favorite Nestlé product that you and your family can't live without?

With over 2,000 global brands, it's tough to pick one. Growing up in South Asia, India, I loved Maggi noodles – a common favorite among students from that region. Currently, I enjoy Maggi culinary products and Nespresso. But beyond products, the purpose behind Nestlé Health Science's Resource products, especially for oncology and nutritional needs for those with serious diseases like cancer, stands out. I've seen firsthand how these improve lives, making them particularly meaningful.

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> ## We design to leverage services rather than embedding AI in every geographic entity.

Nestlé touches nearly 8.2 billion people, and your role involves managing that scale. As one of the largest food and beverage companies, what unique AI opportunities and challenges come with scaling at speed?
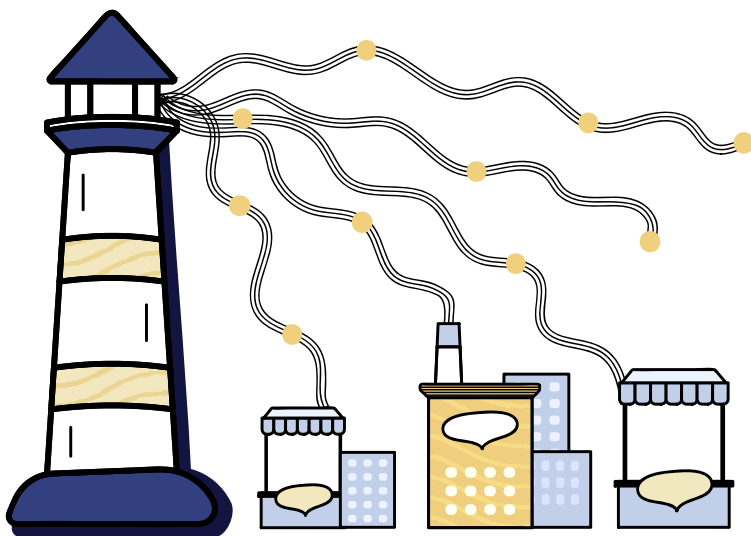
To use a food analogy, the challenge is getting the recipe right. Three key ingredients are business alignment, end-to-end processes and data.

In a complex matrix organization like Nestlé, aligning P&L entities, zones, categories and group functions is critical. But we also need the right processes, change management, adoption, capabilities, people and culture. We design to leverage services rather than embedding AI in every geographic entity.

When it comes to data, we have abundant data in some areas, thanks to our single ERP solution. However, in areas with observational or external data, fragmentation poses issues with coverage, consistency and quality, impacting AI scalability.

To overcome these challenges, we pilot initiatives in mature markets with robust data, capabilities and culture, creating 'lighthouses' that are designed for scalability. We leverage partners and services to automate and reduce costs as we scale across the group, ensuring faster, more efficient expansion.

> ❝
> ## We divide the business into archetypes based on trade routes and channels.

That ties into balancing global and local needs in a fragmented world. With regional products like unique Maggi flavors in India, how does AI help incorporate local and global needs?

In the CPG industry, especially in the food and beverages segment, you need to be very localized. You need to understand different sentiments, different consumer touchpoints and journeys and differentiate accordingly. We use a hybrid operating model, where shared services are managed centrally, but local AI expertise is there to address market-specific needs. Anywhere we are making decisions on commercial investment, on marketing investment or consumer promotions, need to be managed super-locally.

Nestlé bridges global and local incredibly well. How do you tailor strategies for emerging markets, where data, technology and needs differ?

We divide the business into archetypes based on trade routes and channels. Emerging markets, like those in Asia or Latin America, often involve mom-and-pop shops, fragmented trade or rapidly growing e-commerce, sometimes skipping traditional retail. Our data fabric accounts for these differences, integrating competitor, syndicated and retailer data.

AI solutions, like sales recommendation engines, vary by channel – traditional, e-commerce, or modern grocery trade. Data richness, veracity and variety also differ, so our data models adapt to these realities to ensure effective solutions.

With 70% of your brands being number one or two in their categories, what's next for creating the next billion-dollar product? How does AI help with your portfolio expansion?

Previously, we spread innovation too thin, but now we focus on big bets and growth platforms, 'billionaire brands' that we scale through the launch process.

AI drives efficiency in procurement, logistics, manufacturing and commercial spend, freeing up funds to invest in these platforms.

For big bets, like our viral coffee concentrates that are proving incredibly popular with younger audiences today, AI optimizes launch forecasting, capacity planning, production and marketing investments. AI models help allocate spending across channels for maximum ROI, embedding AI across end-to-end processes to drive innovation and growth.
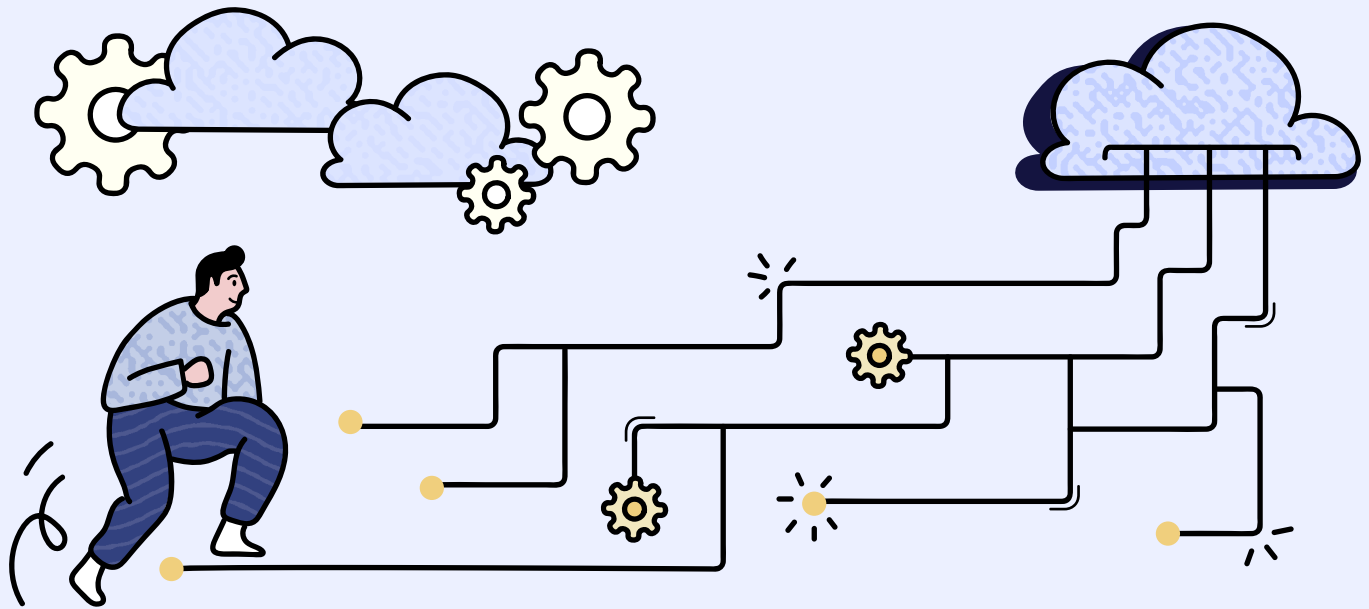
Where is AI delivering the biggest productivity gains across your value chain?

Classical AI is delivering gains in revenue growth management, marketing spend optimization, supply chain control towers, logistics, predictive maintenance and enterprise business planning. These are measurable, with clear value reported to stakeholders.

Generative AI, meanwhile, is enhancing our existing capabilities and improving the user experience. It's certainly improving productivity too, but it's very difficult to measure that gain. We're on a learning journey – much like we first started experimenting with machine learning. There's a real opportunity to reimagine some of our ways of working and end-to-end processes. As we venture further down this path, I expect we will further improve the employee experience and maximize value.

That ties into breaking silos. How are you using AI to replace data, functional and technology silos with a unified digital engine?

End-to-end processes are the vehicle. Take our idea-to-launch process: it spans marketing, R&D, supply chain, sales and regulatory functions. If you use AI in buckets or silos, you will only optimize one of these parts of the chain. At Nestlé, we are seeing a paradigm shift by focusing on outcomes like time-to-market or launch success. This means leveraging AI cross-functionally. It's not easy, but when you get it right you are able to serve customers and consumers far better.

> "
> If you use AI in buckets or silos, you will only optimize one of these parts of the chain.

Nestlé prioritizes health, nutrition, and wellness. How do you embed these values into AI systems?

One of the indicators we've committed to which began in Australia many years ago and has since become more of a global norm, is the health star rating (HSR). So, how does that integrate into our AI systems? Think about product lifecycle management: when we're working on recipe formulation, we're selecting key purchasing specifications and ingredients.

In AI terms, this is a recipe optimization use case. We have around 120,000 recipes in a single system which is already a strength but then we layer AI on top. In the past, the drivers for optimization might have focused mainly on cost, or later on procurement ease and sustainability KPIs. Now we also consider impacts on climate and packaging. And, of course, we include nutritional values and HSRs to see how different ingredients affect a product's overall nutritional profile. That's a very real demonstration of how our values are embedded in AI systems. By getting it right at the base of the end-to-end process – at the formulation stage – we influence company-wide KPIs and deliver on the commitments we communicate to external stakeholders and consumers.

How does AI help navigate market shifts like sustainable farming and rising cacao prices?

Change is constant – COVID-19, geopolitics and inflation have disrupted models. Our operational master plan, revised annually and quarterly, aligns AI with business risks and drivers like market share. AI optimizes SKUs, brands, consumer tastings, order fulfilment and availability in growing channels like convenience, value retailers and e-commerce. It evolves marketing ROI models, pricing algorithms and product recommendations to adapt to dynamic market realities.

You've worked with Fractal for years. What stands out about our partnership, and how do you see us co-developing solutions?

Fractal's partnership started in specific units but grew globally, beginning with revenue growth management. I appreciate Fractal's passionate leadership, domain expertise in CPG and focus on industry-specific innovation rather than commoditized solutions. Its subject matter expertise and practice advancements help the CPG industry grow, making it a valuable partner in driving innovation.

How do you make the most of AI for boosting growth and to empower your workforce instead of automating them away?

We're at a point now where nearly 100,000 employees here at Nestlé are using AI co-pilots. And now we're adding even more capabilities like research and learning agents. Employees creatively use these tools daily. It's amazing to see how it boosts effectiveness and really empowers our workforce, without needing ROI metrics.

For leaders just starting out on their AI journey, what's your advice?

Understand your organization's maturity and benchmark it. Don't be disheartened, because if you're not working in a digitally native company, then there are likely to be cynics. Be smart about picking your first set of capabilities to run with so you can build credibility and trust quickly.

Surround yourself with the right people good, trusted platform partners and internal experts who may not know everything, but who have extremely high learning agility and a bias toward outcomes that are right for the company. It doesn't need to be a lot of people, but it needs to be the right people. And if you have the right team and the right sponsors to kick off your journey, you will be successful.

About Vikrant Bhan

Vikrant is a Data and Analytics leader with a strong background in Business Intelligence (BI) and data analytics. He joined Nestlé in 2006 after successfully delivering End-to-End Business Warehouse implementations for various CPG companies. Throughout his career, Vikrant has held multiple positions in Zone AOA, including Regional Manager responsible for Business Analytics.

In 2018, Vikrant relocated to the IT Hub in Barcelona, where he played a pivotal role in ramping up the Analytics, Data, and Integration Team as the Site Lead. He also established the Global Analytics Service Line as the Analytics Centre of Excellence for Nestle. Recognizing the growing demand for Analytics at Scale, Vikrant moved to Vevey in early 2020 to provide Global Leadership, drive alignment with key stakeholders, and establish a Value-Driven Portfolio across functions and businesses.

Currently serving as the Global Head of Analytics, Data, and Integration, Vikrant is responsible for delivering enterprise technology platforms for Master Data, Integration, Data Management and Analytics. He focuses on scaling data foundations across the organization and delivering value-driven analytics products and services to enable business-led Digital Transformation at Nestle. Vikrant leads global teams with the mission of "Powering every Decision and Action in Nestle with Trusted Data," spanning locations such as Vevey, Barcelona, Milano, Bangalore, Sydney, St Louis, Mexico, and Argentina. He also orchestrates the community of Data and Analytics practitioners across Nestle worldwide.

Vikrant's passion drives him to enable Nestle's purpose, driving business impact, and fostering development each day.

How a global CPG leader simplified SKUs

THE $250 MILLION DECISION

It was a Monday morning, and the executive team of one of a global CPG company faced a familiar headache: its SKU portfolio. Tens of thousands of products, spreading across markets, each with its own production, marketing, and distribution costs. On paper, the portfolio looked impressive. In reality, complexity was choking growth, and no one knew which products were helping and which were hurting.

Meetings stretched for hours. Finance reported losses, marketing defended campaigns, sales pushed for visibility, and no one could get a clear answer. Every decision seemed to hit a wall of data gaps, misaligned priorities, and siloed opinions. Delisting underperforming SKUs could take two years per product. The cost of inaction was mounting, but the path forward was unclear.

The leadership team knew something had to change. They needed clarity, speed, and alignment, and that's when they turned to Fractal.

At Fractal, we didn't just want to put AI technology to use. We wanted to enable teams to make decisions with confidence and clarity. Together, we built an AI supported SKU simplification solution that could see the whole picture, point out underperforming SKUs and enable teams to delist and save costs at the right time.

The AI platform didn't just flag weak SKUs, it explained why they were underperforming, analyzing sales, margins, market growth, and consumer behavior, bringing transparency to the teams making decisions. But insight alone wasn't enough.

Fractal took a leap forward and co-created a delisting process, mapping every step, from halting production to clearing inventory and removing SKUs from shelves, enabling humans (marketing, sales, finance and supply chain teams) to track and close the loop. Roleswere clear, timelines were set, and accountability was visible. Bottlenecks disappeared. Teams started moving together, making delisting decisions at a rapid scale.

The results were dramatic:

SKU Simplification by the Numbers

BEFORE	AFTER
🕐 SKU Delisting Time	
Upto 24 months per product	6 months per product *4x Faster*
👁 Visibility	
Fragmented across multiple spreadsheets and teams	SKUs flagged: *100,000+ underperformers identified*
👥 Team Alignment	
Hidden waste accumulating in production, distribution, and marketing	Savings unlocked: *$250 Million freed* across the value chain
$ Financial Impact	
	Clear roles, shared ownership, faster decisions

Unexpected Wins:

• Focus on high-performing SKUs that drive growth.
• Greater confidence to experiment and scale new products.
• Streamlined cross-functional collaboration.

Automation is powerful, but impact comes from AI + human judgment + process alignment. Together, they turn complexity into clarity.

And the impact went beyond dollars. Teams became more aligned. Decisions were faster and more confident. Leaders could now focus on high-performing SKUs, invest in growth, and experiment with new products. AI illuminated insights, but the company's people made the strategy real.

The lesson is clear: complexity is not inevitable. Even the largest, most fragmented portfolios can be simplified if the organization has clarity, process, and uses AI as an enabler to drive growth.

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Data and discipline

HOWARD YU

Sharing his perspective on the attributes that set future-ready CPG players apart, and what it really takes to make the leap into AI.

In Consumer-Packaged Goods (CPG), speed alone is no longer enough. According to Howard Yu, LEGO® Professor of Management and Innovation at IMD Business School in Switzerland, the companies that thrive with AI aren't the fastest movers, but the most disciplined ones; those that build strong data foundations and make transformation sustainable.

**In 2021, you said: "Going digital is no longer optional."
In 2025, 'going AI' seems equally non-negotiable.
How can leaders effectively navigate this change?**

The world is spinning so fast. During the pandemic, it was all about digital and omnichannel, but now it's about generative AI and AI interfaces.

What I've seen is that the most future-ready businesses aren't necessarily those moving at the highest velocity. Speed is essential, but the real winners are those who take a step back, think things through, and plan carefully.

It's the slow work that really matters. That's today's challenge: taking a step back and focusing on the critical building blocks.

If your organization still runs on manual coordination, with nothing documented, AI can't help you. You need a proper corpus of data. Some businesses rush into superficial AI projects, partnering with startups to launch Large Language Model (LLM) features, but those solutions rarely deliver a nuanced, compelling customer experience.

The real foundation is capturing the right data, simplifying the organization, and eliminating manual processes. That groundwork enables you to take full advantage of generative AI. Once you've built those foundations, LLMs simply accelerate growth.
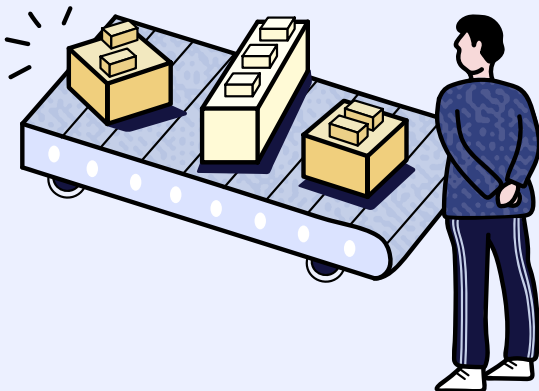
You've spoken about how jobs, processes, and value chains will be decomposed and reassembled like LEGO blocks, with parts automated by AI. Where do you see the earliest and most promising signs of this transformation taking shape? What hurdles must we overcome to scale this reinvention for the 8.2 billion people that the CPG industry serves?

To capitalize on AI's infinite opportunities, CPG executives need to play a dual game: deliver today, while transforming for the future. Generative AI will profoundly change customer interfaces, workflows, and the workforce. However, if consumers aren't buying now, you're in trouble, whether you're a large corporation, a small-cap company, or a family-owned business.

That's why AI deployment needs to run on two tracks.

1. **First**, there's the short-term track: productivity gains, new features for customers, better support for retailers, and guiding shoppers to the right products. These can be deployed quickly, assuming the groundwork is in place, without requiring heavy senior management oversight, thereby empowering employees to experiment and move quickly.
2. **Second,** there's the enterprise-level track: redesigning end-to-end business processes with strategic partners to eliminate steps, reduce manual coordination, and enable junior staff to manage more complex tasks.

If AI deployment is framed purely as cost-cutting, you'll face resistance. People fear for their jobs. Leaders must instead envision AI to be workforce employee-friendly. That means reimagining it as not being about automation, but about empowering people with AI tools so that they can do more meaningful work.

With that value system, the generative AI transformation everyone talks about becomes less painful and ultimately more effective in achieving business goals faster, because we take people along the way.

> **That's today's challenge: taking a step back and focusing on the critical building blocks.**

Most current LLM use cases cluster around customer service, content, and code generation. Can you share any examples of CPG companies applying LLMs in novel, high-impact ways?

In our latest ranking at the Centre for Future Readiness, Procter & Gamble, Coca-Cola, and L'Oréal stood out. They've built strong digital backbones, allowing data to flow across silos – and that took years of work.

Procter & Gamble, for instance, spent almost 10 years running data visualization initiatives, which built a high level of data literacy among managers. This culture of transparency is a real differentiator. No one has nailed it entirely but, in business, being one inch ahead of the competition is enough.

Coca-Cola built sandboxes worldwide, allowing teams

to use their advertising image assets to create locally relevant marketing content, internet memes, and campaign materials to boost conversion rates.

L'Oréal, meanwhile, has long invested in its beauty tech pipeline, such as ModiFace's augmented reality tools for virtual product trials. Generative AI is now enhancing that functional excellence.

What differentiates these organizations is that they're not just chasing generative AI, they're also maintaining expert systems based on traditional machine learning to optimize and clean databases. LLMs are powerful, but not omnipotent.

As we approach a world where AI is universally accessible and free, what will be the enduring sources of competitive advantage for firms?

The fear is this: in a few years, if generative AI becomes extremely smart, it could wipe out direct consumer connections overnight. Imagine someone asks AI to "get me the nicest Christmas gift for my child." The AI purchases without the customer ever visiting the retailer's site. The same could happen with airlines or hotels; years of optimized interfaces, marketing campaigns, and customer knowledge could vanish if bookings all happen through AI intermediaries.

That's the fear. But here's the key, it's just an interface change. What really powers LLMs is data. If you're an operator, there are three ways to think about maintaining advantage:

1. **Leverage proprietary data:** Use customer data that's not publicly available so your matches and recommendations outperform generic AI results. For example, if you're Trip.com, Expedia or Booking.com, you have proprietary hotel reviews, traveler demographics and behavior data. That can produce a 'wow' result where a generic AI agent delivers only an average result.

2. **Capture new, unique data:** With appropriate privacy safeguards, companies can collect unique, real-world data the open internet doesn't have. Theme parks use wearables to track guest activity. Hotels could gather on-site data to understand what drives satisfaction. Context matters, and cleverness without context is useless.
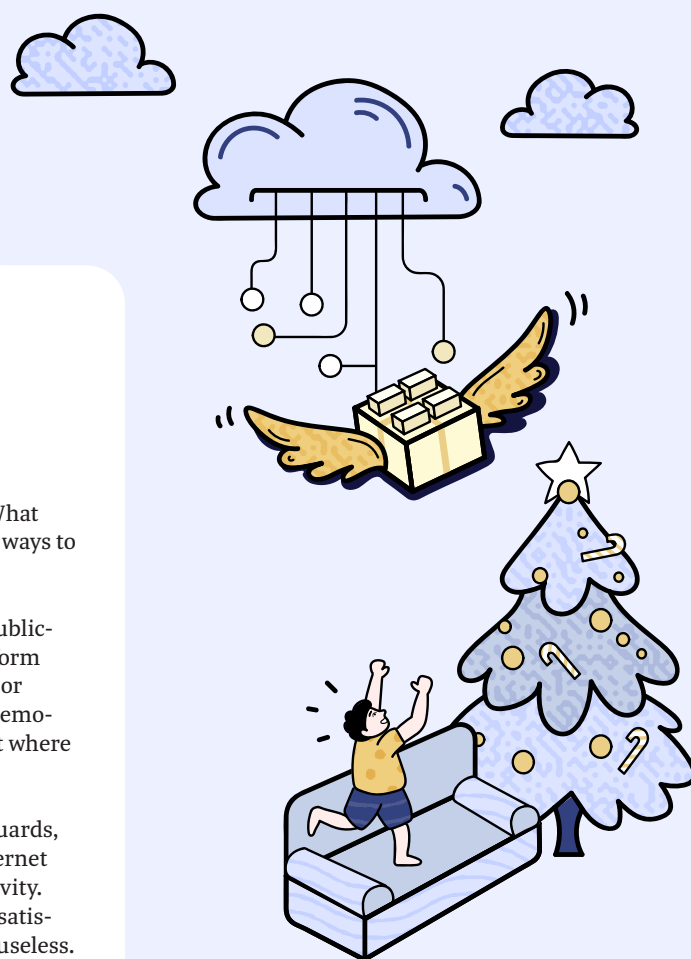
3. **Monetize that advantage:** You could keep the data to enhance your own experiences, license it to AI providers or build your own 'agent within an agent' so customers seek you out directly – like apps in Apple's App Store.

The point is: think about data differently. That's how CPG companies can turn AI into a tailwind rather than a headwind.

> **Every interaction – whether with a customer or a consumer – is a data touchpoint.**

For organizations without much technological capability, AI tools let them quickly catch up to the world's intelligence. What does that mean for large CPG players, now that anyone could compete almost overnight?

Big organizations have a unique opportunity. They need to think beyond just the product, almost in ecosystem terms. If you're Unilever, you already work with small distributors and mom-and-pop stores. But now you can analyze on their behalf, helping them serve end consumers better.

Every interaction – whether with a customer or a consumer – is a data touchpoint. You need to bottle that exhaust. With generative AI commoditizing open knowledge, the only real advantage is understanding your unique context better than anyone else. If you know how a particular community cooks, eats, or shops, your innovation and recommendations will be more effective. And if you don't capture that data, you're invisible to AI.

That means shifting the mindset from product to data and reskilling the entire organization – from top to bottom.

Your research spans industries, regions, and technologies, often identifying emerging patterns well before they become mainstream. I'm curious, looking back over the last five years, what discovery or trend genuinely surprised you?

That future readiness is always a work in progress. If you're not pushing uphill, competitors can catch up fast. In the pre-internet era, it might take 10–15 years. Now, generative AI accelerates the spread of general knowledge dramatically.

This cuts both ways: if you fall behind, you can catch up quickly if you're willing to learn. But if you're ahead and take your eye off the ball, you can lose your lead just as fast.

Proprietary data is what sustains differentiation, your unique, digitized context. And to move fast, your backend must be clean. If your corporate kitchen is messy, full of manual coordination, endless meetings, and undocumented processes, you can't adapt quickly. Future-ready companies have clear documentation, accessible information, and skilled employees who can act without constant approvals.

What's the biggest danger for companies that are lagging?

Without hesitation, it's seeing LLMs as a magic bullet. I'm starting to see that happen. They might decide to buy an LLM company or partner with a technology company, thinking it will save them. They pile their hopes onto one single savior, and that's risky. We know small-scale experimentation works, but one big bet usually doesn't.

Going back to your point about 'keeping the kitchen clean', what should IT, data and analytics departments do more proactively to support their organization and not feel left behind, while also bringing the organization together and breaking silos?

In the past, the business would come to IT, and IT would provide full services. I still see IT departments doing one-off analytics for senior management. That's backwards. Leading organizations like MasterCard, DBS, and L'Oréal are shifting their IT role to developing, safeguarding, and improving new tools, then passing them to the business to deploy themselves. This setup was pioneered at Amazon under Jeff Bezos.

Once upon a time, Amazon's IT was full-service. By the early 2000s, innovation slowed, and Bezos issued the API mandate: no more spreadsheets flying around, no customized data pipelines. Everything had to run through hardened APIs, or you'd be fired. The result? IT became a self-service infrastructure. Business units could tap in on demand, while IT focused on developing modular, plug-and-play tools.

This is now widespread across future-ready organizations. IT stacks are already modular, tested across markets, and standardized. Business units just plug and play, quality checks are automated. IT then co-develops new tools with the business, stabilizes them, and moves them into the mature stack. It speeds things up and eliminates conflict.

Given that you travel often to Taiwan, China and Hong Kong, What lessons could Western CPG companies learn from how firms in the East are outpacing their global peers?

Two things stand out. **First,** in the West, generative AI sparks a lot of fear. In China or Singapore, people are excited. In Germany, it's 'Stop this monster'. In Shenzhen, it's 'Let's go!' Why? In Asia, the last wave of globalization brought benefits: outsourcing, manufacturing, and prosperity. People are used to creative destruction. As long as you learn, you can move up the value chain.

In the West, historically, they were the industrialized leaders. That's where today's political debates come from. So, when people look at AI, reactions differ.

Inside a company, if you face employee resistance, you need to frame AI adoption gently. The Western narrative, especially in Silicon Valley, jumps straight to artificial general intelligence (AGI) wiping out humanity. That's nonsense. AGI isn't ready. There's enormous value in expert systems that make work more enjoyable.

Science may be neutral; technology isn't. Excessive automation that

eliminates jobs without better prospects is evil technology. Companies can choose differently – focus on tools that augment creativity and skills.

Second, in Asia, AI adoption doesn't have to be highbrow. Even basic pattern recognition and data labelling are fine if there's a business case. In Europe, there's often hesitation until the 'perfect' solution appears – which leads to inaction. Mindset makes all the difference.

You've worked closely with global business leaders and tracked their ability to future-proof organizations. From your vantage point, what is the one question you wish more CEOs or executives would seriously reflect on, but tend to overlook?

CEOs need to think end-to-end about transformational AI business processes. Without CEO or top-team intervention, the architecture of a large organization will always default to silos. Business managers will deploy technology within their silo. The CEO must push for cross-silo transformation.

A litmus test: Look at your cross-silo AI workstreams. If the owner is just 'an IT guy', I'm not convinced. If the owner is the chief revenue officer, chief marketing officer, or a regional president, someone close to the customer, then I am. That's rare, because many business leaders don't want to learn the tech, especially if they're close to retirement.

Future readiness can be measured. If your five must-win AI battles are all owned by IT, you're not ready. The business needs to own them, build the right business cases, and package proprietary technologies for the AI world.

About Howard Yu

A globally recognized thought leader and recipient of the Thinkers50 Strategy Award, Howard Yu has spent years studying what makes organizations thrive in times of disruption.

As the author of the award-winning book LEAP: How to Thrive in a World Where Everything Can Be Copied and creator of the Future Readiness Indicator, a benchmark that evaluates companies on innovation, R&D, and financial resilience, Yu has closely tracked how Consumer-Packaged Goods (CPG) companies adapt to technological change.

'LEAP: How to Thrive in a World Where Everything Can Be Copied' is available now from all good bookstores.

For more insights, Howard Yu shares his views frequently on his substack called: One Inch Ahead, https://howardyu. substack.com/
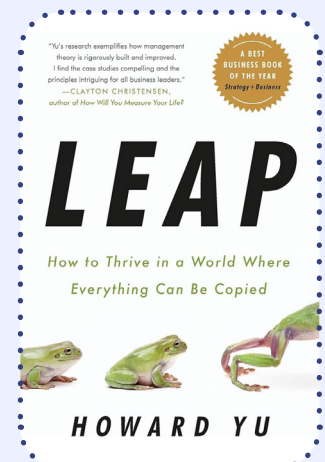
You can also read Howard's Future Readiness Report for CPG organizations here: https://www.imd.org/future-readiness-indicator/home/consumer-packaged-goods-2025/
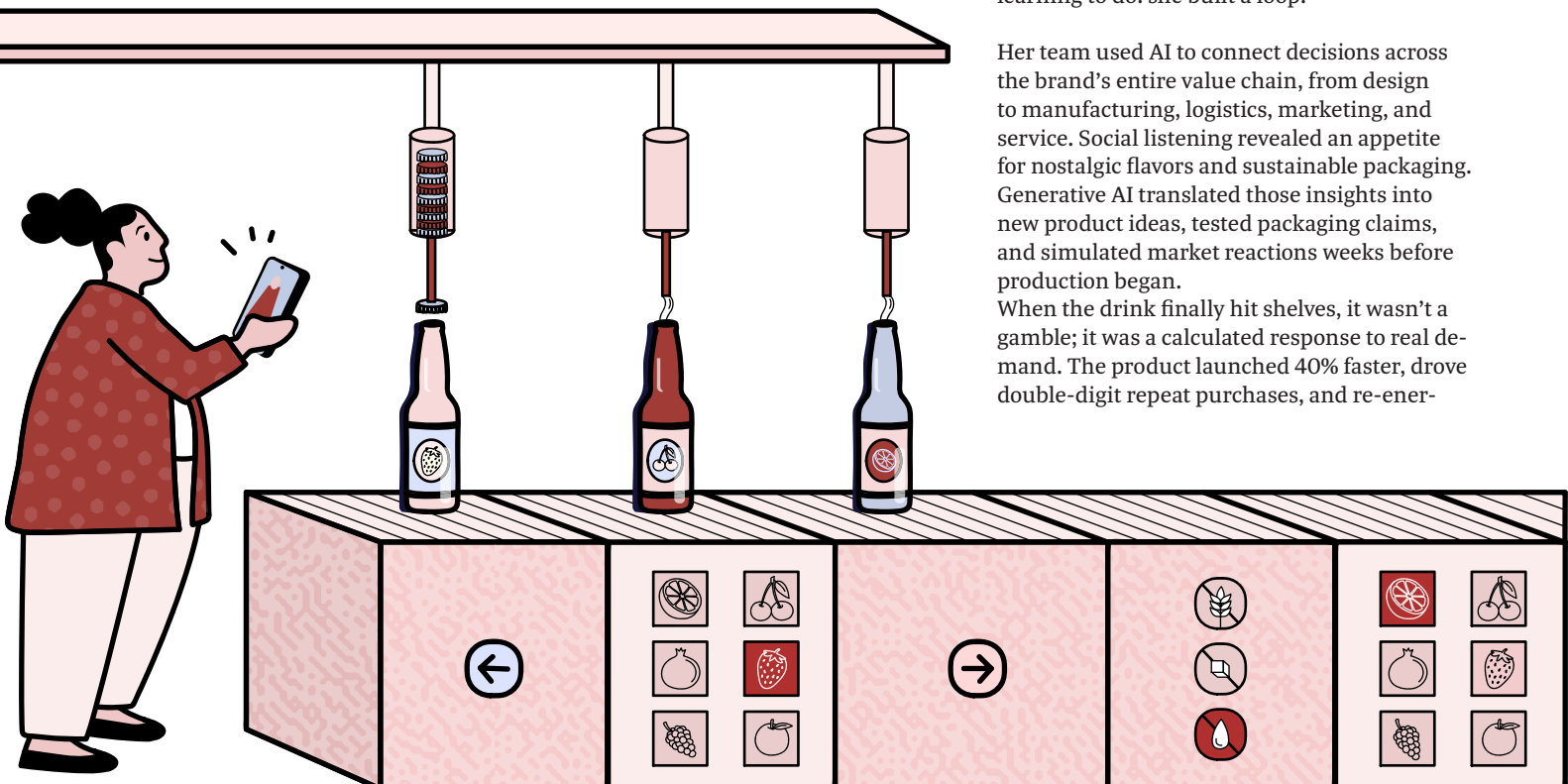
THE SECOND HEARTBEAT

How AI is rewriting the

RHYTHM OF THE CPG INDUSTRY

A story of reinvention, how consumer goods companies are fusing human instinct with intelligent systems to create measurable business impact.

When Olivia, the head of a billion-dollar beverage brand, saw her flagship product losing relevance among younger consumers, her instinct was to tweak flavors and double down on promotions. But the market was shifting too fast for intuition alone. Conversations on social media were redefining taste trends overnight, while her supply chain strained under the weight of volatility.

So Olivia did what many modern leaders are learning to do: she built a loop.

Her team used AI to connect decisions across the brand's entire value chain, from design to manufacturing, logistics, marketing, and service. Social listening revealed an appetite for nostalgic flavors and sustainable packaging. Generative AI translated those insights into new product ideas, tested packaging claims, and simulated market reactions weeks before production began.
When the drink finally hit shelves, it wasn't a gamble; it was a calculated response to real demand. The product launched 40% faster, drove double-digit repeat purchases, and re-ener-

gized the brand's relationship with a new generation of consumers.[1]

"AI didn't replace human judgment. It amplified it, turning every decision into a data-driven act of intuition."

Across the industry, the same transformation is unfolding. Factories are becoming self-aware ecosystems where AI predicts downtime before it happens and digital twins test production runs virtually. A fabric-care leader used this approach to save $120 million in a single year, achieving 99.8% defect-detection accuracy.[2]

Supply chains, once reactive, now anticipate the future. Probabilistic forecasting tells companies exactly which SKUs to stock, where, and when. A global bottling major used it to reduce stockouts by 80%, recovering $40 million in lost sales.[3]

At the same time, personalization is rewriting the rules of marketing. A home-care giant applied generative AI to customize campaigns for micro-segments, lifting conversion by 15% and basket size by 10%. For CXOs, these aren't experiments anymore. They're measurable returns on agility, relevance, and loyalty.

$ 120 Mn.

Costs saved

by a fabric-care leader in one year

99.8%

Defect-detection accuracy

achieving it through AI-powered manufacturing

WHY CXOs SHOULD CARE

Because AI is no longer about tools; it's about time.

- **Speed:** Compress months of planning into weeks of execution.
- **Precision:** Align production with real-time consumer demand.
- **Resilience:** Predict and prevent disruption before it hits.
- **Growth:** Build personalization engines that learn faster than the competition.

Sustainability, too, is finding new expression through AI. By optimizing routes, packaging, and energy use, companies can now measure the impact of every decision on both profit and planet. A single algorithmic tweak can mean fewer miles traveled, less waste, and stronger ESG performance.

The playbook for this reinvention doesn't take years. It takes 10 weeks. Start by choosing one brand or SKU. Map its consumer signals, trace

its key decisions, and identify two or three high-value use cases. Build the data pipes, baseline your KPIs, and empower your teams. Then go live in a limited scope, a region, line, or channel. Prove value, measure lift, and scale. The lesson, Olivia says, isn't about technology at all.

It's about rhythm. AI becomes the second heartbeat; listening, learning, and improving every day.

Twelve months later, her brand's turnaround became a case study across the organization. But the real impact wasn't just in the numbers. It was cultural. The company stopped treating AI as a project and started living it as a way of working.

That's what it means to close the loop.

CLOSE THE LOOP — DON'T ADD ANOTHER TOOL

Conduct a 45-minute diagnostic for one brand. Identify two high-value loops. Launch your 10-week "prove-to-scale" sprint. Stand up an AI Value Office to sustain governance and growth. Because in the next era of CPG, intelligence isn't the differentiator; learning to adapt is.

Dinesh helps global CPG leaders build scaled AI-driven operating models that fuse business performance with sustainability and human insight.

Dinesh Bijoor,
Talent Development Lead,
CPG – Fractal

[1] Your product development process needs a strategic integrator | McKinsey
[2] https://www.wsj.com/articles/unilever-uses-virtual-factories-to-tune-up-its-supply-chain-11563206402
[3] https://www.klover.ai/coca-cola-ai-strategy-market-dominance-in-consumer-packaged-goods/
[4] McKinsey: Prioritise personalisation for 10-15% revenue lift | Business Chief North America

The first-ever Coursera course with a

100% AI-GENERATED AVATAR

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Generative AI for HR professionals

Generative AI for HR Professionals is the world's first Coursera course featuring a lifelike AI avatar of Rasesh Shah, Chief Practice Officer at Fractal EdTech, blending technology and human expertise seamlessly.

Created by Fractal Analytics Academy, this course empowers HR professionals to harness Generative AI to automate tasks, enhance employee engagement, and transform everyday HR practices. With interactive modules, hands-on exercises, and real-world case studies, learners will leap into the future of HR.

About Fractal Analytics Academy

The learning and development arm of Fractal, a global leader in AI solutions. With a team of 40 experts, the Academy serves the upskilling needs of Fractal employees and clients worldwide. It designs and delivers comprehensive programs in technical skills, business and consulting capabilities, and life skills, fostering continuous learning across all levels of the organization.

"

Step into tomorrow. Be the change. Lead with GenAI.

Nature repeats patterns for a reason, and so do successful CPG brands. From the geometry in every leaf to the insights in every dataset, the math behind fractals shapes how both living things and leading brands grow.

kalaido.ai used to generate the image using text prompt

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