IPSOS VIEWS

THE NEW ERA OF INNOVATION

Shattering the Stage Gates with Generative AI

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At Ipsos, we champion the unique blend of Human Intelligence (HI) and Artificial Intelligence (AI) to propel innovation and deliver impactful, human-centric insights for our clients.

Our Human Intelligence stems from our expertise in prompt engineering, data science, and our unique, high quality data sets – which embeds creativity, curiosity, ethics, and rigor into our AI solutions, powered by our Ipsos Facto GenAI platform. Our clients benefit from insights that are safer, faster and grounded in the human context.

Let's unlock the potential of HI+AI!

#IpsosHiAi

Introduction

Generative Artificial Intelligence is transforming nearly every industry, and new product development is no exception.

From creating more realistic consumer personas[1], to analyzing vast amounts of data, and to providing projections on emerging trends, marketers and insights managers are starting to embrace the game changing technology[2]. This is propelling a tidal shift towards a new era of faster and smarter innovation.

Today, the equation of human and artificial intelligence, which Ipsos identified as Humanizing AI[3], is universally recognized as a powerhouse for innovation. However, many marketers are still uncertain about how, specifically, it will impact their development cycles and their roles. GenAI is not only transforming new product development with faster innovation cycles and higher success rates, but it is reinventing how businesses understand and engage with consumers.

For over 40 years, Ipsos Innovation has been at the forefront of leveraging cutting-edge technologies to accelerate innovation and growth for businesses around the world. **The following pages present Ipsos' insights gathered from a year of innovation with GenAI.**

Opening Closed Doors

Traditional Innovation Funnels

Over the past several decades, the process of innovation development has strictly adhered to a conventional funnel model.

- First introduced in the **1960s**, the new product development (NPD) funnel was initially conceived as a metaphor to represent a process narrowing a broad range of product and service options to the most feasible ones[4].
- With a transformation in the **1980s**, the funnel evolved into the stage gates process. This established a structured and methodical approach which was aimed to reduce uncertainty and boost efficiency through distinct decision-making gates[5].

Given the expensive and labor-intensive nature of late-stage innovation, which includes prototype creation and packaging design, these foundational funnels were essential for managing high-stakes product development. However, with the emergence of advanced AI technologies, the traditional innovation funnel is encountering a wave of disruption.

> Every technique using AI is shattering traditional innovation cycles, crashing through silos with unique capabilities to fuel new product development with a range of benefits.

Image: Scientist computing, analyzing and visualizing complex data set on computer.

Shattering the Stage Gates

AI is revolutionizing the way we approach innovation and development processes. The two techniques of AI - generative and analytical - each bring their unique capabilities to the table:

- **Generative AI** can create new, diverse assets from existing data sets.
- **Analytical AI** offers the ability to parse through vast amounts of data and draw meaningful insights.

Each technique using AI is shattering traditional innovation cycles, crashing through silos with unique capabilities to fuel new product development with a range of benefits.

Table 1: Two techniques of AI for innovation

Approach	Generative AI	Analytical AI
Capabilities	Creates diverse assets, like ideas, concepts and packaging, from existing data sets.	Sifts through vast amounts of data and extracts meaningful insights.
Benefits	When properly trained, it enables more agile and **cost-effective** assets, that can better resonate with consumers.	**Accelerates** every phase of innovation by providing immediate feedback.

By shattering the stage gates, AI can drastically streamline innovation cycles with faster and smarter insights for products that can disrupt the marketplace. With the ability to create content autonomously, AI has the potential to reshape the traditionally linear process of innovating, from unmet needs discovery to full product mix development. It does this in three ways:

01 Richer insights for bolder innovation

AI encourages bolder innovation through richer insights from diverse consumer data sets. When AI models are trained with diverse sources of data, such as surveys, social media, search data and/or product testing data, they can generate bolder ideas, concepts, products, and packages, which achieve higher success rates, because they are more closely aligned with consumers' authentic needs. By utilizing AI, businesses can more effectively simulate product scenarios, predict in-market performance, and respond with enhanced prototypes and concepts.

02 Streamlined cycles for faster time to market

AI transforms traditional NPD by making it quicker, more dynamic, and continuous. For instance, generative AI can produce diverse ideas for product improvement using data from a single product test, to enrich the initial stages of development with confident, data-driven decisions. This process expedites prototyping and testing, leading to faster time-to-market, with concepts and packages achieving a better fit with prototypes in the early stages of innovation.

03 Smarter processes for doing more with less

Finally, AI overcomes common barriers in the traditional stage gates by enabling a continuous loop of data exchange, where each input can feed into another. By effectively utilizing existing data sources, the process that was once constrained to specific stages can now begin at any time and from any point.

- For example, **product testing data** can be used to improve concepts with consumer perceptions related to a product's functional performance and user experience.
- Meanwhile, **concept testing data** can accelerate prototype design, with insights related to consumer perceptions and expectations used to predict the acceptance of the numerous prototypes.

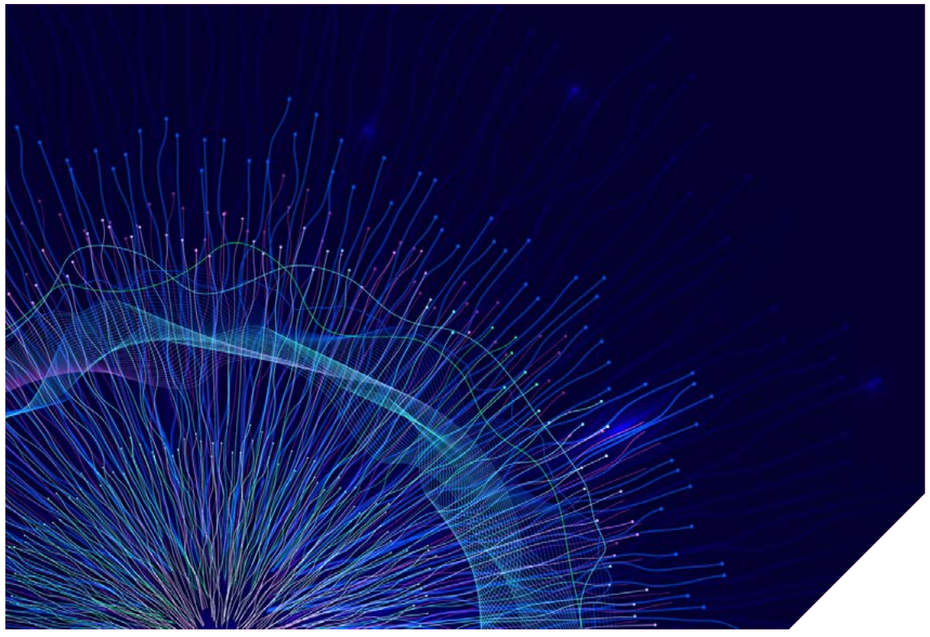


Image: Computer generated design on the topic of artificial intelligence, neural networks and big data.

From Barriers to Breakthroughs

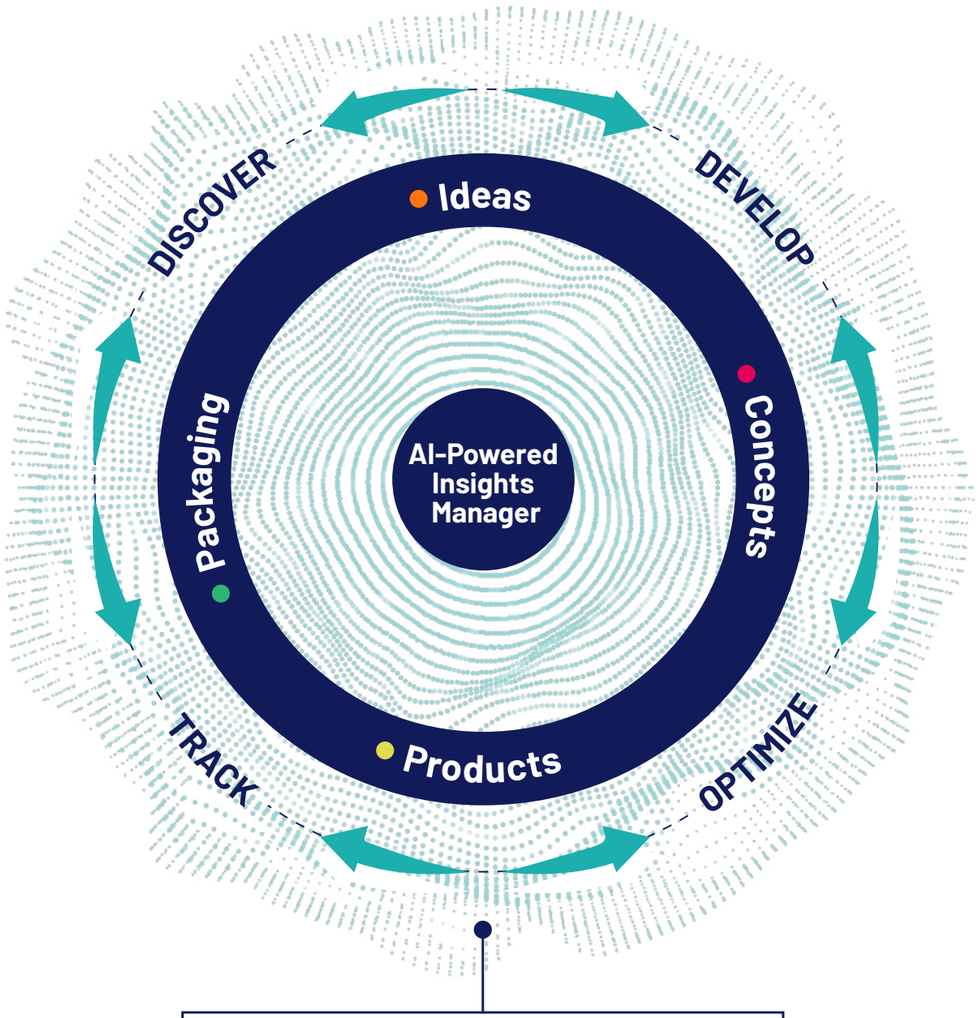
Introducing Innovation Genesis: A New Philosophy to Guide Innovation Development

Training large language models (LLMs) with fresh consumer data gives manufacturers a unique opportunity to overcome barriers in their innovation cycles and achieve superior results.

For one, manufacturers can make the most of single data sources to generate all parts of the product mix at once, such as concepts, products, and packaging. Furthermore, manufacturers can adopt a continuous, flexible, and iterative process that quickly leads to a fully validated set of new products, which are ready to launch.

At Ipsos, we believe the future of innovation is embodied in a framework called **Innovation Genesis** (Figure 1 - page 8). This new framework replaces the traditional stage gates process of the innovation funnel. While it encompasses the cycles of innovation: **discovering, developing, optimizing,** and **tracking**, it is powered by AI-enabled generation and prediction and fueled by fresh consumer data. These activities can happen at the same time or in any order, using the defined consumer data fabric. Innovation Genesis helps manufacturers respond swiftly to consumer needs, in a connected, continuous, seamless, and agile manner. In these ways, it completely transforms innovation development.

Figure 1: Innovation Genesis



Source:
Ipsos

Key Characteristics of Innovation Genesis

01

The marketing mix elements are no longer siloed or sequential.

It is connected and transversal, as fresh consumer feedback from concepts informs both packaging and prototype development. In the same way, feedback on product usage can be used to inform concept development.

This interconnected development of different elements of the product mix, such as ideas, concepts, and packaging, significantly reduces the overall cycle time.

02

Development, optimization, and validation occur in one single cycle.

The powerful, real-time analytics and iterative capabilities of AI enable the creation, screening, and validation of product mixes within a single, unified cycle.

This approach not only improves efficiency but also leads to more effective product development, because ideas, concepts, and products are better aligned.

03

Launch phases blend into one seamless phase of continuous improvement.

AI models, trained on existing and newly gathered consumer data sets, create a data fabric that seamlessly connects the pre-launch and post-launch stages of product development.

This connection, achieved through rapid and iterative in-market tracking and monitoring, allows for smarter product development.

04

The innovation function becomes proactive, instead of reactive.

By accelerating the analysis of multiple data sources, insights professionals have much better access to both internal information and emerging consumer needs in their category.

This approach equips insights professionals to better predict and anticipate opportunities for innovation.

Introducing

INNO**EXPLORER AI**

In 2023, Ipsos introduced InnoExplorer AI, an end-to-end solution for innovation exploration.

Powered by artificial intelligence and fresh consumer data, InnoExplorer AI can generate innovations, improve products, and predict their potential in any category.

Image: Young woman on phone with data wave in the background.

Innovation Genesis in Action

The solution leverages GenAI to develop unmet needs, ideas, concepts, packaging, and products, while simultaneously using analytical AI to optimize and validate them. In one year of operation, InnoExplorer AI has helped brands accelerate innovation cycles from months to days, elevate ideas and concepts with higher trial potential, power products with higher overall liking, and boost innovations with breakthrough potential.

Elevating Ideas and Concepts with Higher Trial Potential

InnoExplorer AI is frequently used by brands to discover winning product concepts in minutes. For instance, when researchers and marketers used InnoExplorer AI to develop ideas in the personal care space in Brazil, the GenAI solution, trained with consumers' unmet needs, helped them rapidly iterate and optimize their concepts, to generate six concepts in one single session. All passed action standards in the very first consumer test, with **higher trial potential** compared to the use of AI models alone.

Powering Products with Higher Overall Liking

In another application of InnoExplorer AI, researchers and R&D professionals leveraged a blind product test capturing consumers' experiences of a product[6] to train GenAI models. The output could support the analysis of principal findings and uncover potential avenues for product improvement.

The researchers and R&D professionals could use Ipsos' Impact Score to identify the causality between the generated output and overall liking in the product. As a result, the researchers received actionable recommendations, validated to achieve **higher overall liking** compared to the results of traditional product testing. They significantly improved the product's formula and identified new opportunities for innovation.

Boosting Innovations with Breakthrough Potential

To more closely align innovations with a product portfolio, the GenAI models in InnoExplorer AI have been trained using product testing data from products within that portfolio. The concepts generated by InnoExplorer AI were then tested using Ipsos' concept testing solution, InnoTest, which validated the concepts with **breakthrough potential** (Figure 2).

Creating Convenient Packaging Ideas in Minutes

To take blind product testing data even further, InnoExplorer AI was used to generate a new packaging design based on consumer interactions with the product (Figure 3). In this case, consumers favored transparent, easy-to-open packaging, particularly for skincare products. Ipsos' packaging screening solution, FastPack, confirmed that the AI-generated packaging was **more convenient** than the original packaging, which was designed without any AI assistance (Figure 4).

By extending the use of the same consumer data sets for both dynamic and simultaneous NPD, InnoExplorer AI has accelerated the development of concepts, products, and packaging, with more impactful outcomes.

Figure 2: Ipsos InnoTest validation of GenAI based concept

Innovation Name	Trial Index	Relevance	Expensive-ness	Differentiation	Believability	Archetype
Long lasting radiance and freedom of spots	115					**Breakthrough** Potential for (sub) category creation

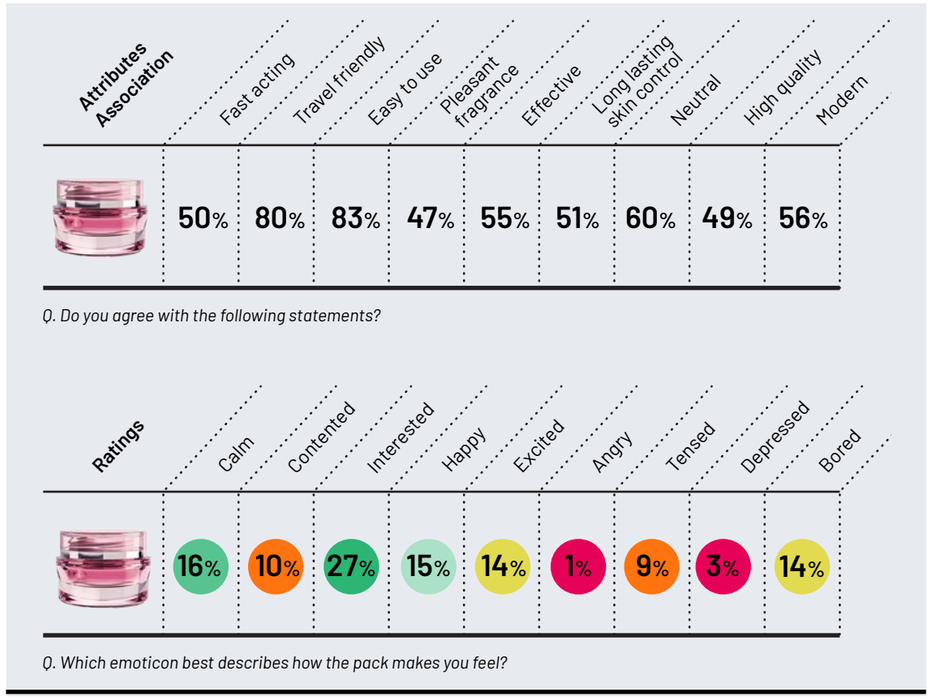
Source: Ipsos

After one year of applying the Innovation Genesis philosophy across various countries and categories, InnoExplorer AI has achieved a 9% higher trial potential in ideas and concepts, compared to using AI alone. Additionally, it has achieved a 10% higher overall liking in products, compared to traditional product tests that did not incorporate AI.

Source: Ipsos InnoExplorer AI

Figure 3: Packaging generated for a skincare product with InnoExplorer AI

Figure 4: Ipsos FastPack validation of GenAI based packaging



Source: Ipsos

Powering Insights Professionals with New Possibilities

"We shape our tools, fall in love with them, and thereafter, our tools shape us"[7] – this statement perfectly illustrates the profound influence of technology on human behavior, particularly in the business sector.

As we enter an era where AI is becoming ubiquitous in businesses, it is key to understand how it will impact different professions and dynamics. For instance, CPG manufacturers are set to experience a significant shift in the roles and responsibilities within marketing and technical consumer insights departments throughout their entire value chain.

> Those who embrace AI responsibly and strategically will be the ones to succeed in the new era of innovation.

Image:
Businessman discussing data in tech office.

A Central Role for Consumer-Centric Innovation

AI will continue to evolve in its ability to generate high volumes of high-quality assets[8]. As a result, AI will streamline the management of various stakeholders involved in developing different elements of the product mix, such as concepts, packaging, and product ideas. Without (or with less) exhaustive coordination, **AI will enable centralized insights functions dedicated to specific, consumer-centric tasks for NPD.**

The role of the insights professional will also become less tactical, and more strategic. Their new role will involve evaluating insights based on their (i) feasibility, (ii) viability and (iii) scalability. Consumers will be at the center of all operations, as less logistics, coordination, and facilitation across multiple parties will be needed, freeing up time and space to focus on the bigger picture.

The Need for Responsible Innovation

As AI becomes more deeply integrated into innovation development, key considerations like data privacy, responsible AI practices, and the necessity for human oversight and intelligence will become increasingly important. Insights managers will take on a larger role in ensuring **compliance with policies, upholding research ethics, navigating legal matters, and managing intellectual property.** Their responsibilities will include:

- **Data integrity:** Ensuring AI-generated insights represent their target consumers and are free from hallucinations and biases.
- **Data security:** Guarding their organization's IP and ensuring it does not leak into the training data of public AI models or to their competitors.

We expect similar discussions about consumer privacy regulations, patent protections, and copyright laws to become increasingly common in boardrooms, with insights managers playing a leading role in these conversations.

The saying, **"AI will not replace you, but someone who uses AI will,"** highlights the challenges many insights managers face today. Those who embrace AI responsibly and strategically will be the ones to succeed in the new era of innovation.

Truth, Beauty, and Justice

While Innovation Genesis offers boundless potential, it is critical to carefully evaluate and adapt it using human intelligence. This thoughtful approach will help maximize its value and minimize potential risks. At Ipsos, we provide AI-enabled research under the guiding evaluation framework of **Truth, Beauty and Justice[9].**

01

TRUTH with consumers at the core of operations.

While built on colossal and ever-growing data sets, the quality and accuracy of today's GenAI models are entirely dependent on the data they were trained with. At Ipsos, we ensure that all assets generated with Innovation Genesis always stem from authentic, purposefully curated fresh consumers data sets, which are relevant to the category, representative of the target audience, and timeless.

02

BEAUTY through traceability to avoid hallucination and bias.

When we talk about the "beauty" of AI models, besides accounting for the ability to generate new and creative insights, we are considering their explainability, including the traceability of the generated assets to their original training data. This means we require AI to track any generated assets back to the specific training data used for their creation, to verify them. This strict generation-validation process ensures transparency, breaking the black box nature of public models by preventing their ambiguous or hallucinated results.

03

JUSTICE by ensuring compliance and IP protection.

As practitioners of AI, across Ipsos, we work with all major AI model suppliers in a secure GenAI sandbox, called Ipsos Facto. This platform serves as a "walled garden," where AI applications, Intellectual Property (IP) and Personally Identifiable Information (PII) are trained and utilized in isolation. This ensures that none of the input or output data ever leaks outside of their "wall" to become generalized training data.

Image: Businesswoman using artificial intelligence and virtual technology "screen"

Unleashing the Potential of Humanized AI

Artificial intelligence stands on the brink of revolutionizing new product development in numerous ways, initiating a rippling effect throughout the industry.

- **Shattering the stage gates:** Innovation Genesis will leverage human and artificial intelligence for more connected, continuous, seamless, and agile NPD, accelerating time to market.
- **Building breakthroughs from previous barriers:** This novel approach will foster more impactful innovations, with higher success rates and breakthrough potential.
- **Powering insights managers with new possibilities:** Insights functions will have streamlined operations enabling greater strategic foresight and more consumer centric innovation that drives business performance.
- **Applying Truth, Beauty, and Justice:** It will be crucial for insights functions to prioritize responsible innovation, compliance, and ethics. This will be vital for them to guarantee a secure and transformative incorporation of AI into their processes.

As AI technologies continue to evolve, with advancements such as AI-powered video generation and the potential of quantum computing, the possibilities for using GenAI in new product development become endless. However, it is vital to keep a balance between these technological developments and human ingenuity. By strategically and responsibly harnessing AI's disruptive potential, we can push the boundaries of innovation to unlock unparalleled levels of consumer interaction. **The new era of innovation, where humans and AI work in tandem, promises a future filled with possibilities for creating extraordinary products that bring businesses even closer to consumers.**

About Ipsos Innovation

Our innovation research specialists help clients ignite growth by meeting evolving consumer needs with new and enhanced products and services.

Offering the best of AI and behavioral science, validated insights, an agile suite of solutions and decades of innovation expertise, Ipsos Innovation helps clients create, screen, optimize, validate, and forecast the business potential of consumer goods, durables, technology, and financial services, in over 90 markets.

Endnotes

1 Smith, J., & Johnson, L. (2020). The Role of AI in Market Research. Journal of Marketing Research, 56(4), 517–530.

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Further Reading

- Ipsos. Beyond the Hype
- Ipsos. Exploring the Changing AI Landscape
- Ipsos. Humanizing AI

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