

Intelligent Industry

# DATA-DRIVEN R&D FOR CONSUMER PRODUCTS

Accelerating digital transformation in R&D at scale

## WHAT IS DATA-DRIVEN R&D FOR CONSUMER PRODUCTS?

Data-Driven R&D for Consumer Products is a new offer from Capgemini that combines scientific expertise, experience and understanding with the latest in data science, data engineering and AI to help CP brands accelerate and improve R&D processes, transforming R&D from a cost center to a growth engine.

For many Consumer Product organizations, it is impossible to stay ahead or even remain competitive if the brand is relying on traditional R&D.

**Data Driven R&D for Consumer Product** is a market-leading offer from Capgemini that helps Consumer Product (CP) brands dramatically improve the scope, integration, speed and success of their R&D function—transforming R&D from a cost center to a growth engine.

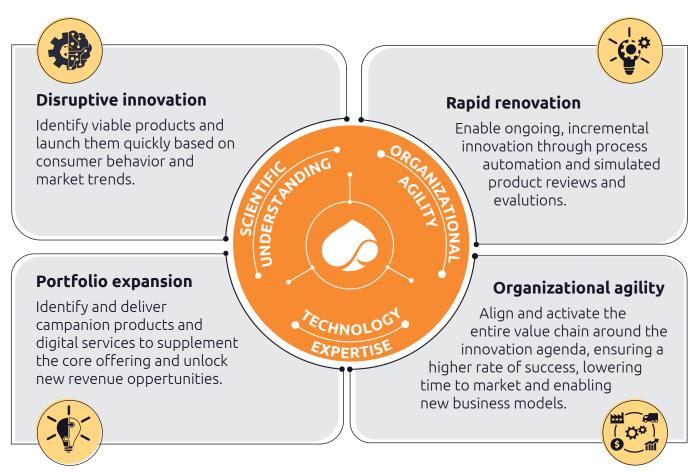


50% REDUCTION IN GTM TIME AND DEVELOPMENT COSTS

INCREASE THE INNOVATION SUCCESS RATE

~2X LIFETIME VALUE

Data-Driven R&D for Consumer Products brings together all the elements needed to accelerate digital transformation in R&D and build maturity, helping organizations unleash a culture of continuous, multifaceted innovation.



## What can Data-Driven R&D do for your organization?

- In-silico product testing enabled a **20% acceleration** in discovery of high shelf-life formulations
- Automation of lab equipment setup **doubled experiment capacity** and **improved effectiveness**
- Virtual packaging redesign resulted in **annual savings of 230K tonnes** of plastic plus significant cost savings
- 20% reduction in physical samples produced due to use of digital models
- Maximize value from pilot plant trials using data science to pinpoint processing factors, driving **83% of variability**
- AI-enabled smart search for R&D data led to the discovery of **"unknown unknowns,"** saving research scientists months of effort annually
- Personalized digital services resulted in **87%** of users changing a habitual product for a healthier alternative
- Digitally enabled panel test data analysis reduced analysis time from weeks to minutes

## DATA-DRIVEN R&D FOR CONSUMER PRODUCTS OFFERS CP ORGANIZATIONS THREE DISTINCT TRACKS BASED ON WHERE THEY ARE IN THEIR CURRENT TRANSFORMATION JOURNEY:

## TRACK 1 JUMP START

#### Build Belief

- Develop a realistic and achievable vision and roadmap based on your organization's needs.
- Deliver results through selfcontained use cases that demonstrate the value of digital R&D.

## TRACK 2 ADOPT, ACCELERATE & DE-RISK

#### Build Bridges

- Build capability and drive engagement through platforms and infrastructure investments, as well as the implementation of prioritized use cases.
- Identify high value needs, and develop the platform around each to ensure it is useful and adopted by the researchers.
- Extend and refine the platform as more needs are identified.

## TRACK 3 MATURE & SCALE

### Build Scale

- Expand and scale existing capability to address new needs and fill gaps.
- Leverage AI Studio to increase scale and meet the demand for niche skills for one-off projects.
- Develop in-house capabilities by engaging cross-industry expert teams.
- "Spin out" larger work items to allow further infrastructure development and industrialization of R&D processes.



## Track 1: Jump Start

Demonstrate the rapid value of our Data Driven R&D frameworks, methodologies and solutions, when combined with a bespoke vision and roadmap based on your organization's unique needs and goals.

#### **Next Steps**

- Define a realistic transformation roadmap that balances shortterm "quick wins" with long-term maturity
- Implement self-contained use cases that demonstrate the value of digital R&D

#### **Key Components**

- Digital R&D Roadmap
- Art of the Possible Workshops
- OutPerform
- Proof of Value
- RAPIDE
- 890 Data and Insights Exchange
- People Data Centre, delivered in partnership with Unilever
- Data Science Platforms

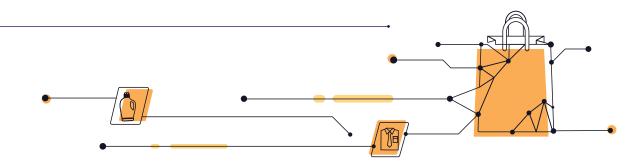


RAPIDE framework + AI studio = **4X** increase in productivity for delivery of analytics projects

## Capgemini's Proprietary Approach: Our Accelerators, Frameworks and Methodologies

- **RAPIDE:** A governance framework to build Robust AI & Data Science solutions
- **People Data Centre:** A market-leading capability that identifies and analyzes consumer and competitor insights, delivered as a low-cost managed service in partnership with Unilever
- **890 Data and Insights Exchange:** A catalyst to fast track your AI & analytics journey in R&D by enabling access to insights and data services
- **OutPerform:** An industrialized approach to help CP companies leverage data and insights for purposeful outcomes at scale
- **Trusted AI:** A framework that ensures the delivery of trusted AI systems in order to minimize reputational risk, avoid bias and discrimination and withstand malicious attacks
- Al Studio: A managed service that provides specific AI & science skills for research projects
- Intelligent Process Automation for human & machine collaboration

Adoption of the AI studio gave one client the scale to run over **140** innovative projects requiring **70** highly specialized data science skills



## Track 2: Adopt, Accelerate and De-Risk

#### Build the capability and drive engagement through platforms and infrastructure investments as well as the implementation of prioritized use cases.

#### **Next Steps**

- Identify high-value current and future research needs across the business
- Iteratively build and extend platforms with new capabilities that meet these needs and deliver value now
- Drive adoption by working closely with research teams throughout the process creating ambassadors that see the value on a daily basis

#### **Key Components**

- RAPIDE
- 890 Data and Insights Exchange
- Trusted AI
- Data Science Roadmap
- Intelligent Process Automation
- AI/ML DevOps
- People Data Centre, delivered in partnership with Unilever

## Track 3: Mature & Scale

## Expand and mature the R&D capability by developing the breadth and depth of data science skills and intelligent process automation.

#### **Next Steps**

- Leverage Capgemini's AI studio to create a step change in data science capability while also developing in-house teams.
- Spin out larger work items to enable further infrastructure development and industrialization of R&D processes.
- Work with an on-site partner team to identify and prioritize un-filled data driven R&D needs.
- Tap the global pool of on-demand technology and R&D experts to fill skills gaps and increase scale

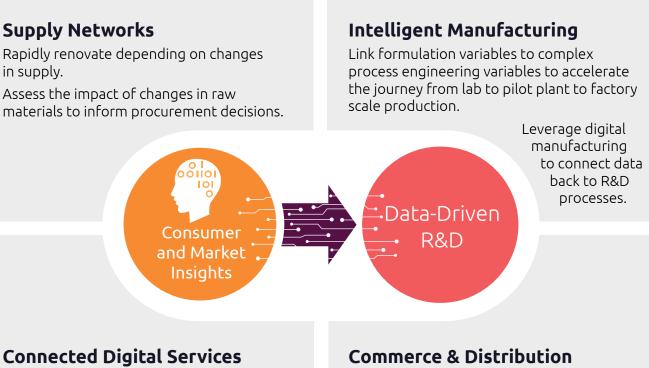
#### **Key Components**

- Al Studio
- RAPIDE
- 890 Data and Insights Exchange
- Trusted AI
- Intelligent Process Automation
- AI/ML DevOps
- Augmented Global Talent Pool
- Global Partnership Network



## DRIVING IMPACT ACROSS THE VALUE CHAIN WITH DATA-DRIVEN R&D FOR CONSUMER PRODUCTS

Data Driven R&D for Consumer Products helps brands reposition R&D as a growth engine. Our approach has a cascade effect, driving innovation and unlocking benefits across the entire value chain.



Unlock digital services that enhance the consumer experience.

Ensure data from digital services are fed back to R&D.

Optimize storage and distribution through formulation and packaging changes.

Share distribution data to address constraints within R&D, e.g. storage times and temperatures.

## **PIONEERING INTELLIGENT INDUSTRY WITH CAPGEMINI**

Data-Driven R&D for Consumer Products is the latest offer within Intelligent Industry—Capgemini's cross-industry application of new technologies and supplemental services to help our clients foster

innovation through new and differentiated smart products, supply chain optimization and an enhanced customer experience.

Following our integration with Altran, Capgemini is the only

global firm with both the depth of product engineering and breadth of specialist capability to master complex data and deploy novel AI solutions and technologies at scale.



## About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50 year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fuelled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

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