PRODUCTS THAT COUNT

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LEADERS IN INNOVATION: THE PRODUCT DEVELOPMENT JOURNEY

GET THE FUTURE

INNOVATION, INSIGHT, AND INSPIRATION ACROSS THE PRODUCT DEVELOPMENT JOURNEY

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Executive Vice President, Capgemini Invent Global Offer Leader, Intelligent Products & Services Imagine a kaleidoscope and its shifting colors and geometric forms, constantly changing. Becoming something new, different, interesting, and unique with each simple twist of the cylinder. Innovation is a lot like that. Endless possibilities, often driven by technology, designed to make something better, more efficient, or more valuable.

The next great product innovations put the customer at the center, creating a new experience that is memorable, sustainable, and valuable – for both the consumer and the brand. If it can be imagined, it can be built with collaboration, vision, and a depth of expertise across industries, markets, and audiences.

The task will seem daunting at times; it's no small undertaking to create something new. We spoke with innovative leaders from various industries who embraced the challenges of ideation, design, large-scale systems and engineering, and re-evaluating existing business models to capture success and increase revenue.

They share insights and experiences, from recognizing that first inkling of possibility to mastering the market. And they discuss mistakes and lessons learned – invaluable information that will help you grow and succeed.

There are many steps on the journey from concept to scale. And we're here to help, regardless of where you are on your product-development journey. It's one of the main reasons we sponsored the Leaders in Innovation podcast series and are proud to partner again with Products That Count on this e-book.

Capgemini brings deep industry knowledge and proven success to help you identify and capture value. We help companies pivot to intelligent products and services, delivering end-to-end product lifecycle services, from concept to market, underpinned by full-stack design and product-engineering capabilities.

We believe it's time to elevate the role of product leaders, enabling success at each step of the way to help companies deliver outsized impact at speed and scale.

Turning innovative ideas into tangible products and services that touch hearts and move markets is the currency of the digital age. This is the charge and the challenge for today's product leader.

Product leaders are very much like conductors, orchestrating different pieces with masterful timing and finesse. Like a symphony, it is not enough for each section to be good on its own – they have to work in harmony to create great music. The same is true for creating great products.

No matter where you sit in your organization – product manager, technologist, or business leader – you will find this series and e-book informative, insightful and, I hope, inspiring.







FINDING SUCCESS AT EACH POINT IN THE JOURNEY

Companies must innovate to survive. Product managers play an integral role as business leaders, driving revenue and creating and sustaining a workplace culture that fosters innovation and inspires employees.

The best leaders, the ones we see having the most impact, are forward thinking and strategic, ask a lot of questions, challenge the status quo, and are not afraid to take risks. They work well with broader business ecosystems and they bring a systems-thinking mindset.

This e-book features innovative leaders from various industries who embraced the challenges of ideation, design, large-scale systems and engineering, and re-evaluating existing business models. They share insights and experiences, from recognizing that first inkling of possibility to mastering the market. These conversations originally appeared on Product Talk, an award-winning podcast show produced by Products That Count.

We sat down with people like Darren Adams of Unilever, who used digital technology to create new value for Unilever and its customers. Adams talks about finding your source of inspiration to ignite creativity and pulling it through the lens of data-driven insight to arrive at a valuable product.

Taking that product through the physical design phase to create a product that is visually appealing and differentiated enough that you'll be able to leapfrog the competition is the domain of Jerry Callahan, founder of Heatworks.

Ensuring that your business model matches your business goals and understanding the importance of creating your moment in the market are the critical next steps. Glen Fields of Rockwell Automation shares his expertise in using business-model frameworks to grow and expand offerings.

If you're ready to scale, Intel's Samir Sharma takes you through the results he realized when combining engineering and advanced technologies. Many systems.,ecosystems paired with multiple partners and multiple goals. He found that harnessing 5G, AI, and edge computing to create smart cities required scaling up services and systems to achieve success.

"Sustainability has arrived." That's arguably the greatest quote to sum up where we, as business leaders and innovators, are in the fight to create sustainable products and services. It's from Hamilton Beach's Drew Carlson, who discusses the company's sustainability efforts. It's an important reminder that sustainability and environmental impacts need to be identified and addressed at each stage of product development. Factors from packaging components to energy impacts and how products are physically delivered to the market are integral to sustainability success. It's no longer optional. Sustainability is a must at every step, end-to-end, of product development.

This Leaders in Innovation e-book, like the podcast series, is for product leaders and by product leaders, offering practical advice and inspiration to help you succeed regardless of where you are on your product-development journey.

At the macro level, we have identified five critical steps to consider as part of a successful product-development process.

- **Ideation:** Where do product leaders look for innovation? Finding your source of inspiration to ignite creativity and pulling it through the lens of data-driven insight to arrive at a valued product.
- **Product design:** Creating loveable products that are visually appealing and differentiated enough to leapfrog over the competition.
- **Business model:** Ensuring that your model can deliver your business goals; using business model frameworks to grow and expand offerings, especially for as-a-Service models.
- How to build and scale: Combining engineering systems, advanced technologies, and digital ecosystems to drive scale for new products and services.
- **Sustainability:** Designing with sustainability in mind at every step of development.

Companies need to change the way they define, make, distribute, and support products. This requires innovative business models, customer-centricity, an agile development approach, and an ability to navigate a complex and highly dynamic ecosystem.

This backdrop is where experts discuss how to achieve success by addressing each step of the product development process. Each chapter of this e-book also includes resources for additional information.





IDEATION WITH UNILEVER USING DIGITAL TECHNOLOGY TO CREATE NEW VALUE

COMPANIES ARE STARTING TO RECOGNIZE THE IMPORTANT ROLE DIGITAL PLAYS IN DESIGNING CONSUMER-FOCUSED PRODUCTS

Why would a company that sells soap, skincare, ice cream, and laundry soap be thinking about digital? According to Darren Adams, the head of digital products at Unilever, a global consumer product goods (CPG) company, there is tremendous opportunity to use digital and data to help provide new consumer experiences and services. In turn, these innovations will drive new business and growth.

As consumer expectations change and new technologies emerge, Adams believes companies are starting to recognize the important role digital plays in designing consumerfocused products — a journey Unilever began years ago. Leveraging and understanding data to inform new value for the consumer, whether in product selection or service, are integral to product success and creating customers for life.

As global head of digital innovation, Adams focuses on the consumer and the ways the consumer experience can be enhanced using digital technologies and methodologies. Data analytics is an integral component.

For a CPG company traditionally making chemistry in a bottle, exploring the world of digital and data requires an entirely new playbook, where roles and KPIs must adapt to a longer-term consumer engagement. In product-based companies, the first steps in product development center on identification of a consumer need and searching for the right solution and purchase; this is typically the role of the marketing team. But Adams' next steps are a bit less traditional. He thinks about usage, two or three steps further down the development road map – tracking results and analyzing data over time to drive a more targeted and closer consumer engagement and cycle of products.

Usage and analysis are a big part of Unilever's focus today, he says, and digital is starting to provide perspective on consumer buying and usage patterns. Understanding what the data shows is the foundation for a lot of decisions about product selection and services. That data and information flow also creates an ecosystem for the consumer, extending beyond delivering new engagements to connect digital marketing with the science and technology parts of the organization. Those functions are charged with developing new formulations, product ingredients, and ways of delivering products.

Digital innovations also play a role in marrying short-term sales objectives with long-term development and innovation, a tension Adams says is not unique to any one company or organization. Unilever is experimenting with accelerator programs, putting a focus on specific areas that have been identified as business challenges. Accelerators also raise a critical question beyond focus: Are CPG organizations ready for digital? Do they have the infrastructure and mindset to produce, manage, and scale an entirely new class of digitally native products and services, even if they want to?

These considerations make the integration of new solutions and technologies into a stronger company. Innovation products and market share must surely follow.

THERE ARE A NUMBER OF RESOURCES AVAILABLE TO PRODUCT LEADERS, INCLUDING

- <u>Create Impactful Innovation Strategy</u>
- <u>Building A Creative Organizations -</u> <u>Innovative & Agile</u>
- Design Systems 101
- Data-powered Innovation Review -Wave 4
- <u>Capgemini Research Institute report Intelligent</u> <u>Products and Services: Unlock the Opportunity of a</u> <u>Connected Business</u>

Leaders in Innovation: The Product Development Journey

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PRODUCT DESIGN WITH HEATWORKS TURNING GREAT IDEAS AND DESIGN INTO GREAT PRODUCTS FOR CUSTOMERS

SUCCESS STARTS WITH KNOWING WHAT YOUR CUSTOMERS WANT, TO IDENTIFY NEW AREAS OF OPPORTUNITY

Inspiration can translate into an effective yet practical design, creating a product that is visually appealing and differentiated enough to leapfrog the competition.

That's the conviction of Heatworks founder Jerry Callahan, who talks about the effect that combining innovation and design can have on a consumer base.

Callahan has learned the importance of consumer-centric design and product development. Heatworks often is credited with reinventing the way the world heats and uses water. From digital water heaters to a countertop dishwasher that resembles slight waves on a pond or lake, these products promote energy efficiency and are designed with the consumer in mind.

Business today is more persona and more data-driven than ever. Success starts with knowing what your customers want to identify new areas of opportunity.

For Callahan and Heatworks, one of the biggest lessons learned was understanding that it's impossible to please everyone all the time. Be thoughtful in picking your targets. Researching and understanding customer needs is critical. Is the product going to solve an unmet need for the intended targeted customer? Can it be priced for that customer to afford?

This idea was reinforced when Heatworks was trying to expand into international markets with the Tetra Countertop Dishwasher. It was an incredibly popular item in the United States, as empty-nesters, smaller families, and those with limited physical space embraced the space- and energysaving appliance.

This was not the case in South America, the first place Heatworks tested the product outside the US. Callahan said they didn't understand basic economics of life there, where people who could afford a dishwasher had no need for one during the day, when family member and staff were available to help. What was needed was an even more compact dishwasher to handle dishes, especially baby bottles, that accumulated overnight. The Baby Tetra was born. Heatworks' team of engineers focuses on processes as a complement to creativity. A process to solve a problem that results in a product consumers will love presented in an attractive design translates to market success, Callahan said.

According to a report from frog, a Capgemini Invent company, of the 30,000 or so new consumer products launched each year, some 40 percent fail. While there is never a guarantee of market success, design thinking helps organizations to minimize pitfalls, launch successful products, and extend market reach.

That report, <u>The Business Value of Design</u>, features three tools designers should use.

- **Deep user insights:** Everyone uses market research. Design research goes a step beyond to provide real insight about, and empathy for, actual users and their needs.
- **Breaking market segments:** While companies often think in segments and categories, customers do not. Design takes a more open perspective, transcending status-quo product categories and market segments to explore radical opportunities that live between categories.
- Strategy as a creative act: One limitation of traditional product strategy is its reliance on extrapolation – or linear conclusions based upon observable trends and tendencies. Design helps identify an ideal state more closely aligned with customer goals and a strategy to achieve it.

THERE ARE A NUMBER OF RESOURCES AVAILABLE TO PRODUCT LEADERS, INCLUDING

- The Business Value of Design
- <u>Creating an innovative portfolio of intelligent</u> products and services
- How inclusive design can bridge the great digital divide
- Design Systems 101





BUSINESS MODELS WITH ROCKWELL AUTOMATION

PIVOTING TO A NEW BUSINESS MODEL

MANUFACTURING EMBRACES A DIGITAL TRANSFORMATION

"Revolutionary" and all its verbal iterations are often overused or unnecessarily dramatic. But as Glen Fields is witnessing, the manufacturing world is living up to that description as physical product development transforms to become systems as a service.

Fields focuses on the digital transformation underway in the manufacturing industry and the five steps to realize success. According to Fields, the convergence of products, software, and services is driving this transformation across industries.

The new era of manufacturing is here. Whether your organization is focused on discrete or process manufacturing, manufacturers must rapidly adapt in response to changing market demands and technological innovation – while balancing efficient and sustainable operations.

Fueled by the rapid development of technologies, including cloud, artificial intelligence (AI), internet of things (IoT), edge computing, and 5G, the convergence of the physical and virtual worlds is the next phase of transformation cutting across all facets of customer interaction, business operations, R&D, engineering, manufacturing, and supply chains.

Connecting digital technology with the engineering of complex devices, vehicles, and equipment will create a more intelligent manufacturing experience for businesses.

According to Fields, a Rockwell survey in 2015 found that 36 percent of respondents hoped to implement augmented reality, and 35 percent thought it was hype. In a 2022 survey, Fields said that 49 percent are using AR and wearables in their manufacturing flow. A lot of that has been driven by COVID-19 and remote access capability.

But perhaps the biggest technological imprint on the switch to services is digital twins – virtual replicas of physical systems that can model, simulate, monitor, analyze, and constantly optimize the physical world.

<u>Capgemini research shows</u> that organizations working on digital twins have seen a 15 percent improvement in key sales and operational metrics and an improvement upwards of 25 percent in system performance.

Manufacturers looking to ensure long-term resilience and competitiveness are increasingly digitizing their manufacturing operations to improve process efficiency, inventories, productivity, and the time it takes to produce the goods needed to fulfil customer demand.

Investment in smart plants and related technologies is growing, with the adoption of digitized systems for manufacturing execution (MES), enterprise resource planning (ERP), product lifecycle management (PLM), and other digital tools. A new business model based on software and data services is enabling Rockwell's OEM customers, Fields says. These "smart manufacturing" customers can now sell a physical machine as well as an outcome-based services contract using a digital twin.

Innovative business models are critical for breakthroughs that disrupt industries and bring game-changing ideas to life. Fields is also finding that AI is incredibly effective for data acquisition and analysis, for machine learning or deep learning. These tools are elevating efficiencies in manufacturing.

He offers five steps product leaders should follow to monetize a new business model: identify the solution outcomes, liberate data, unite data, and clearly articulate your call to action.These will lead to the fifth step: to successfully monetize a new business model.

Brilliant products, services, and breakthrough innovations occur when new technology capabilities are combined with new user experiences and new consumption models.

History is paved with milestones where business models have radically changed the dynamics of industries. Uber and Lyft moved transportation from make and sell to a brokerage model allowing for rapid expansion, Amazon moved from transactions to memberships with Amazon Prime strengthening behavioral loyalty, and Spotify championed the freemium model offering a free basic product to attract multiple users and a paid premium for advanced features.

THERE ARE A NUMBER OF RESOURCES AVAILABLE TO PRODUCT LEADERS, INCLUDING

- Digital twins: adding intelligence to the real world
- <u>The data-powered enterprise: Why organizations</u> <u>must strengthen their data mastery</u>
- <u>Capgemini Perspective: Realizing the power and</u> promise of industrial 5G
- Intelligent Industry: The next big transformation
- Why investing in Smart Plants is a business imperative
- <u>Capgemini Research Institute report Intelligent</u> <u>Products and Services: Unlock the Opportunity of</u> <u>a Connected Business</u>





HOW TO BUILD AND SCALE WITH INTEL SCALING ENGINEERING AND ADVANCED TECHNOLOGY REALIZING THE POWER OF COMBINING BITS AND BYTES

Technology creates convenience and efficiency in large and small ways. Combining technology with physical infrastructures has the potential to change the future of cities.

Sameer Sharma is the Global GM, Smart Cities & Transportation, for IOT/Networking Solutions at Intel. He's a fierce proponent of smart cities – places that use digital technology and data to solve a range of problems associated with urban living, including population density, traffic, crime, and safety. Companies, citizens, and public services need to build the digital overlay to affect real change.

Sharma explains that Intel designs its technology to integrate with physical systems, saying, "We're looking to convert the infrastructure of tomorrow to be smart infrastructure."

Digital transformation is key to bringing back the building blocks of smart cities to a better state of productivity. He calls this the "infrastructure of tomorrow" or "smart infrastructure," and it relies heavily on the ability to engineer and scale up massive numbers of systems, across multiple platforms, to leverage advanced technologies like 5G, edge computing, IoT, and AI. This combination will enable datadriven services for citizens.

The expansive wealth of data that is generated by all these systems is analyzed, becoming the foundation for the types of services needed to sustain smart cities. Pulling insights from all this data can be applied for practical solutions. Traffic patterns and public safety can help underserved populations better connect to transportation, and can influence the location of affordable housing to make that connection even easier. The <u>Capgemini Research Institute recently surveyed</u> 10,000 citizens and 300 city leaders around the world to identify challenges and opportunities to becoming smart cities. Nearly 75 percent of city officials believe a smart city will attract a more qualified workforce and provide an attractive destination for start-ups and established businesses. Interestingly, 41 percent of US citizens are willing to pay more for smart-city initiatives.

The biggest challenge survey respondents identified is the lack of technology expertise to provide digital platforms for urban services.

THERE ARE A NUMBER OF RESOURCES AVAILABLE TO PRODUCT LEADERS

- Why investing in Smart Plants is a business imperative
- <u>Get ready for a radical reinvention of mobility</u> <u>business models</u>
- <u>Smart factories at scale: A Capgemini Research</u> <u>Institute report</u>
- <u>Sweet home, smart city</u>
- <u>Capgemini Research Institute report Intelligent</u> <u>Products and Services: Unlock the Opportunity of</u> <u>a Connected Business</u>





SUSTAINABILITY WITH HAMILTON BEACH

"SUSTAINABILITY HAS ARRIVED"

PRODUCT MANAGERS ARE CRITICAL TO LEADING THE PIVOT TO SUSTAINABLE PRODUCTS, BUILDING LITERAL AND FIGURATIVE PATHS TO EXPANDED CUSTOMER BASES AND NEW REVENUE STREAMS

That's arguably the greatest quote to sum up where we, as business leaders and innovators, are in the fight to create sustainable products and services.

It's from Drew Carlson, senior industrial designer at Hamilton Beach, discussing the company's sustainability efforts.

Those efforts range from reduced packaging to refurbishing appliances and quantifying carbon footprint to communicating with various stakeholders. The company looked at every element that goes into sourcing materials and building products – across a variety of products from countertop water purifiers to air fryers. Hamilton Beach worked with Synapse Product Development, a Capgemini Invent business, to complete a life cycle assessment to quantify the environmental impact of the design across the system or product life cycle.

Martine Stillman is vice president of engineering at Synapse, and has counseled clients across multiple industries on creating sustainable products and services. Stillman argues, "Sustainability in product development is no longer optional; it is a business essential. All companies, including digital companies, have an environmental footprint that must be addressed and decreased. The challenge for all of us is finding the best ways to convert good intentions into positive environmental results."

There is no argument left to defend or hide behind when it comes to the future of product development. Numerous studies have shown that customers want to do business with companies that share their sustainability values. Businesses beware! Defy Gen Z buying power at your own risk. <u>A recent</u> <u>study from First Insight</u> shows that Gen Z consumers have outsized influence on not only their Gen X parents but even their Boomer grandparents when it comes to sustainable shopping.

In fact, consumers across all generations are willing to spend more for sustainable products. Today, nearly 90 percent of Gen X consumers said that they would be willing to spend an extra 10 percent or more for sustainable products, compared to just over 34 percent two years ago. It's an idea Carlson and Stillman discussed on the podcast, with Carlson emphasizing the need to be in tune with Hamilton Beach's customers and the things those customers value. "Sustainability is really going to impact us," he said.

Product managers are critical to leading the pivot to sustainable products, creating achievable strategies, championing environmentally friendly decision-making, and building literal and figurative paths to expanded customer bases and new revenue streams. Products that are more environmentally friendly are often also more functional, easier to navigate, and accessible across more connections, devices, and abilities.

By pursuing sustainability, we discover potential features and experiences that help users better manage their own digital world and live according to their values.

THERE ARE A NUMBER OF RESOURCES AVAILABLE TO PRODUCT MANAGERS, INCLUDING

- Leading the Way for Sustainable Products and Services, a Capgemini-sponsored e-book
- <u>Do Better. Sustainable Product Design</u> from Synapse, a Capgemini Invent company
- <u>Chief Challenge: Going Beyond Sustainability</u>, from frog, a Capgemini Invent company which supports creating the infrastructure for success and leadership in social and environmental sustainability <u>Sustainable</u> IT from Capgemini Research Institute
- <u>Capgemini Research Institute report Intelligent</u> <u>Products and Services: Unlock the Opportunity</u> <u>of a Connected Business</u>



INNOVATIVE LEADERSHIP FOR THE FUTURE

Companies have to innovate to survive. Product managers have an integral role to play as business leaders, driving revenue and creating and sustaining a workplace culture that fosters innovation and inspires employees.

A new, ground-breaking report from the Capgemini Research Institute, Intelligent Products and Services: Unlock the Opportunity of a Connected Business, found that a shift from traditional product offerings to smart, connected products and services is having a profound impact on product development.

Consider the following key findings:

- 46 percent of organizations surveyed expect to gain up to 20 percent of their revenue from intelligent services and 43 percent expect more than 20 percent of their revenue to come from intelligent services in the next three years.
- On average, 28 percent of organizational revenue is expected to come only from intelligent services, as opposed to 13 percent today.

These findings are based on a survey of 1,000 respondents from unique organizations (only traditional manufacturers) with more than \$1 billion in annual revenue, across 11 countries. The respondents were at director level or above, responsible for either driving intelligent products/services strategy in their organizations or being closely associated with it. These respondents share common challenges: finding products and services that put the customer at the center, creating a new experience that is memorable, sustainable, and valuable – for both the consumer and the brand. For survey respondents, transitioning towards an intelligent products and services portfolio is the best path forward.

The research shows that organizations with well-defined visions and strategies for IP&S are realizing benefits that include new and profitable revenue streams, increased customer loyalty and satisfaction, greater efficiency, and reduced total cost of ownership.

Similar to the steps to follow along the product development journey, the research shows that organizations interested in realizing business, customer, and market gains need to embrace best practices from industry leaders across sectors, including:

- Creating a holistic strategy with strong governance
- Embracing agile and innovation culture
- Embedding technology into existing processes
- Starting small and scaling gradually
- Harnessing data to enhance customer experience and remain competitive and
- Taking a longer-term, customer-centric view.

It is time for product managers to seize the intelligent products and services opportunity to transform business models, unleash innovation, and improve customer experience, thereby crafting a profitable and sustainable path forward. The future of industry is intelligent – and it is here now.



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About Capgemini Invent

As the digital innovation, design and transformation brand of the Capgemini Group, Capgemini Invent enables CxOs to envision and shape the future of their businesses. Located in more than 36 offices and 37 creative studios around the world, it comprises a 10,000+ strong team of strategists, data scientists, product and experience designers, brand experts and technologists who develop new digital services, products, experiences and business models for sustainable growth.

Capgemini Invent is an integral part of Capgemini, 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 over 340,000 team members in more than 50 countries. With its strong 55-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, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion.

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About Products That Count

Products That Count helps 300,000+ product managers accelerate their careers. It engages >20 percent of all product professionals globally through highly-rated programs, such as an award-winning podcast show, curated executive roundtables, and coveted Product Awards. It partners with leading brands, including Capgemini, SoFi, Amplitude, Cisco and Teladoc, to accelerate the rise of product to the C-suite and transform product teams into a competitive advantage.

Learn more at ProductsThatCount.com