

# Getting Started with Product Development Strategies

IDEX Health & Science Helps Companies  
Harness Breakthrough Innovations



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# INTRODUCTION

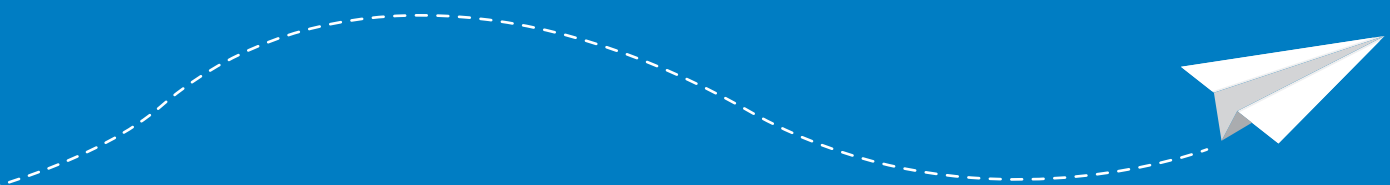
Customers are continually looking for newer or better products and services. What is more, a rise in competitive pressures has intensified the need for companies to differentiate. To stay relevant and keep up with the latest trends, new innovations must get to market quickly, and smartly. If not carried out properly, product launches may succumb to pitfalls that render them fruitless.

New Product Development (NPD) plays a pivotal role as the major driving force of organic business growth, but to add new products and services to their range of offerings, companies must make improvements to their infrastructure.

With a focus on growth, an increased number of stakeholders are involved in planning, defining, and managing elaborate product portfolios. Additionally, today's innovation process goes beyond internal stakeholders to now involve outsourced development partners. These pressures bring about many challenges when it comes to managing product development effectively. There is a high potential for errors on the path from ideation to product launch when using unstructured processes, causing the rollout of products to be costly and prolonged. While it is important to launch products quickly, to do so effectively means managing and controlling the entire product lifecycle.

The solution to these challenges involves laying a solid foundation for processes – or system of processes – to simplify behind-the-scenes management of new product development. This white paper outlines the importance of new product innovation, different process methods, and best practices for optimizing your company's strengths. We also explore the value of utilizing outsourced suppliers in product development and how to effectively collaborate with them to optimize product strategy, innovation, and development to help you get to market faster.

By truly understanding what is happening at every stage of your process, companies can simplify and streamline new product development for success.



# THE INNOVATION PLAYBOOK: GETTING STARTED WITH PRODUCT DEVELOPMENT STRATEGIES



## WHAT IS NEW PRODUCT DEVELOPMENT?

Simply put, New Product Development (NPD) covers the full process of creating and taking a new product or service to market. Businesses may develop completely new products or they can improve upon existing products to take advantage of fresh opportunities.

New or rebranded products are intended to either meet consumer demand, compete with other items in the industry, fill gaps in the marketplace, or keep up with market trends and advances in technology. In business and engineering, the process involves several steps that must be completed before a product can be introduced to the market. This includes ideation, concept drafting, design creation, building and producing the product, determining the correct positioning, and defining marketing and commerce aspects.



# BENEFITS OF USING AN NPD STRATEGY

A well-founded NPD strategy helps you and your company stay organized to accurately plan and resource a project. Systematic product planning and research can not only capture your customers' needs and expectations, but it can also help you eliminate wasted time and resources.

A solid NPD strategy can help to:

- › Establish your target market more thoroughly
- › Determine profitable pricing
- › Reduce development costs
- › Expose unforeseen risks in production and business
- › Prevent the launch of a poorly designed product

There are several important measures to consider when planning your NPD strategy.



## Guided Development

A typical NPD process framework, like the one illustrated on page 6, needs to resolve key questions about the end customer as well as the market before moving forward with in-depth development. This example outlines each phase of an NPD and includes important questions to be addressed along the way.

PHASE	DETAILS	CRITICAL QUESTIONS
<b>PRELIMINARY: MARKET EVALUATION</b> 	<p>Prior to starting a new development project, evaluate your current product or service portfolio in existing markets to make sure that revenue is being maximized. This will give you a better understanding of the market, your competitors, industry trends, and insights into potential opportunities to meet customer needs.</p>	<ul style="list-style-type: none"> <li>› What are our competitors doing?</li> <li>› What is the state of our current market?</li> <li>› Will other markets work for our products or services?</li> <li>› What does the market need?</li> <li>› What do our customers need?</li> </ul>
<b>PHASE 1: IDEA GENERATION</b> 	<p>After you have completed the preliminary market evaluation, you will have better insights from internal and external sources, as well as formal evaluations. This gives you a clearer picture of how to brainstorm ideas and take advantage of market opportunities. From there, you can brainstorm potential ideas and new concepts.</p>	<ul style="list-style-type: none"> <li>› What products or services would benefit our customers?</li> <li>› What products or services would satisfy our customers?</li> <li>› What new, different, or improved products can we sell?</li> </ul>
<b>PHASE 2: CONCEPT TESTING</b> 	<p>Examine all ideas and concepts to evaluate the feasibility, production costs, customer affordability, and market potential to determine the overall ROI.</p>	<ul style="list-style-type: none"> <li>› What concept(s) are the most favorable?</li> <li>› Will customers understand the concept(s)?</li> <li>› What sets this product apart from its competition?</li> </ul>
<b>PHASE 3: PRODUCT REFINEMENT</b> 	<p>After a concept is approved, establish capability requirements, performance specifications, and operational parameters. Iterate projects through development and advancement. Quality-test prototypes and refines functionality. Ensure your concept is strong and will meet development parameters. If customer and profitability needs are met, proceed to market.</p>	<ul style="list-style-type: none"> <li>› Does the market have a need for this product?</li> <li>› Do customers actually want or need this product?</li> <li>› Can the product be produced profitably?</li> </ul>
<b>PHASE 4: MARKET WARMING</b> 	<p>Initiate test marketing with potential customers to gather reactions. This should include opinions on the product, appearance, behavior, and packaging. This step can generate early adopters and help give the product a boost before it enters the marketplace.</p>	<ul style="list-style-type: none"> <li>› What features are most useful?</li> <li>› What features are least important?</li> <li>› What customer segments will purchase the product?</li> </ul>
<b>PHASE 5: PRODUCT LAUNCH</b> 	<p>Once a product has been fully-vetted it can proceed to full commercialization. This includes pricing, product positioning, branding, and delivery decisions. Include sales, marketing, and distribution teams.</p>	<ul style="list-style-type: none"> <li>› Who is the target market?</li> <li>› What category will the product be released in?</li> <li>› What are the key selling points?</li> <li>› What are the differentiators?</li> <li>› Are there any sub-customer segments that would buy?</li> </ul>
<b>PHASE 6: PRODUCT REVIEW</b> 	<p>After the product launch, review product performance to determine any problems and/or areas for further improvement. Discover potential future product concepts based on customer reactions and requests.</p>	<ul style="list-style-type: none"> <li>› Are there similar products we can take to market?</li> <li>› How can we support this product?</li> </ul>





## HAZARD 2: Neglecting the Competition

Without thoroughly researching competitor activity, companies could easily waste significant resources even if they have a profound knowledge of customer needs. Product appeal decreases significantly in an over-saturated market. By monitoring competitors closely, you can reveal areas of opportunity, such as sectors with unfulfilled customer demand. Detailed monitoring can also expose areas you may need to fight for market share, or more importantly, it can uncover crucial game-changing competitors that may upset the entire market with shifting trends or technologies.

To stay ahead in the game, create a system for monitoring the competitive space across your market. Gather intelligence and information such as customer sectors, product offerings, and markets, along with the organization's overview and size. Then, track current and potential initiatives to start analyzing trends. Rely on your executives to regularly identify potential game-changing competitors, particularly in neighboring markets, products, and services.



## HAZARD 3: Misunderstanding What the Customer Needs

When it comes to product development, understanding what the customer needs is extremely important. Otherwise, you risk creating products that customers have little interest in. Misunderstanding the voice of the customer can happen when customers aren't questioned adequately, or when only a portion of the market is interviewed.

Don't forget to examine prospective buyers along with your current customer base, as they can help companies take advantage of new opportunities or uncharted market segments. Test existing and potential customers, by first asking them what they need, and how strongly they think it is necessary. From there, you can dive deeper into the problems the customer is experiencing and determine how your product could solve those problems. Utilize robust surveys and qualitative interviews with both current and potential customers to uncover the key drivers behind customer requirements and expectations.



## HAZARD 4: Not Partnering with the Right Vendor Early On

Companies can hit roadblocks later on in development if they don't bring their Contract Manufacturer (CM) or Original Equipment Manufacturer (OEM) into the conversation at an early stage, ideally during the *Idea Generation* and *Concept Testing* phases. Without having a clear understanding of the product criteria and key inputs, such as technical capabilities, materials management capabilities, quality control, and strategic fit, the overall health of a new product development project can be compromised. When vendors are brought in too late, there can be financial and scheduling concerns as well.

Prior to starting any sourcing project, establish a strategic relationship with your vendor so they may be part of your NPD team. Your OEM should be treated as an extension of your business to help fully actualize your projects. By ensuring they have the proper skill set to support your specific product's development, their added expertise can often pinpoint existing operational problems that you may be unaware of, so that you can avoid risk moving forward. When engaging with your vendor, include all major stakeholders such as engineering, product management, quality control, and finance. Determine roles by spending time to develop a clear set of requirements for short-term and long-term milestones, and validate the product from time to time to ensure ongoing alignment with the direction of the project.





## HAZARD 5: Bypassing the NPD Process

During the *Concept Testing* and *Product Refinement* phases, the stakeholders can easily fall victim to hunches or emotional impulses and rush through NPD phases to take a product to market sooner.

It is important to follow a well-defined NPD process to ascertain key metrics and product feasibility at each stage. This allows you to proceed with well-qualified products or pause products if they don't meet specific benchmarks. Even if customer testing and feedback are favorable, companies must resist the urge to skip product refinement. Focus on refining the product design, framing sales and service, and warming the market to ensure your product will be executed well. This, in turn, will safeguard your product's success.



## HAZARD 6: Starting Full-Scale Sales Campaign Too Early

When companies kick off a full-scale sales campaign, they may run into serious hurdles, even if they have a well-conceived product. Without evidence of product success and actual customer testimonials, potential customers tend to doubt the validity of the information being presented. If a product is presumed to be 'bad,' the negative reputation may lead to market rejection, or worse — the sales team may even deprioritize sales based on a product being tagged as '*impossible to sell.*'

To avoid this pitfall, use a warming period to soft-launch your new product in the market. Take advantage of beta testers to establish testimonials and/or identify challenges that could prevent product sales. To attract early adopters, use incentives such as discounts in exchange for product testimonials or case studies to help you to demonstrate product credibility. You can utilize feedback from customer testing to help create an effective launch strategy that highlights your new product's benefits and strengthens your current product portfolio as well as your global brand.



## HAZARD 7: Skipping Post-Launch Reviews

Once a product is fully launched, the NPD process doesn't halt. It is an ongoing refinement cycle in which products are designated for periodic improvements or upgrades as technology advances. If the review process is skipped, companies may waste valuable opportunities for future product improvements or miss the discovery of complementary product development.

After launch, take advantage of early feedback from the market. Review and evaluate the market responses with the aim to continuously offer improvements and upgrades. By steadily advancing your products, you can increase their chance for sustainable survival and identify new or adjacent product opportunities.



The life science industry is making some big changes when it comes to collaboration. Read the study: "*Unlocking Innovation in Your Supply Chain*" with five key insights for managing your life science suppliers like partners.

 [Download the Forbes Insights Study](#)



# HELPFUL TOOLS AND TACTICS

The hazards listed below can be discouraging and possibly harmful to a company. However, when the right tools and tactics are deployed, they can be avoided. Here's a list of tools and tactics to help your company execute each phase and stay on track:

## PDP Tools and Tactics

<b>PRELIMINARY: MARKET EVALUATION</b> 	<ul style="list-style-type: none"><li>› Evaluate New and Adjacent Markets</li><li>› Monitor Competitors</li><li>› Monitor Industry Trends</li><li>› Research Online Demand Using Google Trends</li></ul>
<b>PHASE 1: IDEA GENERATION</b> 	<ul style="list-style-type: none"><li>› Review Product Portfolio</li><li>› Survey Customer's Needs</li><li>› Analyze Market Drivers</li><li>› Ask for Feedback on Forums like Reddit</li><li>› Research or Ask for Suggestions on Social Media</li><li>› Carry Out Attitude and Usage Studies</li><li>› Perform Exploratory Product Research</li><li>› Conduct Preliminary Cost/Benefit Analysis</li><li>› Generate Estimated Budgets</li><li>› Examine Ideas with Outside Vendors</li></ul>
<b>PHASE 2: CONCEPT TESTING</b> 	<ul style="list-style-type: none"><li>› Execute Voice of Customer</li><li>› Segment Customers</li><li>› Carry Out Customer Satisfaction Surveys</li><li>› Host Focus Groups</li><li>› Iterate Concepts and Testing with Outside Vendors</li></ul>
<b>PHASE 3: PRODUCT REFINEMENT</b> 	<ul style="list-style-type: none"><li>› Analyze Features or Concepts</li><li>› Optimize Pricing</li><li>› Carry Out Customer Satisfaction Surveys</li><li>› Product Changes with Outside Vendors</li></ul>
<b>PHASE 4: MARKET WARMING</b> 	<ul style="list-style-type: none"><li>› Test Brand Messaging</li><li>› Host Focus Groups</li><li>› Execute Product Testing</li></ul>
<b>PHASE 5: PRODUCT LAUNCH</b> 	<ul style="list-style-type: none"><li>› Carry Out Customer Satisfaction Surveys</li></ul>
<b>PHASE 6: PRODUCT REVIEW</b> 	<ul style="list-style-type: none"><li>› Survey Product Use</li><li>› Survey Lost Customers</li><li>› Analyze Wins/Losses</li></ul>





# STRUCTURED STRATEGIES FOR NEW PRODUCT DEVELOPMENT

Process management strategies are an important discipline to follow for structured business activities. They provide a foundation for methods to discover, model, analyze, measure, improve, optimize, and automate processes. Whether you're advancing an existing product or creating something new, process management strategies will ensure your products will be steadily improved. They also help to make certain that complex products are stable when they enter the market and are improved routinely. The four stages of product development are:



FUZZY FRONT END



DESIGN



MESSY BACK END



IMPLEMENTATION



## 1. Fuzzy Front End (FFE)

In general, the Fuzzy Front End is the vague period between when an opportunity for a new product is considered for the first time, and when it is decided the product idea is ready to enter the formal development process. FFE is the best opportunity for driving innovation within a company and happens during the ideation step. Since FFE is more about idea creation, it is usually handled informally to pitch your great ideas for new products that solve your customer's problems. Although only a few products may make it past the ideation stage into actual development, this stage is critical.

While many companies use FFE best practices in some fashion or another, most companies recognize that the following actions are imperative for a successful FFE approach.

**Identify Your Innovation Goal:** Before making a product, it is essential to determine the main problems your customers have that need to be solved. Without understanding this key factor, a product could fail.

**Determine If Your Customers Agree with This Goal:** Make sure the problem you identified is actually a problem. You'll risk the success of your product and may even risk brand loyalty if you develop a product that customers don't actually need.

**Analyze the Market About Your Goal:** Research other market segments and related technology to gather data on market size, how customers are using the products, and how much items cost. This will allow you to gain valuable insights into competitors, trends, and demographics and help you make wise business decisions.

**Create a Prototype of Your Idea:** Build a prototype of your idea to verify the design. The prototype can range from 3D modeling to creating a fully-functional model, depending on the complexity and requirements. This gives you a sense of clarity and can help solve issues early in the process. Prototypes also give you the opportunity to analyze differing ideas quickly and test your idea in different use-case scenarios to find potential errors.

**Enlist Customers to Test Your Idea:** User testing is an important step to help predict the success of your product. The process of both talking and *listening* to your customers allows you to develop a product that they actually want. If your product helps solve your customers' problems, they will love it, continue to use it, and recommend it to others. User testing is invaluable for reducing uncertainty and narrowing down product objectives.

**Feed Your Idea into the Development Process:** Once you have established your idea through FFE, the next course of action is to plan how to channel your product into the development process. Set intentions for how to develop, produce, and market your product, while also carrying out both technical and source-of-supply assessments to help you move beyond FFE. Confirm that your product idea meets the benchmarks for your company by ensuring it solves a problem, is scalable, is something customers will buy, and fits the interest and expertise of your company. Moving forward, actions and deliverables should also include the following:

- › Product definition, specifications, and technical concept
- › Customer benefits and testing data
- › Market trends research and information
- › Business plan and product mission statement
- › Development schedule and budget

### ✓ Defining Your Products Checklist

Use the guidelines above to keep your product ideas manageable and confirm if your product is ideal to move forward with development. In addition, use the checklist on our blog to help define potential product ideas.

[Click to learn more](#)





## 2. Design

While some design elements may have been started earlier in the FFE process, once a product is confirmed to go into development, it is time to move on to product design. Here, product planning is supercharged to establish overall design processes and detailed requirements to validate manufacturing feasibility.



## 3. Implementation

Once design planning is set, it is time to complete your design and implement the planned set of features. Your engineers and vendor experts should test the functionality to assess whether or not your product prototype meets the design goals and requirements previously set. Then, coordinate how the product will be manufactured, transported, and distributed. From there, you can determine how you will support your customers.



## 4. Messy Back End (MBE)

Some companies tend to focus more of their attention on idea generation but can forget or skip the Messy Back End. While the MBE may not be as enjoyable, it is intrinsically related to the FFE and is a critical step of the product development process.

The best back-end management gives decision-makers access to a comprehensive view of the product innovation and all its supporting information. This information gives companies the necessary data and context to decide which innovations fit the company's strategic vision, and whether or not they are worth pursuing in the commercialization phase.



# Product Development Process Resources

See the links below for more resources, located on the IDEX Health & Science blog, with helpful information related to innovation, development, and process models.

## Product Innovation Models

In business, the product innovation process translates ideas into a good or service that creates value and satisfies the needs and expectations of its customers. There are many ways a company can innovate, but all companies should consider four main types of innovations to stay relevant in their market.

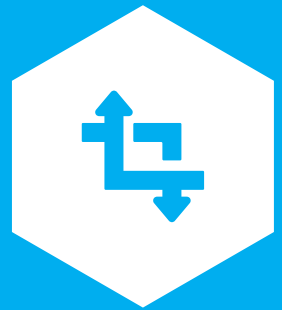
[Learn more about product innovation models](#)



## The Evolution of Product Development

Product development is the process of taking ideas from the initial concept to the point where a product is launched in the market. Alternatively, it can also be recognized as the method of a formal process followed by a business.

[Learn more about the evolution of product development](#)



## Product Development Process Model Types

Having a standardized innovation process is critical for saving your company time and money. Although it can differ based on the individual needs of a company, there are several approaches that can be used for formalizing a Product Development Process (PDP).

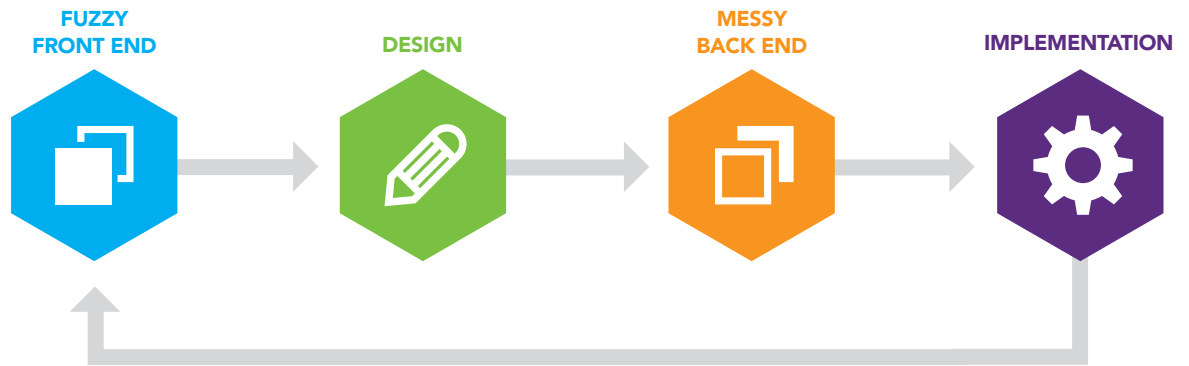
[Learn more about Product Development Process \(PDP\) model types](#)



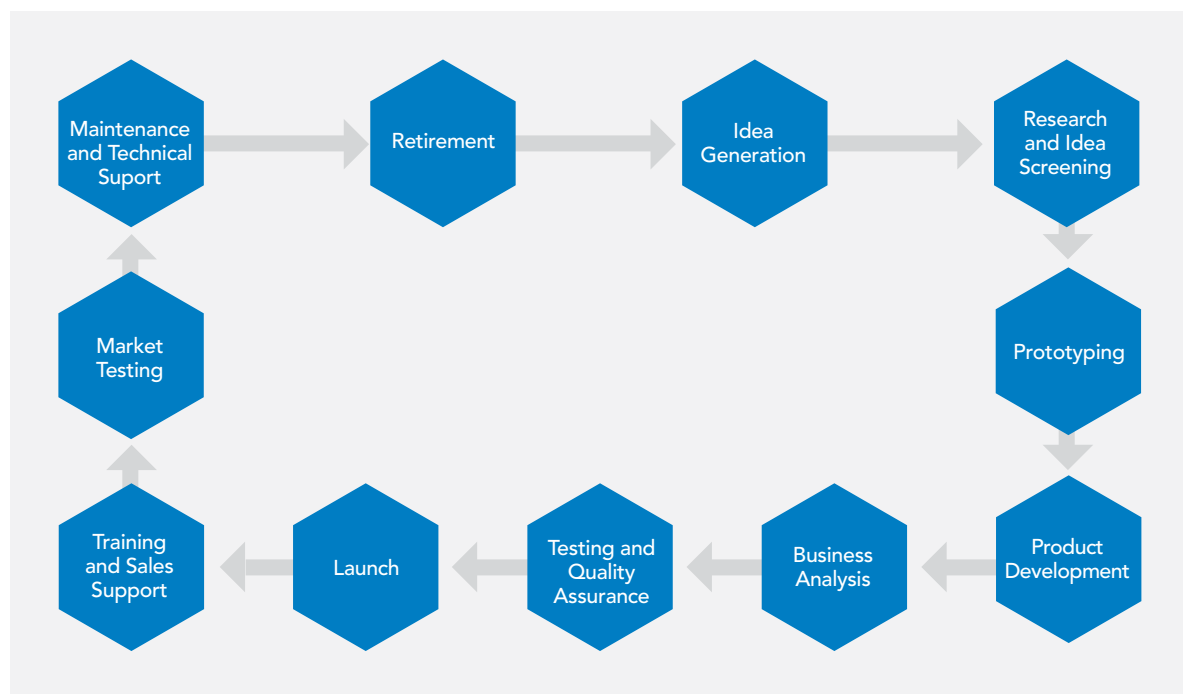


# PRODUCT DEVELOPMENT LIFECYCLE (PDLC)

While the processes on the previous page outlined the elements of new product development, the Product Development Lifecycle (PDLC) is defined as the sequence of all activities performed throughout the typical stages of its product life — from ideation through development, manufacturing, and selling of a product, on through growth, maturity, stability, and decline. The product lifecycle informs business decision-making, from pricing and promotion to expansion or cutting costs.



Sound product lifecycle management has many advantages, such as going to market faster, improving safety concerns, improving the ability to better manage seasonal fluctuations, and increasing sales opportunities. There are various PDLCs that can be utilized, depending on your company's individual processes or requirements. A PDLC can be incorporated during the fuzzy front end, design, implementation, and messy back end.



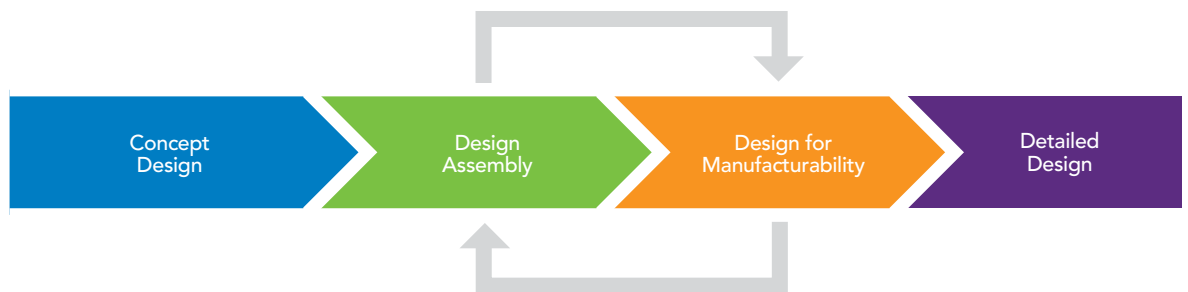
The PDLC can also be used in greater detail along each step of the PDP, similar to the sequence above.

Several common PDLC approaches can be incorporated into your product development process, based on the best fit for your company, such as:



## 1. Design for Manufacturing and Assembly

Made of two separate processes, Design for Manufacturability (DFM) concentrates on the best processes, best materials, tolerances, and optimization, while Design for Assembly (DFA) focuses on minimizing the complexities involved in taking an assortment of parts that make up the final product after assembly. Combined, these are the Design for Manufacturing and Assembly (DFMA) process, which consists of designing parts, components, or products in such a way as to make a better product. By simplifying and refining the product design, these processes make products easier and more economical to manufacture. DFMA should be implemented early in the design process, far in advance of tooling.







## 2. Design for Six Sigma

Design for Six Sigma (DFSS) is a product development process, based on traditional Six Sigma (SS), which allows for multiple methodologies to be used. It focuses on performing extra work up front, to identify product variations and minimize defects. Traditional SS utilizes DMAIC – or *define, measure, analyze, improve, and control steps* – which is most effective when used to improve a current process or to make gradual changes to a product. On the other hand, DFSS is primarily used for the complete re-design of a product or process. The methods of DFSS can vary for what works in each company, but most practices focus on fully understanding the needs of their customers and using that information as a basis for the product and design process. They can include methods such as DMADV, DCCDI, and IDOV (shown below). To ensure all aspects of a product are considered, DFSS team members must remain cross-functional throughout each phase of the process from research through design, implementation, and launch.

### DMADV



### DCCDI



### IDOV



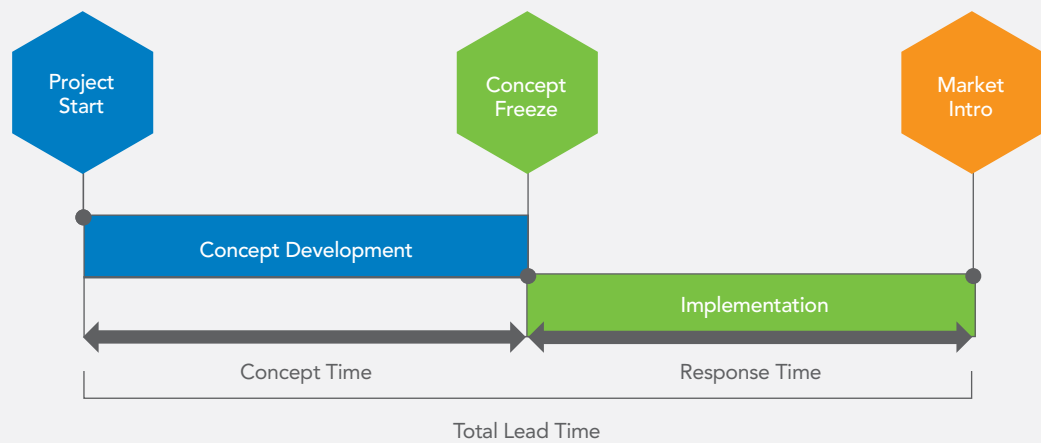


### 3. Flexible Product Development

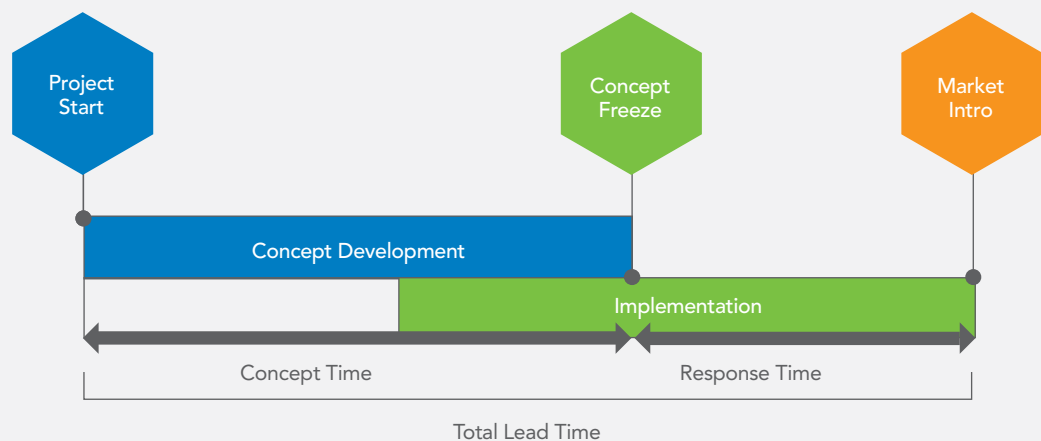
Flexible Product Development (FPD) focuses on minimizing disruptions during the product development process, even when customer needs, management direction, markets, or technologies can change frequently. The concept of FPD comes from Preston G. Smith's book, *Flexible Product Development: Building Agility for Changing Markets*,<sup>1</sup> which declares that flexibility is essential for innovation. The more innovative a product, the higher probability that changes will be required during development. Smith claims that phased development processes have the potential to make development more difficult, disruptive, and expensive. The book aims to help companies build processes and apply tools and approaches that are more tolerant of change, which can in-turn affect the bottom line.

#### Traditional vs. Flexible Product Development Diagrams

The Traditional Approach



The Flexible Approach



1. *Flexible Product Development: Building Agility for Changing Markets*, Preston G. Smith; <https://www.amazon.com/dp/0787995843>



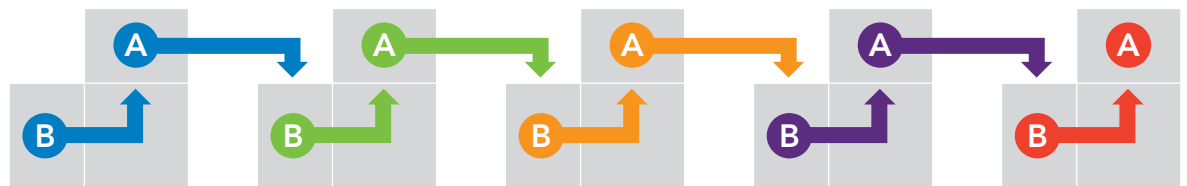
## 4. Lean Product Development

Lean Product Development (LPD) focuses on using Lean principles to meet the increasing number of innovation challenges when creating new products. It includes a wide range of tools that help companies identify and remove process waste to raise momentum while maximizing value to the customer. LPD helps companies by improving visibility, coordination, and workflow while breaking down process silos by considering the entire value stream. It promotes a culture of problem-solving and communication between teams at all levels while encouraging teams to work independently. This combination of tools increases innovation while allowing companies to improve performance in a sustainable way. LPD also places priority on finding critical knowledge gaps to determine what technology and/or outsourced vendors should be used and helps identify key risks. It balances the efficiency and effectiveness of development to create a truly valuable product proposition for customers.



## 5. Quality Function Deployment

Quality Function Deployment (QFD) is a development process model that determines what you need to accomplish to satisfy and/or delight your customers. Its primary goal is to carefully listen to the voice of customer, then effectively respond to those needs. QFD uses a set of planning tools to identify customer expectations and prioritize products or services based on the most important attributes. Once those qualities have been prioritized, QFD deploys them to the proper teams to convert into detailed engineering specifications and plans to produce and fulfill those requirements. The method includes a pre-defined set of matrices that facilitate development progression. It allows for shorter development timelines and lowers costs by preventing valuable project time and resources from being wasted on non-value features or functions.

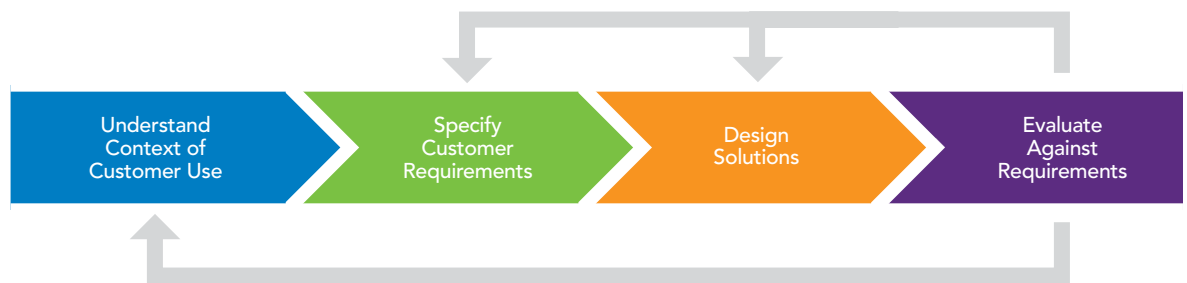


- |  |   |  |
|--|---|--|
| <b>A</b> Requirements Matrix<br><i>Design Requirements</i> | <b>A</b> Product Characteristics Matrix<br><i>Product Characteristics</i> | <b>A</b> Control/Verification Matrix<br><i>Production/Quality Controls</i> |
| <b>B</b> Customer Requirements                             | <b>B</b> Engineering Design   | <b>B</b> Manufacturing/Purchasing  |
| <b>A</b> Design Matrix<br><i>Engineering Design</i>        | <b>A</b> Manufacturing/Purchasing Matrix<br><i>M/P Operations</i>         |  |
| <b>B</b> Design Requirements                               | <b>B</b> Product Characteristics  |  |



## 6. User-Centered Design

User-Centered Design (UCD), or user-driven development, is a system of processes (not restricted to interfaces) in which companies focus on their customers' needs during each phase of the product development process. UCD is a problem-solving iterative process where teams use various investigative tools, such as surveys or interviews, and generative tools, such as brainstorming, to establish a full understanding of customer needs. From there, teams evaluate the result of each phase against the original customer's context and requirements to determine if the product idea is performing. While some product design methods force customer behavior to adapt to a product, UCD aims to optimize products around how customers can, want, or need to use them. By continually evaluating against customer needs, UCD provides an early-warning system that allows you to course-correct and fine-tune your product as you go.



## Streamline Future PDP Work

When it comes to a strategic approach for developing and managing products and their lifecycles, including the management of people, projects, workflows, technology, and data, there is great value in having real-time visibility of the product lifecycle and performance. More control over critical data gives product development teams a way to accelerate their design, change course, and simplify the transfer from design through development and production.

An effective PDLC in place makes it possible for companies to develop products quicker and go to market faster. By putting holistic processes into their operation, companies can remain competitive, collect revenue sooner, and remain relevant across all channels.



# ABOUT IDEX HEALTH & SCIENCE

IDEX Health & Science is the global authority in fluidics and optics, bringing to life advanced optofluidic technologies with our products, people, and engineering expertise. We make your vision a reality by solving complex problems and mitigating risk through strategic partnership.

## Strategic Partnerships

The key to the future is collaboration, and at IDEX Health & Science we put the focus on what matters — the success of your systems. To make your vision a reality, we make even the toughest designs seamless, all while helping you balance budgets, time-to-market, and mitigating risk. With IDEXology, your ideas stay safe and protected while we solve complex problems together.

## Your Specs and Our Expertise

In today's fast-paced market, innovation needs to be more than just an idea. It isn't good enough to only focus on the continual improvement of products. True innovation occurs when great ideas actually happen and make their mark on the world. In order to break new ground and expand your competitive edge, ideas not only need to be different, they need to be better. At IDEX Health & Science, it's not just about engineering every element of an instrument. We use IDEXology to help you see how each part comes together in higher-level designs, from the smallest component to the future of our industry.

## Your Roadmap and Our Plan

You have a roadmap and we have a plan to keep you on course. From concept to prototype to final production, we solve complex problems together, each stage playing a vital role for the growth and advancement of your vision. We create your most challenging designs so seamlessly that the very notion of a "subsystem" must be called into question. IDEXology is the backbone of agile engineering. It expedites innovation and allows you to design tomorrow's technology today.

## Your Vision and Our Focus

To make your vision a reality, we share our market-leading optofluidics knowledge and support, combined with unique partner innovation tools such as our Rapid Response Programs, to help you accelerate your time to market by generating new opportunities with high-impact, effective ideas that support business growth and increase profitability.



## Core Capabilities

### Fluidics

At IDEX Health & Science, we don't just build components; we also create innovative solutions that maximize performance and enable complete optimization of the fluidic pathway.

- › Column Hardware
- › Degassers
- › Fluidic Connections
- › Manifolds
- › Pumps
- › Pump Components
- › Sensors
- › RI Detectors
- › Valves

### Microfluidics

We thrive on complex problem-solving opportunities. As the number one provider of microfluidic consumables across the globe, we are ready to help you solve the next big thing with the broadest portfolio of capabilities.

- › Microfluidic Consumables
- › Sample-to-Answer Solutions
- › Supporting Labware

### Imaging & Illumination

Reliable by design and fueled by innovation, we are the market leader in providing “enabling” optical subsystems, vertically integrated from laser and optical components through system design, manufacturing, and metrology.

- › Filter Wheels & Switchers
- › Illumination Light Engines
- › Optical Filters
- › Optical Subsystems
- › Sensors & Cameras
- › Imaging Objectives

### Subsystems & Assemblies

We deliver the most complete portfolio of premium optofluidic technologies, components, and capabilities and help you develop subsystem and integrated assemblies. Simplification is paramount to successful instrumentation, and as a partner, we can help you eliminate costly trial-and-error cycles with solutions that differentiate and outperform your competition.

- › Solutions for Critical Elements of Your Fluidic Path
- › Consumable Microfluidic Devices
- › Complete Opto-Mechanical Assemblies
- › Manufacturability & Reliability
- › Lower Development Costs
- › Minimize Time to Market Risks

## Global Leaders

Whether you're pursuing a complex consumables design or a life-of-instrument flow cell, we support and guarantee your success with extensive experience that unites the intersections of fluidics, optics, and chemistry. We are a strong force of committed people and innovative products for your complete optofluidic pathway, continually increasing our product offering, expanding our market relevance by connecting to new customers, and positioning ourselves as global leaders in optofluidics engineering.

## Worldwide Optofluidics

As a global company, IDEX Health & Science has an international network of direct sales professionals and distribution partners in place to provide personal service to every customer. Our experts are ready to visit your operation, assess your needs, and develop intelligent solutions for your challenges.

## Corporate Responsibility

IDEX Health & Science is committed to preserving the environment. Our continuous improvement programs hold our facilities accountable to reduce waste, prevent pollution, and conserve resources. Many products comply with REACH and RoHS regulations.



## Partner with IDEX Health & Science

If you're ready to make your visions a reality, contact us and we'll show you how to take your company to the next level.

[www.idex-hs.com/partner](http://www.idex-hs.com/partner)



For ordering, technical support, and contact information please visit [www.idex-hs.com](http://www.idex-hs.com)