

New Product Development Process

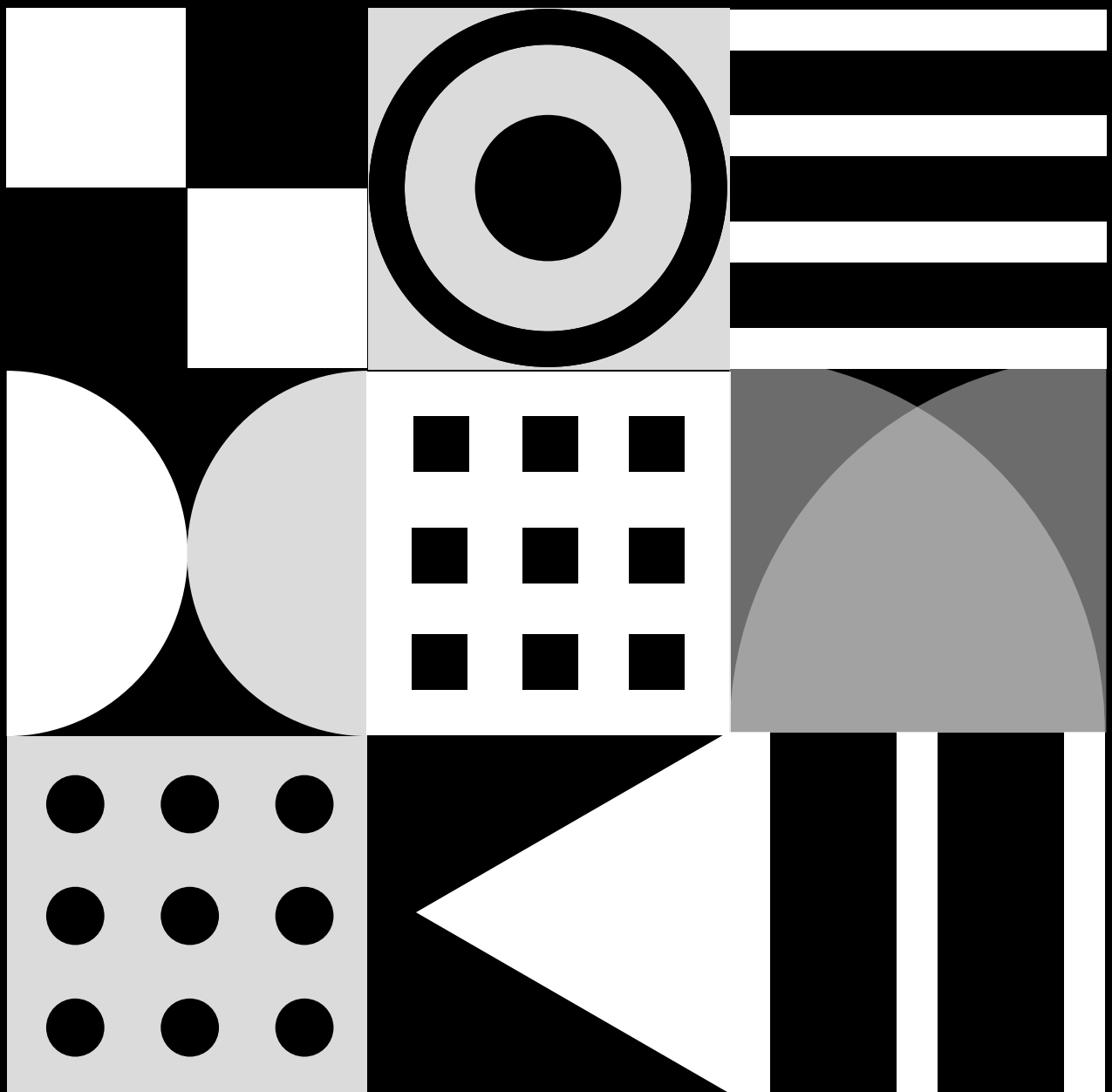


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Introduction

In the tech world, change is the only constant. The success of your company depends on how fast you adapt to the needs of the marketplace and the growing competitive landscape. Your organization needs to continually innovate to keep up with customer expectations and stay relevant. This means delivering new and improved products much faster. A streamlined product development process that facilitates short development cycles will help your company stay ahead of the curve and satisfy customer needs with great new products and features.

What is the product development process?

The New Product Development (NPD) process is about grabbing the market opportunity that revolves around customer needs, checking the idea's feasibility, and delivering working software.

On the other hand, Product Development is an umbrella term that sticks to the six stages of the software development lifecycle and works on launching products that already have a Proof of Concept (POC). Whereas the New Product Development approach revolves around working on an entirely new idea, where the uncertainty around its development and subsequent adoption is high.

The seven stages of the New Product Development process include — idea generation, idea screening, concept development and testing, building a market strategy, product development, market testing, and market commercialization.





Seven Stages of New Product Development

Building new products and services are synonymous with uncertainty. But, when you follow the suit of the systematic New Product Development process, you will soon gain clarity and confidence in what you are building.



Process

1. **Idea Generation** – Collective brainstorming ideas through internal and external sources.
 2. **Screening** – Condense the number of brainstormed ideas.
 3. **Concept Testing** – Structure an idea into a detailed concept.
 4. **Market Analysis** – Understand the cost and profits of the new product and determining if they meet company objectives.
 5. **Product Development** – Developing the sample, this involves the putting together of ideas and materials to form a testing product to the market.
 6. **Market Testing** – Marketing mix is tested through a trial run of the product.
 7. **Commercialization** – Introducing the product to the public.
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Stage 1: Idea Generation

Your goal should be to generate many worthy ideas that can form the foundation for the New Product Development strategy. The major part of this stage should be to give significance to brainstorming sessions where solving customer problems is given precedence.

This phase is not about generating foolproof ideas that are ready for implementation. Instead, raw and unproven ideas that can be shortlisted later.

Here's how you can do that.

1. Emphasise on Customer Problems

The problem that is well thought off is a problem half-solved. Here's how to identify the issues that your target audience is facing:

a. Personal Problems

If you are facing a problem, others may likely be facing it too. All you need to do is focus on that one problem and build a solution that can be tagged as “one for all.”

To start with, you need to understand the human story behind digital offerings.

For instance, Jeff Lawson, the founder of Twilio, has an interesting story behind its communication-based software product launch.

He was associated with three business companies in the past, and all of them lacked one thing — Productivity.

When he was driven to start again with something of his own, he knew that he needed to cover up the communication gap — the biggest hurdle towards the path to productivity.

That is when product innovation happened in the form of Twilio. The product building and launching had its ups and downs, but his conviction to having needed this product led to making up for a great business idea.



Qualify Each of the Listed Problems

This step helps check the feasibility of the shortlisted problems and the solution based on the 4U approach by Michael Skok, the founder of Startup Secrets. The 4U stands for:

4U Approach by Michael Skok



Unworkable



Unavoidable



Urgent



Underserved

Unworkable: Figure out whether the brainstormed product concepts will address some real problems. Will the product be able to fill the existing customer experience gaps and will achieve product-market fit?

Unavoidable: Is the problem that you are working on unavoidable to the extent that it becomes mandatory to comply? You need to find out whether solving that problem is a choice or a compulsion.

Urgent: Is the problem urgent and is highly demandable by the target market? If the answer is affirmative, this could be your chance to cover the white space in the market with your original product.

Underserved: Are there no available products that address the existing user problems? Look for the whitespace in the market and hold on to the idea that looks promising.



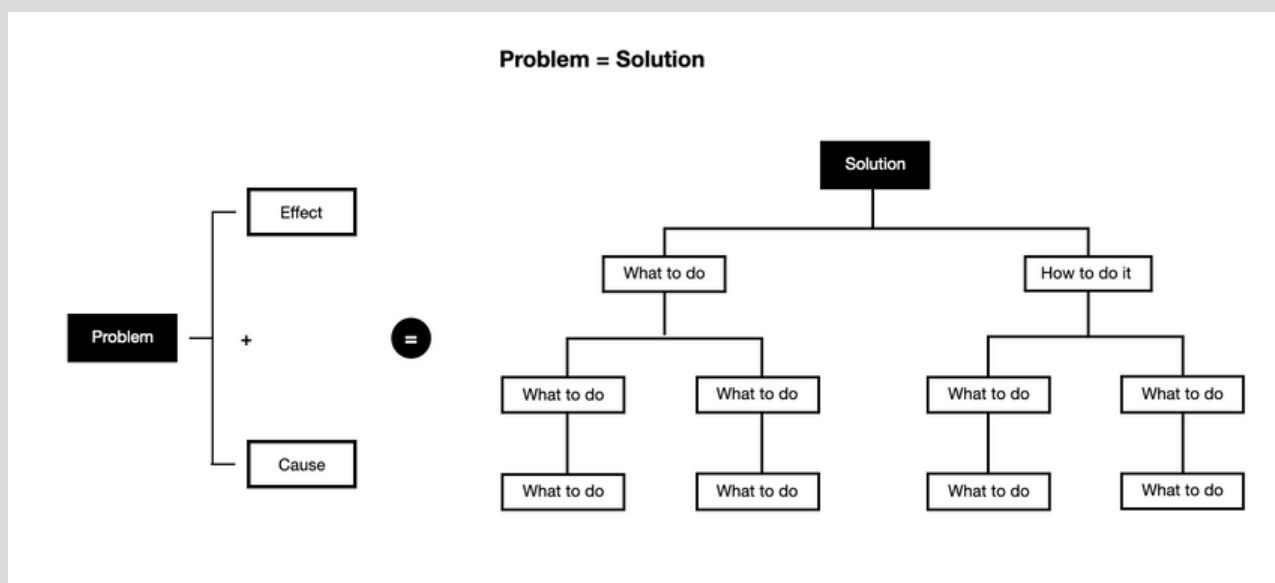
Coming Up With Possible Solutions

If you have figured out the problem, it's time to look for possible solutions. For every user problem, there ought to be potential New Product Development opportunities.

Here's the workflow that starts from a problem and ends up with strategizing around the solution.

In all, no matter how common or uncommon the problem is, the solution should be unique. Even if a product already exists, ensure that the product can solve problems differently.

For instance, Slack and Zoom are both SaaS products that focus on promoting communication and collaboration. But, Zoom does it differently by also enabling the conducting of webinars, i.e., making it their unique selling point (USP).





Narrowing Down Problems + Solutions

Create a comparison chart where you list all the shortlisted problems along with the solutions. Circulate the findings across the organizational structure to come up with a viable problem set.

In case the stakeholders are not convinced regarding the shortlisted idea, try the Replicate, Re-Purpose, and Upgrade approach.

- **Replicate:** This focuses on creating a similar product as that of a competitor, but launching it in new market conditions. When done with launching the MVP, the strategy should be to expand the business by introducing out-of-the-box features later on.
- **Re-Purpose:** This focuses on rewiring an existing business model. For instance, LinkedIn introduced LinkedIn Learning, an e-learning platform for professionals, similar to an e-learning platform for students, and built new opportunities for expanding the market share.
- **Upgrading:** This concept of New Product Development revolves around introducing a new business model that is better in one way or the other from existing solutions. It could be improved performance, better speed, addressing the challenges that a competitor is facing, or introducing added functionalities.

Stage 2: Idea Screening

This New Product Development stage revolves around choosing that one idea that has the highest potential of success. Put all the ideas available on the table for internal review, i.e., turn to people with industry knowledge and experience in the field.

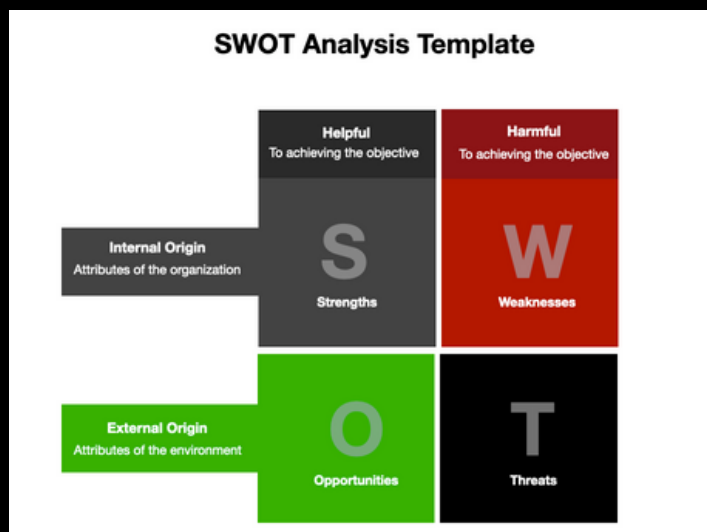
For a new product development idea, having a POC should hold precedence as it helps check the feasibility of the idea. There is no point in zeroing in on an idea that is not technically feasible to build.

Consult the Agile Development team — their expertise can help in understanding the technical side of things, which, in turn, can help you shortlist ideas worth building a PoC for.

SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis can be another good practice to consider when shortlisting New Product Development ideas.

The Agile Development team, the product owner, the scrum master, and the product manager conduct a detailed analysis of the idea to shortlist an idea where — strengths and opportunities overpower threats and weaknesses.

Conducting a SWOT is relatively simple, and you need a simple 2×2 grid to get started:



Stage 3: Concept Development & Testing

Before you start with the New Product Development process, building a detailed version of the idea and the user stories should be given priority.

This value proposition evaluation is the first step towards concept development and testing.

At the very least, it ensures that you discover problems in your approach sooner and can course-correct earlier. That saves you from piling up technical debts.

The easy-to-follow concept development steps include:

1. Quantifying Gain/Pain Ratio

You need to create an insightful picture of the product from the user's perspective. This can be achieved by calculating the gain/pain ratio, where:

Gain = Benefits of the product for the customer. What is in it for them?

Pain = The efforts made by the customer to understand and use the product.

2. Conducting a Competitor Analysis

Knowing about existing market players is a critical strategic step to consider. When you understand the competition, it becomes easier to infer:

- Where the competitor lacks
- Where is the scope for improvement
- Existing white space in the market

3. Enlisting the Major Product Features

The user stories you involve in the New Product Development software project will make or break your business. When creating a list of such features, it is imperative to know:

4. Create a Value Proposition Chart

Even when you are convinced with the wisdom & the utility of your idea, being able to state it clearly to the end-user, in their context, is quite a different story altogether. You have to give a clear picture of what the new product is capable of doing.

This clean & presentable fashion can be best represented in the form of a value proposition chart. The format of which should include:

Value Proposition Chart

Value Proposition Parameter	What does it means ?	Answering the Big question
For	Who are you developing the product for ?	Answer
Who are dissatisfied with	Defining the problem the users are facing	Answer
Our Product Can	The unique element that distinguishes your product	Answer
That Provides	How it solves the key-problem of the customers	Answer
Unlike	How your product is different from the already existing alternatives	Answer



5. Concept Testing

Once the value proposition is ready, it is time to present it to the set of selected customers. How they perceive the idea is the test of your efforts so far. Because if the idea doesn't look promising, you'll have to repeat the steps to develop a new product.

You can get meaningful insight by focusing on four critical aspects:

- Identification of the focus group, i.e., people who would benefit from the new product under development.
- Assessment of other alternatives that can be presented to the focus group.
- Development of a foolproof plan for the New Product Development right from features, marketing, pricing, and distribution.
- Positioning of the product's unique features into your customers' minds to enhance findability and discoverability.

Stage 4: Market Strategy

Marketing strategy is all about drafting a way to reach out to the targeted audience.

Perhaps the best and most straightforward method is to follow McCarthy's 4Ps of marketing for your New Product Development project.



Here's what the 4 P's imply:

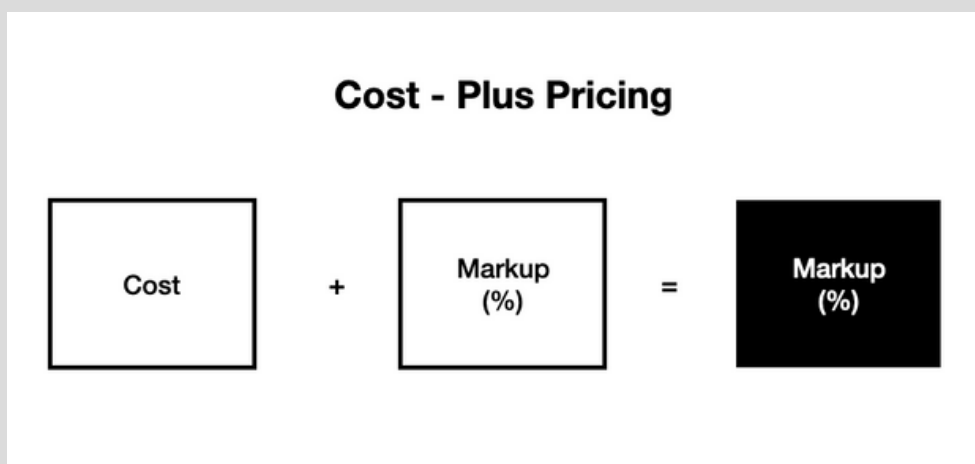
Category	Meaning	Purpose
Product	It is about finalizing the software product based on the concept testing report	Product Design Branding Strategy Level of services offered
Price	It revolves around strategizing around product licensing cost, estimating profit margins, and creating an unbeatable marketing strategy	Pricing Strategy Discounting Policies Payment Modes
Promotion	The hero point or the unique feature that distinguish your solution from others	Balancing advertising, marketing, and public relations strategy The mediums to reach out to the target audience Maintaining a fair to-and-fro customer communication frequency limit
Placement	How it solves the key problems of the customer	Finalizing product distribution strategies Defining the product's scope, i.e., local vs Global

This business analysis will help you decide whether the New Product Development efforts are worth the financial investment or not, i.e., will it create a continuous stream of value?

Smartly strategize around the selling price by Identifying the base price of the product. The best way to identify the base price is:

1. Cost-Based Pricing Model

Here, the initial production cost is added to the markup percentage to come up with your new product's final price.





Applying the cost-plus pricing formula:

- **Production cost** = Technology cost + development cost + licensing cost = \$100
- Markup% = 50%
- Price = \$150

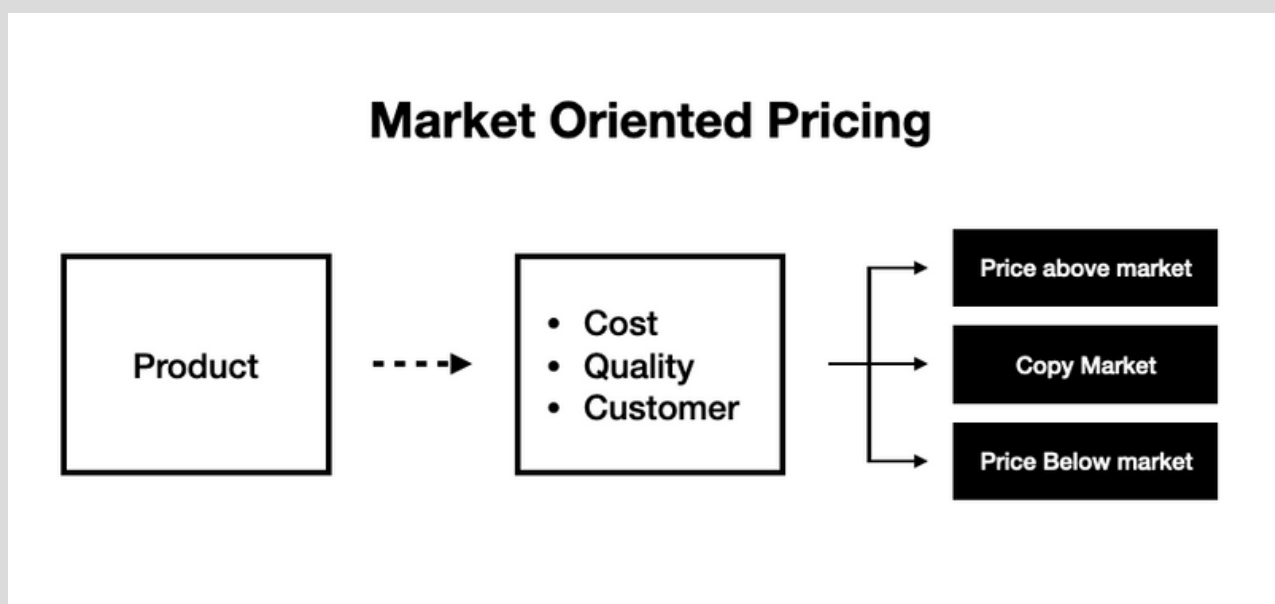
If your business analysis team applies the psychological price trick, i.e., ending the final price with 5 or 9 digits, chances of conversions increase.

So, if the psychological pricing is to play, the \$150 price will become \$149.9.

2. Market-Focused Pricing

This pricing is inferred after a thorough analysis of the pricing model of similar products in the target market.

The market-oriented pricing follows the trajectory:





The factors to consider when selecting a competitive price:

- **Price Above Market:** A higher price is suitable when proceeding with New Product Development initiatives that solve an urgent problem of the customers.
- **Copy Market:** Selling the new product at the same price as your competitors can initially be a safer move. However, you would have to ramp up the marketing efforts to score better than the competitor.
- **Price Below Market:** A lower price bracket than your competitor is recommended to attract customers that can be converted into loyal ones over time, even if your new product solves things differently.

Stage 5: Product Development

When the New Product Development idea is in place, the market strategy is documented, and the business analysis is completed — you can move on with the product development cycle.

The New Product Development starts with developing the prototype followed by MVP.

1. Prototype

This focuses on creating the UI/UX for the product, which is then shared with the stakeholders. This helps in visualizing how the product will look and whether it complies with ergonomics best practices.

2. Minimum Viable Product (MVP)

This focuses on working on the user stories in Agile for the New Product that will set it apart from others. Once the design, development, and testing are done — the minimum viable product is launched in the market with that minimal features. The iterations depend on the initial response.

The best way to approach New Product Development is to rely on Agile Product Development that focuses on incremental and iterative development while promoting collaboration and communication.

It is better than the waterfall approach as it allows the to-and-fro movement across the development cycle as new user requirements emerge. Though the development stages of Waterfall and Agile are similar, each of these software development methodologies differs.

The advantage of Agile is that it speeds up the software development process while maintaining communication and synchronization across the development teams.

Stage 6: Market Testing

This step in New Product Development aims to reduce the uncertainty revolving around the success of the software product, i.e., checking the viability of the new product or its marketing campaign.

There are two market testing strategies to follow:

1. Alpha Testing

The test engineers deployed in the organization use and judge the product based on performance. The test engineers check the product's performance and map the marketing mix results with the product created.

In case of any issues, the changes are planned and implemented before the final go-ahead.

2. Beta Testing

The target groups or customers use the product and give their unbiased feedback to the organization.

It is about listening to the voice-of-customers, VOC. If any issues are reported, they are moved back to the development team for fixtures.

Here's how Alpha and Beta testing are different from each other:



	Alpha	Beta
Why?	Validate software in all perspective, ensure readiness for beta testing.	Get end users feedback, ensure readiness for release.
When?	At the end of development process	After alpha testing
Who?	In-house development or QA team, customer.	A group of real end users.
Get What?	Bugs, Blockers, Missing features and others.	Idea to improve usability, compatibility, functionality
What next?	Bugs, Blockers, Missing features and others.	Idea to improve usability, compatibility, functionality.

There is also a third form of market testing that applies to product validation. This market testing approach is called the In-Home Usage Test (IHUT). Here, the product developed is provided to intended customers, who will ultimately use the product.

These users should be allowed to use the product, and then their feedback should be recorded. It is another successful way to test market the built product. Their feedback can form the foundation for further improvements.

Stage 7: Market Entry/Commercialization

Commercialization is an umbrella term that entails varied strategies to ensure the success of your new product. Here is what commercialization includes:

If all the mentioned strategies fall right in place, nothing can stop your product from getting attention and being a product-market fit.

Here are some must-do marketing activities that will help you gain traction:

1. Marketing the Concept Over Product

The idea here is simple — talk about the concept and your product's intent instead of endlessly boasting about your product features. In short, answer how the product will make your customer's life easier.

When HubSpot, a marketer's product got launched, it was not much of a success. Sadly, their customers did not understand the intent of the now successful product.

So, how did they change the game?

They chose to market their unique selling point instead of marketing and promoting the entire product. And their unique selling point was inbound marketing.

They started to create awareness around it and instantly became a recognized leader in the software product industry. Sometimes the right marketing is all you need for the magnet effect.

2. Having a Brand Voice

A unique mindset and a unique voice always have an all-ears audience. This is where your marketing team plays a significant role. They need to establish an effective communication style that represents the brand in the best manner.



Be it be blogs, emails, or even the website content; all of these elements need to be taken care of. In the end, the copies you create should hold power to intrigue your target audience.

3. Conducting Intriguing Webinars

Webinars are one way to attract quality leads. Conduct webinars that talk about how the new product will benefit your audience and the features you are introducing.

Webinars can also help promote findability and discoverability, i.e.,

- **Findability:** It is easy to find and use features that the customer is aware of.
- **Discoverability:** It is easy to find and use features that the customer has no knowledge about.

And, now that remote work is gaining traction, webinars can effectively help you reach out to your target audience. Talk about your product and features and witness a positive impact on your bottom line.

Importance of the New Product Development Process

Here are some of the benefits of sticking to the New Product Development process:

- Helps in checking the technical feasibility of the idea
- Ensures faster time to market
- Effectively addressing the customer needs
- Multiplies the chances of success
- Reduces technical debts
- Better management of the feature creep
- Negates the opportunity cost

Conclusion

New product development is about converting new and untried ideas into workable products. This product will be your brainchild, which will give you a competitive advantage and help monopolize the market.

Summing up the seven stages of New Product Development — idea generation, idea screening, concept development and testing, market strategy/business analysis, product development, market testing, market entry/commercialization.

The thumb rule of the New Product Development is to focus on innovating while delivering value.

In the words of Steve Jobs, “The people who are crazy enough to think that they can change the world are the ones who do.”

Thank
you