Quest
Masterclass

Product Innovation Problems & Solutions

How Top Product Managers Launch Extraordinary Products

Product Innovation may mean different things to different organizations. To some it may mean creating entirely new products and to some it many mean incremental improvements in the existing products. But it isn't limited to this definition only. Products must be such that they successfully generate an affection in the minds of the customers through their disruptive idea, extensive application, useful ingredients, decorative packaging, high speed of delivery and other factors. But with times changing rapidly, companies need to strategize not only for today but for five years from today as well. Understanding current challenges, drawing insights from different industries, and implementing the learnings at the speed of light is imperative.
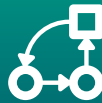
True Innovation is Coming Up With A Product That The Customer Didn't Even Know They Needed

3 Key Pain Points for Product Innovators & Ways to Mitigate Them

1. Perpetuating New Ideas

2. Developing A Product Strategy

3. Role of Technology?

1. Perpetuating New Ideas In The Team

Perpetuating new ideas is quite important as it helps to break the stereotype of functioning in the same way and bring a significant and sometimes, required transformation. This not only helps to seep down into the lower strands of the society and increase the customer base but also helps a company stand out when compared with its competitors. Innovation is often surrounded by a lot of dilemma due to fear of reduction in sales volume and revenue and also due to strict adherence to government regulations. These along with other factors inhibit the perpetuation of new ideas and slows down the overall growth of the industry. Let's discuss them in detail.

A. 2 Key Problems Associated With Perpetuation of New Ideas

a. Innovation Horizons: One of the universal truths about innovation is that it breeds inertia. As companies turn into multinational giants, they tend to continue with decade old practices which hampers their progress in the ever changing scenario. Companies need to take into consideration of the fact that along with maintaining a steady cash flow, they must constantly look out for emerging opportunities as well. But are companies ready to renunciate their fear of disruption and encourage a culture of 'out of box' thinking?

b. Innovators dilemma: Companies are often more involved in the core product manufacturing industry which is the major source of generation of cash. But they are reluctant to disintermediate their own products and adopt new technologies. Though several upcoming niches may not threaten the more profitable core manufacturing business as of now, but they could very soon.

Companies need to find new ways other than traditional products to remain relevant in the present era. But are they ready to listen to their customers and embrace creative ways to help them out?

B. Solutions to the above listed problems

a. It is imperative for companies to balance the realities of today and the uncertainties of the future. This can be done by having a series of strategic conversations within the company's core team for guiding them along the right path and for strengthening the business portfolio. For accomplishing this feat, there are 3 Innovation Horizons that companies must look forward to. These are as follows:

Horizon 1:

Horizon 1 deals with incrementing the already established production line for their existing customers which includes the day to day activities that are performed by a company to improve and extend the current business line. These activities need to be performed in a strict fashion while adhering to pre-determined rules so as to minimize risks and uncertainties. Yes, innovation happens but it is to maintain a smooth passage of profits and cash flow into the company's treasury. Horizon 1 is quite important in the hierarchy as it provides the required funds for investing in Horizon 2 and 3 respectively. Companies must take extra care of their Horizon 1 activities as it deals more with fine-tuning their production cycle so as to maintain and defend their core business.

Horizon 3:
Explore Businesses of
The Future

Horizon 2:
Nourish Upcoming
Business

Horizon 1:
Protect Core
Business

Value

Time

Horizon 2:

Companies must constantly look out for new business opportunities and investments of the future that can be transformed into cash cows in the coming times. Such opportunities fall in Horizon 2. These businesses have the potential to eventually replace a company's present core offerings. Creative minds need to operate on the Search and Execute strategy depending on Data-driven decision making and come up with a new set of customers, a new distribution channel and most importantly, a new business model. So, companies must embrace the opportunities and should work with diligent and business-savvy individuals so as to move from the ideation to the execution stage without any delay. And fill the loopholes that they have spotted before their competitors do so.

Horizon 3:

This horizon deals with what the future will look like. It takes into account all the new technological developments happening in the industry. It is quite distant from the present core competencies of organizations as it emphasises on such ideas that lie out of the comfort level of the present management team and which may lead to nowhere. The main focus here is to have a huge pool of ideas to scout from time to time and to increase the velocity of learning. Companies must find out the concerned market and technical risks for each idea and prune down the pool of options that are available to them. Once they are sure about its feasibility, they must upgrade it to Horizon 2.

b. Studies suggest that even if companies do almost everything right, they may experience stunted growth over time or may simply disappear altogether. Thus, they must explore new markets and should not dismiss the arrival of emerging start-ups that are often equipped with disruptive innovation skills. Companies should seek new opportunities by not only finding new revenue streams and by satiating the ever increasing demands of their customers but also by building relationships with non-financial firms to remain relevant. Companies should keep in mind not to neglect small niches which they presently consider unattractive because of their low revenue generating potential. With time, these small niches grow into large markets and turn out to be major threats for big and established organizations. Big firms need to identify that incumbents do not fail because they lack the ability to explore new trends, create new ideas and bring new technologies to the market rather they fail because they attempt to apply it on their existing customers and infrastructure. This is where new entrants outplay established companies because they find new markets to apply these technologies and often have nothing to lose because of their low cost structures. Eventually, these small start-ups advance rapidly and soon hit the steep part of the acclaimed "S curve". Hence, established companies need to not only embrace disruptive technologies vigorously but also need to explore the correct audience for implementing them.
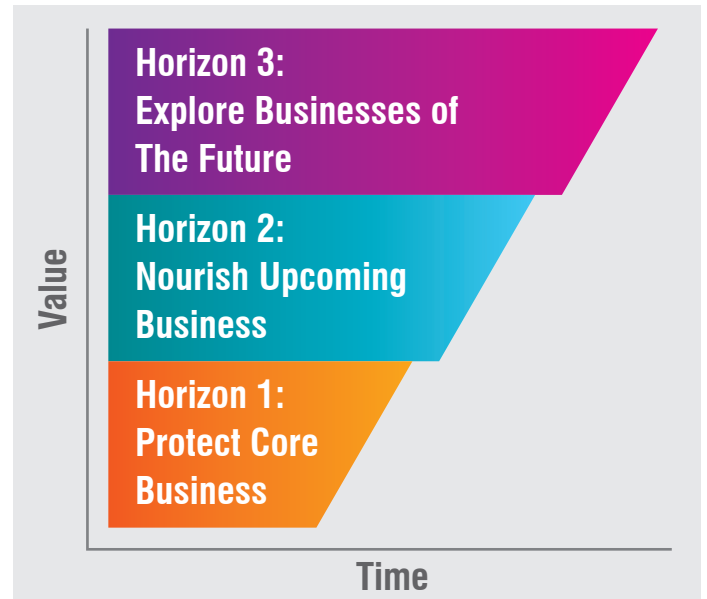
According to HBS Professor Clayton Christensen, About
95% **of New Products** Fail Due to
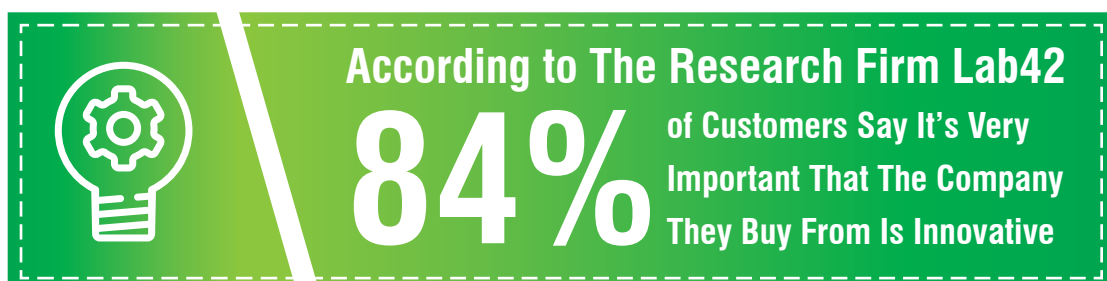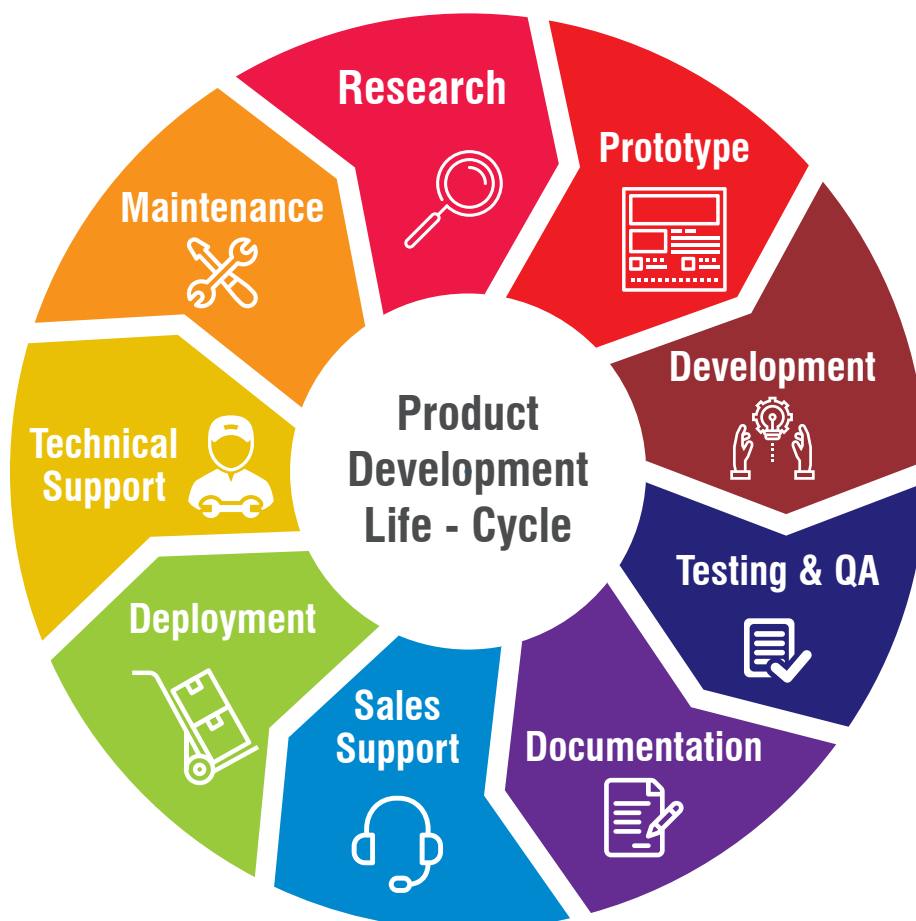**Ineffective Market Segmentation Mechanism**

2. Developing a product strategy

Once a new product has been developed, companies need to determine how it will be received by the customers. This is where a sound product strategy holds critical importance. Companies need to create a strong product launch plan and learn from failure. They need to indulge in AB testing so that they can kill bad ideas fast and adopt the good ones and execute rapid and iterative prototype development. But are firms focussing enough on continuous development in the production innovation life cycle and developing and delivering winning launch strategies? Let's explore them in detail.

A. 2 Key Problems Associated With Developing A Product Strategy

a. Product Innovation life cycle: Product Innovation can neither be accomplished nor be judged by a single parameter. It includes many facets like quality, precision, reliability, safety, benefits, functions and uses. Are companies ready to take note of all the above-mentioned things? Are companies able to manage the unpredictability in performance of their product in its different life-stages? Are they able to come up with ideas that resonate with their customers and adapt according to their customer's feedback?

b. Create a strong product launch plan: Just creating a product and bringing it out in the market doesn't mean that people are going to buy it. Companies need to create a connection between their product and potential consumers. Companies must remember that their business or product launch is the first impression that will be imprinted upon the minds and hearts of people. But are companies ready to take steps to plan and execute a well-timed, indelible launch that will make their product stand out from the crowd? Are they ready to adopt smart, strategic and effective ways for promotion so that their product grabs eyeballs all across the globe?

Research
Prototype
Maintenance
Development
Product Development Life - Cycle
Technical Support
Testing & QA
Deployment
Sales Support
Documentation

According to The Research Firm Lab42

84% of Customers Say It's Very Important That The Company They Buy From Is Innovative

B. Solutions To The Above Listed Problems

a. In the present day and age, companies cannot sit idle and wait for customer response. Good products sell itself is a fallacy and companies need to continuously improve across various stages of product development. The first thing that companies need to look upon is to select an idea loaded with huge potential. In cases where a new product is to be built upon the lines of an existing product, this can be relatively easy. But for products which are created with an intent to bring a revolution in the industry, it can be relatively difficult. This requires setting up of a team of think tanks who focus solely on assessing the right idea by looking at the company's profile. Once the idea has been finalised, the company needs to back it with detailed research to know the demands existent in the market. For this, it is vital for companies to know the market size, market attractiveness, customer requirements, differentiation possibilities for the competition, technical feasibility, and market entry barriers. After the research phase comes the prototype development phase. This is one of the most important part of the product innovation cycle as it not only gives companies the inner insights of what their customer actually wants but also cuts down on the time and cost of implementing a well-executed bad idea. It starts off by designing a few core parts of a product and then grows in depth and breadth over multiple iterations. After the 1st iteration, companies should send the prototype to users to gather feedback about the merits and demerits of the concerned product. Once the feedbacks are received, companies should identify the areas that need to be worked upon and build a better prototype in the next iteration. After following all the above steps, the products need to reach the end consumers. A big Logistics network is of utmost importance as it extends a company's capability to reach millions of users and make sure that the company makes the most of its effort and investment.

b. Companies need to take into consideration of the fact that just by developing a product that fills a void in the marketplace doesn't mean that it's guaranteed to be a good sell. Before launching the product in the market, companies should first collect feedback by organizing surveys in the target groups and must make the required changes. This is important because if their real customers get a flawed or buggy item, they will hesitate to use the future versions. Companies should contact influencers to promote and cross sell their products on their sites. Also, it would be a good idea to contact loyal customers and provide them a free sample. If they like it, they will share it with their friends, colleagues, write reviews on blogs and generate a buzz on social media. With the proliferation of mobile apps for display ad marketing, companies should not neglect this sector. Since the mobile viewing time has increased exponentially, companies should extensively use this opportunity to promote their product to their current and potential customers. Since companies cannot be present at every place at every time, they can create high-quality engaging demo videos that are self-explanatory in nature and demonstrate the product's distinguishing features in a user-friendly manner to their customers. A good Product strategy also demands a touch of personalization because the way in which each of your customer interacts with your product may be miles apart. Personalization depends upon income, demography, likes, lifestyle, geography etc. which needs to be taken care of. Last but not the least, generating leads for a new product is of utmost importance but not enough. Having the capability and capacity to manage these leads once they arrive is much more important. Companies must try to nurture their relationships with potential leads by sending them useful content periodically. Above steps show a clear route on how to develop a strong product launch plan that can increase customer base and ultimately lead to exponential sales.
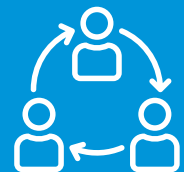
Businesses Spent
$341bn
on R&D Performed in the United States in 2014

Prototype

Share

Refine

Get Feedback

Digital Video Saw A
26%
Jump in Spend From 2016 To 2017

Technavio's Market Research Analyst Predicts The Global Rapid Prototyping Equipment Market To Grow Steadily At A CAGR of Around
5% by 2021

3. Role of Technology

The Research and Development (R&D) department develops technology platforms which are used to create economical solutions that ensure the blooming of innovative products. Recently the role of Blockchain, Artificial Intelligence(AI), Machine Learning (ML) and analytics in the realm of product innovation has seen an exponential increase. They not only bring greater efficiencies to businesses at lower cost but also drive down the cost of corporate investment. But are companies willing to bring such a massive change in their production ethos which has been dominated by traditional ways of product development? Let's see the role of technology in detail.

A. 3 Applications of Blockchain In The Product Innovation Process

Apart from making crypto currency widely popular, Blockchain also plays a vital role in product innovation processes. Below are 3 applications how it's bringing a dramatic change in the product innovation cycle:

a. Smart Contracts: One of the most important applications of Blockchain is Smart contracts. These have been able to create agile supply chains that can automatically search, negotiate and close deals with partners all across the globe. Smart contracts contain the bills of lading for raw materials, proof of origin and destination, time of export, operations performed etc. that can be securely checked by partners. This is a unique concept because in traditional supply chains, the contracts and documents pertaining to trade are held by each partner's legal department which takes a lot more time to reflect any changes and is a way more expensive method. Smart contracts not only helps to speed up product supplies across the value chain but also helps create more reliable and fruitful relationships.

b. Supply chain visibility and traceability: Supply chains that are guided through Blockchain systems can help trace any kind of defects while manufacturing products. For example there is an arms and ammunitions company which makes guns and bullets. Now suppose, bad bullets were manufactured and sent to various arsenals around the city. Through efficient Blockchain systems, bullet manufacturing companies can reduce their liability by quickly identifying the bad bullets and thus, reduce the injuries and deaths that could have been caused by it. This reinforces the confidence of arsenal owners and augments their satisfaction with the arms manufacturing company.

The Global Blockchain Market Is Expected To Be Worth **$20 bn** by **2024**

c. Audit trails and Payment: Checking Blockchain systems are also excellent at audit trails. They can prove that a pair of shoes was made in good working conditions and the workers were paid fair wage for their work. This not only allows the retailer to charge a premium for the product but also allows the factory workers to live a comfortable life. Also, with the introduction of smart shipping containers, devices can track real-time status of products and can automatically sell the surplus quantity. Moreover, Blockchain powered crypto currencies helps to settle payments instantly without any hassle.

> **Blockchain Enables The Creation of Smart Contracts, With Terms & Conditions Both Sides Can Specify & That Assure Trust In The Enforceability of The Contract & The Identity of The Counterparty**
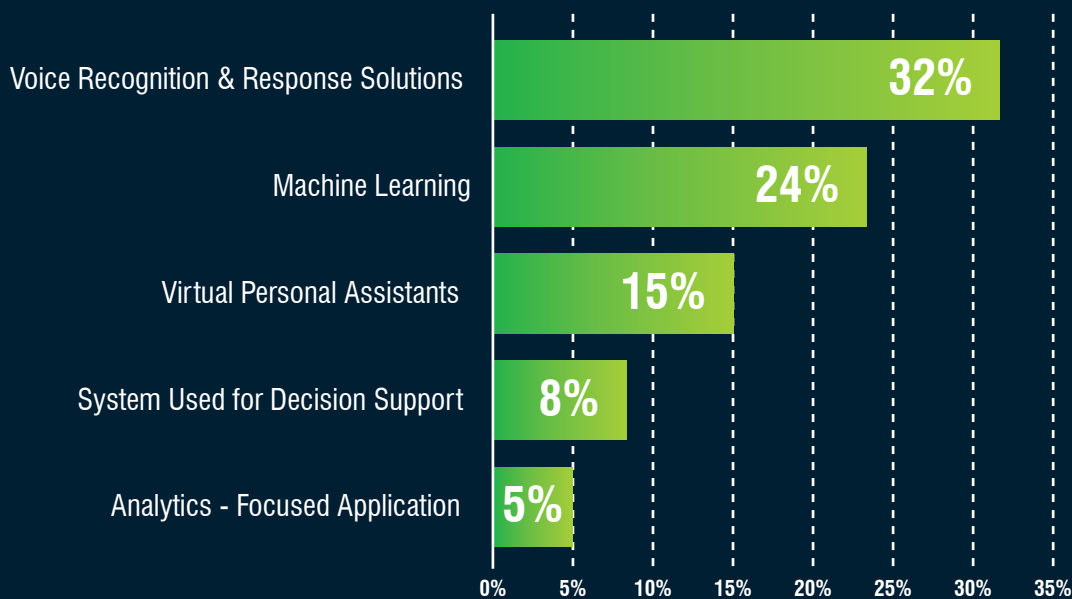
B. 2 Applications of AI in The Product Innovation Process

AI has the ability to process huge volumes of data, derive insights and patterns out of it which can ultimately be leveraged in adding customer value. This not only provides a better sense of what your customers and clients are looking for but also ensures that transactions are carried out successfully under valid quantity constraints. Let's explore this in detail.

a. Natural Language processing (NLP): NLP allows users to query data sets in the form of a question that they would pose it to other people. After receiving the information, the machine interprets the sentences in human language, converts them into data sets and sends an answer. It can be used to store, decode, and analyse the huge volumes of information stored in medical records of millions of patients in the country. Another feature of NLP is sentiment analysis. This feature helps data scientists to analyse hundreds of thousands of comments on social media to evaluate a company's brand performance and the areas where it can improve. Also, various search engines like Google use NLP algorithms to translate text into different languages.

Artificial Intelligence & Machine Learning in 2017

Most Widely Used Artificial Intelligence Technology At U.S. Company

Voice Recognition & Response Solutions — **32%**

Machine Learning — **24%**

Virtual Personal Assistants — **15%**

System Used for Decision Support — **8%**

Analytics - Focused Application — **5%**

0% 5% 10% 15% 20% 25% 30% 35%

b. Machines Learning: Machine Learning due to its multifaceted nature has already displayed its transformative impact. Many of us would be aware of the facial tagging feature on Facebook that prompted users to tag their friends by clicking on their photos and adding their names manually. But lately, a face recognition algorithm has been added that automatically recognizes the photo and tags people for the user. Also, companies like Apple have used Machine Learning capabilities in their smart assistant, Siri, which uses voice recognition technologies and Neural Networks to iteratively improve its capabilities. Giants like Amazon and Netflix have been tremendously successful in retaining their customers and have realized substantial revenue increase by leveraging customer experience through personalization.

According to New IDC Spending Guide, Worldwide Spending on Cognitive & Artificial Intelligence Systems Forecast to Reach

$12.5 bn in 2017

In the above 3 sections, we got a clear understanding of how top Product managers launch extraordinary products that not only solve a critical problem of potential target segment but also holds their interest for times to come. For this, managers should try to create an environment that embraces creativity and perpetuates new ideas that can drive the company forward in a specific direction. Product Managers should create a formidable product strategy that stands undeterred and helps make several iterations for developing the perfect product. And last but not the least, product managers should constantly explore new technologies such as Artificial Intelligence (AI) and Machine Learning (ML) which can speed up the product innovation process manifold by going through enormous chunks of data in less time. With a strong product strategy at place, companies can come up with great products and increase the profits exponentially.