

Choice Architecture for Product Agility

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Abstract

The idea of product agility is the check that the offering created is indeed the right thing for the customers. The alignment between the vision, strategy, and implementation creates the perfect outcomes for the business and value for the customers. If every organization had been following this, we would have had several successful products in the world. But even today, we talk only about a handful of them.

Frederic Laloux, in his book 'Reinventing Organizations', argues that the organizations in the future will have little to no strategy in place [1]. But it is driven by the self-managed employees who understand the purpose of the being and the general direction in which the organization is marching. Such organizations, called the Teal Organizations, would tune within to create products that meet the real need once a problem is identified. This is not an empiric process as it is reliant on emotions instead of data.

This poses an additional problem (or a blessing in disguise??!!) in an already chaotic process world. Product agility is a choice everyone in the organization should make. Careful placement of cues within the current implementation structure could help this cause. Traditionally, nudges are used in marketing to influence customer behaviour. This paper would aim to explore the possibility of a few built-in nudges within the implementing organizations with the aim of product agility transcendence.

Keywords: Nudges [2], Process loops, 5Ps, SPARK, Humanized Thinking, Full Stack Product Agility, Product Agility Manifesto, Product Probes

I. Introduction

The product says to the problem, 'You are my creator'. And the problem replies to the product, 'And you are created for me'. Imagine a world as simple as that. A product exists to solve a (set of) problem (s).

It is not as simple as that. Often, the product organizations fall into the trap of what I call Process loops. Right from need identification to technical choices to the actual implementation, these loops exist at many levels. And they make the organizations fail to focus on what matters the most. Being a feature factory does not always mean that the product is on the right path. Not all the features make the customer/ user happy and loyal.

Remember the baby elephant syndrome? An elephant tied to a rope at a very young age continues to believe that the same rope can hold it even when it becomes huge and never tries to break free. Being unable to decouple the technical aspects from the functional needs is often the reason why products lack agility.

Agile manifesto for software development processes was formulated in 2001. Here is a quick look at the evolution of agile practices for software development over the years.

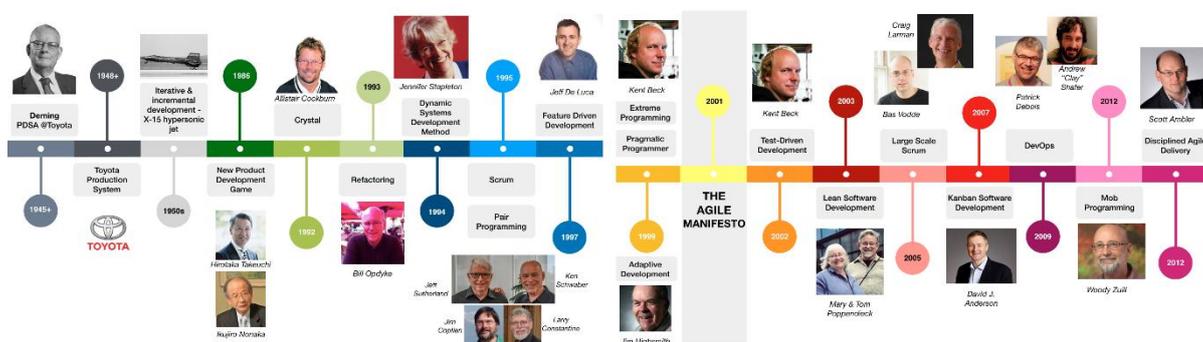


Image from: <https://awarenessagents.wordpress.com/2018/07/11/a-brief-history-of-agile/> [3]

It covered specifically the practices and processes for implementation that would help create quality software. While this provided a formal direction and guidelines for organizations, I feel that it stopped short of covering the entire spectrum of the product life cycle.

Introducing additional processes to cover the entire product lifecycle might hamper the balance in meeting the already incomprehensible, demanding, and time- sensitive customer expectations. Also, the aim should be to be more product centric and not process centric. More process introduces additional burden on everyone involved.

As it passes through each of the process loops, the product starts to fall asleep at the wheel. Organizations feel constrained by the imaginary chains that they often fail to think outside the box. All that being said and done, what helps an organization to truly remain

agile on product-ivity? Let us see if we could arrive at some nudges that could be built in to keep the product from being held by any imaginary shackles.

Moving forward into the 21st Century is a different ballgame altogether. The shifting paradigms make it difficult for the organizations to stick to the traditional ways of working and yet achieving the desired outcomes for themselves as well as the customers. As Erik Roth points out in his foreword for Idris Mootee’s book “Design thinking for strategic innovation”, it is important to enable teams over the rigid structures.

CHANGING MANAGEMENT PARADIGMS	
20th Century	→ 21st Century
Scale and Scope	Speed and Fluidity
Predictability	Agility
Rigid Organization Boundaries	Fluid Organization Boundaries
Command and Control	Creative Empowerment
Reactive and Risk Averse	Intrapreneur
Strategic Intent	Profit and Purpose
Competitive Advantage	Comparative Advantage
Data and Analytics	Synthesizing Big Data

Image from Design thinking for strategic innovation [4]

II. Terms explained

A. What is a Product [5]?

On the surface, a product is an offering provided for use to address a set of needs and has transactional value. In our context of the digital world, products can exist in many segments such as B2B, B2C, and B2B2C.

But products do not often happen by accident. They are the result of a conscious and constant journey with ever-evolving customer needs. In the ideal world, a product manager is supposed to help identify and prioritize those needs. But let us face it. Product managers often end up being project managers and become involved in internal alignments aka product implementations.

Often, we become entangled under the illusion that our solutions solve customer problems. We spend our energy on solutions without understanding the real problems at hand. It's not about the features that we produce but the purpose with which they are created.

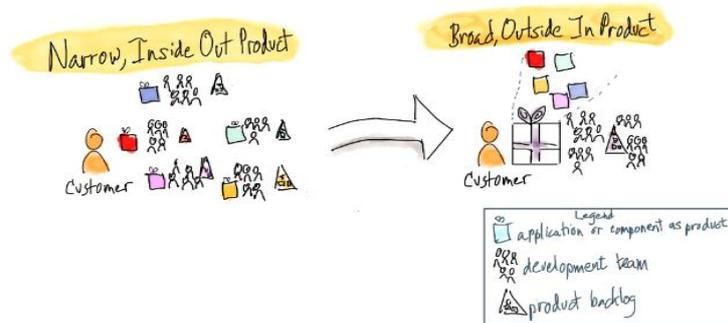


Image from <https://www.ebgconsulting.com/> [6]

The outside-in approach ensures that strategy and tactics are both in balance. When aided by ProductOps, better products come to the fore. This is due to various aspects such as processes, tools, practices, key objectives, and mindset aligning together and having the end goal at each stage in their sight all the time.

ProductOps is an emerging field. It needs the sync between the data, technology, and interactions to help create better products. The alignment, interactions and processes between business, engineering and customer become better by using ProductOps function. Currently, the concept itself is at a nascent stage and was heavily inspired from MarketOps, ResearchOps, DesignOps, and DevOps. Due to that factor, various organizations have different ways of working when adapting to ProductOps. The baseline is still the same.

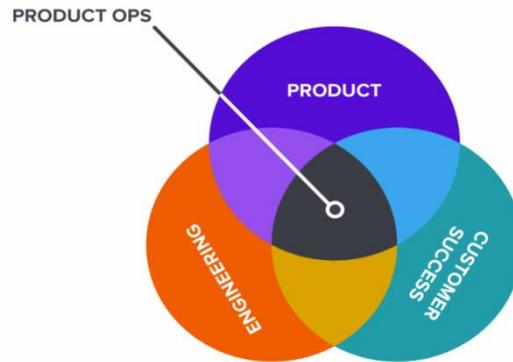


Image from: <https://www.pendo.io/resources/the-rise-of-product-ops-ebook/>

B. What is Product Agility?

Building the right thing in the right manner is the north star for any business. However, we must admit that the product managers are humans too and they could make mistakes. But sometimes such mistakes could lead to unrealized opportunities as well.

In 2012, the organization Tiny Speck was working on creating a video game. To keep track of all the internal communications and have a central repository for all the files, they built a tool for themselves called the "Searchable Log of All Conversation and Knowledge". After a few months of work, they had to stop their work on the game as there were not enough takers. But they realized an opportunity for the tool during this period. In less than a year, the company was valued at over a billion dollars. The company's name as you might have realized is Slack.

If we are unable to recover from mistakes, it could indicate that the checks and balances are not really in place. Sometimes, when the vision is blurry, we clean our glasses to refocus but not throw them away. Product agility is the constant wayfinding to create value. Organizational resilience also becomes evident through this and even in adverse situations such as Covid, they can bounce back better and quicker.

But is this Product Agility? It can be. But there are also several other aspects that are central to Product Agility. It is mainly the ability to connect with the customers while keeping the business objectives in mind. The organizations need to make money (unless they are not-for-profit) while the customers should get the value for which they are willing to pay. If both are not in balance, the products cannot sustain in the market for long. There could be an initial problem fit but the product-market fit is equally important for businesses to be able to serve the needs while staying relevant and at the same time be profitable. A Full stack product agility that involves all phases is the right way to go forward.

C. What is Choice Architecture [7]?

Wikipedia defines Choice architecture as *the design of different ways in which choices can be presented to consumers, and the impact of that presentation on consumer decision-making.*

The principles of a good choice architecture involve understanding complex behaviour patterns, having defaults, expecting the outcomes, and using feedback. A product built with choice architecture principles helps improve the chances of being successful and better.

Originally coined by **Richard Thaler** and **Cass Sunstein** in their 2008 book *Nudge: Improving Decisions about Health, Wealth, and Happiness*, choice architecture does so by using Nudges. A nudge (as a verb) means encouraging or persuading someone to do something in a way that is gentle rather than forceful or direct (from Cambridge dictionary).

"A nudge is any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic consequences. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level to attract attention and hence increase likelihood of getting chosen] counts as a nudge. Banning junk food does not."

To illustrate the concept, here is an example:

The payment page in the Food delivery applications such as Swiggy or Uber Eats allows customers to include a tip of any amount they want for the delivery person. However, they also provide certain default amounts which gently remind the customers what the ideal tip amount could be.

Building an exceptional offering requires patience with the user experience being the epicentre of the whole exercise. Otherwise, our service delivery teams will be flooded with complaints and service requests.

D. What has Choice Architecture got to do with Product Agility?

In his book 'Atomic habits', James clear [8] talks about the power of making small changes that lead to a huge impact. These small changes when included at all levels of the product life cycle as well as the product development life cycle could help the organizations create a resilient and desirable product that can serve the purpose for many years.



The Agile Manifesto was primarily aimed at software development processes. If a Product agility manifesto existed, it could have involved the entire product spectrum. This involves various stages of the product life cycle from ideation to senescence.

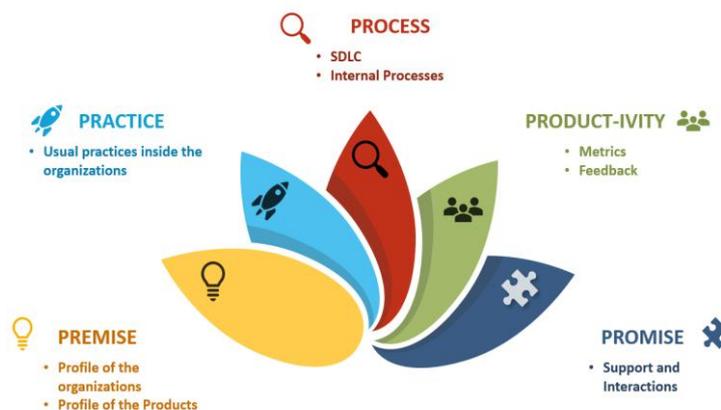
Product agility is both art and science. I have taken a stab at the Product agility manifesto keeping that in view. Just like the Agile manifesto, the idea for the Product agility manifesto will be to have more emphasis on the aspects to the left than the right to be able to create better value. While both aspects are important, our focus is to lean more towards:

- Problem Management over Product management
- Simplification over Scaling
- Familiarity over Facts
- Experience over Effort



III. Research and Related work

With the goal of engineering perfect outcomes to achieve Product agility and how certain organizations do better than the others, I have framed a 5P model to aid in research. The aim was to understand what aids the agility of a product as the nudges and perform better than the peers. The organizations surveyed (or interviewed) were asked questions on the below aspects.



- **Premise**

- This puts the context in place. The distribution of the organizations in terms of the size, location, operating markets, and the profiles of the products. It also considers the PESTLE (Political, Economic, Social, Technological, Legal, and Environmental) conditions in an implicit manner.

- **Practice**

- For the organizations in context, the idea is to understand the usual practices inside to generate insights around what practices could be better than the others. The practices vary widely between organizations and the idea is to find common underlying principles behind some of them.

- **Process**

- Agile is no longer a buzz word. It has become the norm now. However, there are still certain organizations employing traditional methods and achieving success. Also, some organizations employed a set of mixed methods to achieve optimal outcomes. Given the limited resources at their disposal, they preferred to use time tested processes but leaving room for innovation at the same time. Understanding the true sense of agility could come from gaining perspective from all types.

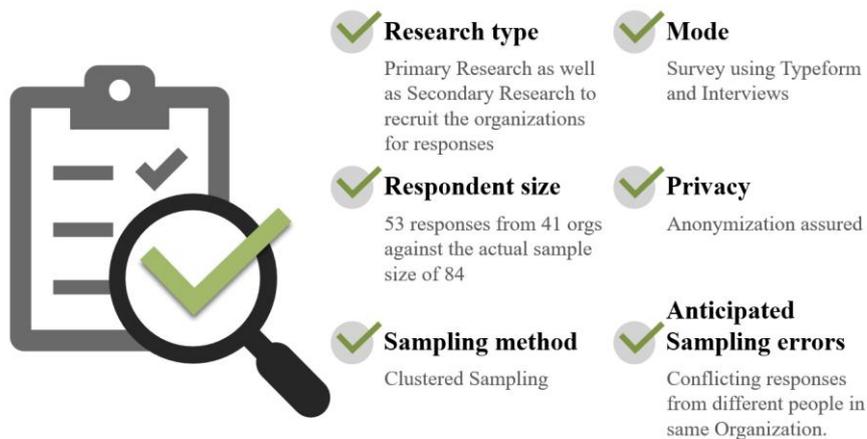
- **Promise**

- Each organization faces certain challenges. It is important to understand what those are and how they are overcome. Despite a wide range of these challenges, the organizations employed various means to deliver on their promises. The questions in this area helped get a better picture of what products promise to the customers and how they stand up to them.

- **Product-ivity**

- The true measure of product agility is difficult to understand and follow. It can be found by the measures selected and employed by the organizations towards understanding what product success meant to them. Questions in this line were included as part of the surveys to get a better understanding of such measures.

A. Research Methodology



A survey was created using type-form that consisted of about 18 questions. This was sent to participants at various levels in the organizations. These organizations were distributed across 3 regional clusters viz., North America, APAC, and Europe. The respondents were selected mainly from 5 domains viz., Education, Healthcare, Retail, Logistics, and Manufacturing serving in B2B, B2C as well as B2B2C in some cases. The organizations were mainly of a start-up nature.

However, the minimum selection criteria for organizations included in the survey are:

- Greater than or equal to 4 million USD revenue
- Minimum 3 years in business
- In the case of multiple products in the portfolio, the flagship product was the consideration
- Where possible, a Net Promoter Score rating of more than 3 was also a criterion (based on play store/ app store ratings)

Several sources like DNB were used in identifying these organizations.

B. Research Findings

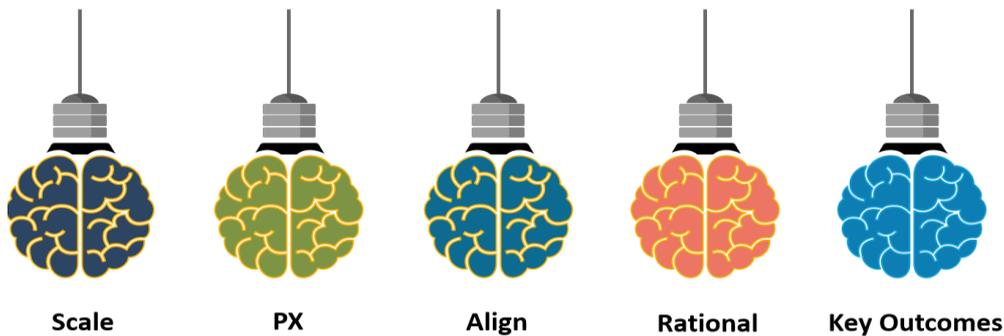
Below are some of the highlights from the research findings:

- About 74% of respondents use Agile methodologies and 80% use Scrum as their Agile method for their implementation (either as the only mode or as part of mixed methods).

- Over 70% of the respondents have mentioned that they spend their resources on customer experiences in a specific manner.
- Close to 83% of the respondent organizations meet frequently and brainstorm together to align with business objectives.
- The main metrics for measurement are Revenue, Customer Churn, and new customers in more than 78% of the organizations.
- The main prioritization challenge was the lack of clarity on what to deal with first (~20% of Organizations have this as number 1).
- Some organizations (<8%) did not have the necessary tools/ infrastructure in place to measure against the expected outcomes.
- Products that had a high Net Promoter Score (more than or equal to 3.5 on a scale of 5) fared that way because of:
 - The specific focus in serving the problem areas.
 - Frequent customer interactions
 - Prioritizations done in accordance with cross- functional teams’ brainstorming based on user interactions
 - Availability of customer service teams
 - Quarterly measurements of customer happiness index
- Close to 44% of Organizations received at least 3 referrals on average from their customers.

IV. Choice architecture for Product Agility

There are common underlying practices that the new age organizations employ to be better successful. These could be the built-in nudges across organizations. I tried to present these nudges through a framework representation. I call this the SPARK framework.



Each of these elements represents subtle cues and not enforcements. To be able to shape the behaviour of all the parties involved in product agility transcendence, these elements guide individuals to take a more considerate approach. They act more like a template and not mindless anchors resulting in self-imposed nudge alikes.

- **S – Scale (or Not)**
 - Scale the products using features only when necessary and when a specific problem needs to be addressed by a different feature.
 - Prioritize the needs of the customer over the wants.
 - Pivot quickly when the focus needs to be placed elsewhere.

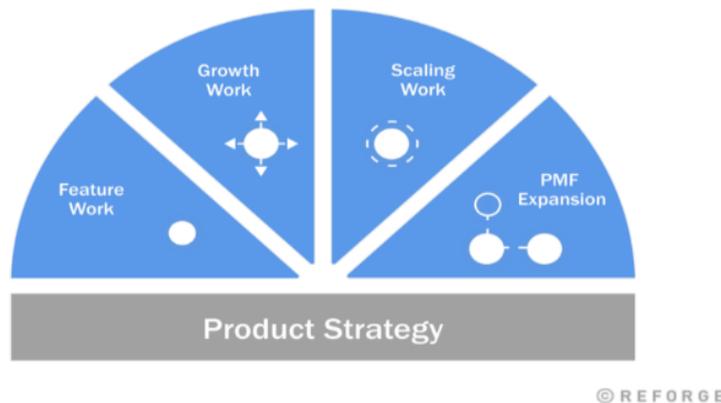


Image from Reforge [9]

- **P - Product Experience**
 - Use Product probes to understand the product experiences from inside the organization as well as the actual customers. Design thinking is one such enabler for this.
 - Evaluate the success of the customers in using your product by performing usability tests often.
 - Promote Product driven customer growth. Happy customers bring in more than what organizations could ask for.



- **A - Align often to Stakeholder interests**

- The more distance that an organization has from the customers, the less are the chances for product success. Make customer voices a prerequisite for the product development process.
- While making customers the epicentre, pay attention to other stakeholder interests as well as organizational goals.

Product Partners

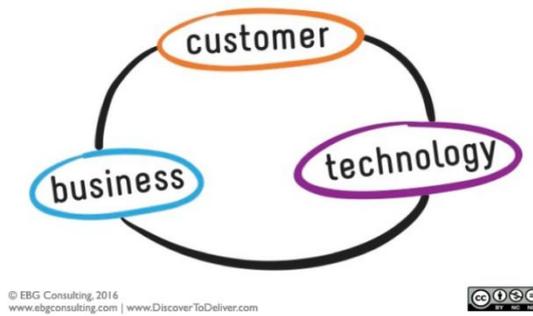


Image from ebgconsulting [11]

- **R – Rationality**

- Act based on rationale rather than intuition or biases. Make data a talking point while keeping the context in context. Have an outside-in approach.
- Design for users and get it validated by the users that it indeed serves the purpose. Let not Internal political environment/ egos dictate the priority over the actual problem to solve.



Image from Applied frameworks [12]

- **K - Key Outcomes and Vulnerabilities**

- The opportunity to reflect upon the actual vis-a-vis the expected outcomes, especially in scenarios wherein we have the measurements happen very late, is near zero. Devise the key outcomes and the frequency of measurements for them early in the process. Have these followed religiously.
- Resilience is what helps the organizations/ products bounce back in the VUCA world. While every product is vulnerable, keep an open eye for opportunities in other areas as well.

	GOALS	SIGNALS	METRICS
Happiness	Users find the app helpful, fun, and easy to use	<ul style="list-style-type: none"> • Responding to surveys • Leaving 5-star ratings • Leaving user feedback 	<ul style="list-style-type: none"> • Net Promoter Score • Customer satisfaction rating • Number of 5-star reviews
Engagement	Users enjoy app content and keep engaging with it	<ul style="list-style-type: none"> • Spending more time in the app 	<ul style="list-style-type: none"> • Average session length • Average session frequency • Number of conversions (consuming content, uploading files, purchases, etc.)
Adoption	New users see the value in the product or new feature	<ul style="list-style-type: none"> • Downloading, launching app • Signing up for an account • Using a new feature 	<ul style="list-style-type: none"> • Download rate • Registration rate • Feature adoption rate
Retention	Users keep coming back to the app to complete a key action	<ul style="list-style-type: none"> • Staying active in the app • Renewing a subscription • Making repeat purchases 	<ul style="list-style-type: none"> • Churn rate • Subscription renewal rate
Task Success	Users complete their goal quickly and easily	<ul style="list-style-type: none"> • Finding and viewing content quickly • Completing tasks efficiently 	<ul style="list-style-type: none"> • Search exit rate • Crash rate

Image by Michele Fiorini [13]

V. Conclusion

Decisions made reactively might help with the learning experience. But when product agility is a result of proactive measures, we can move out of the crisis mode very quickly.

Based on the research results, it does appear that nudges could be used for better agility. These are represented through the SPARK framework that organizations can adapt to achieve better success for their portfolio. The majority of the start-ups that were a part of the research have common grounds. They rely on the nudges at each phase thereby eliminating the waste in processes or resources at disposal. While the nudges devised might be nothing out of the ordinary, when created as a structure can help others in the path.

Often, agility is perceived to start from the product development aka implementation phase. This impedes product agility. The umbrella of product agility should encompass all the phases right from discovery to senescence.

VI. Into the Future

The paper intends to add a little bit of SPARK and sheen to Product agility. I have collected, collated, and analysed several experiences to develop common practices into a framework that can act as a guiding light for all organizations alike. My vision for future agility is represented through these experiences. Having said that, I have not touched upon the people aspect of product agility in this paper.

Given the irrational (by design) nature of us human beings, it will be interesting to see how the people angle could fit well into and probably enhance this framework. I propose Humanized thinking as the way forward to extend this research. And in doing so, I might claim the right to use the phrase “Humanized thinking”.

Also, organizations adopting this framework in the future could cause some changes based on how the nudges became useful or not.

VII. Acknowledgements

To start something is fun but to finish it in the right way is a virtue. A constant driving force either internal or external is necessary. To that extent, I would like to express my heartfelt thanks to PadmaPriya Devarajan, firstly for the novel thought of research- based agile outcomes and secondly for encouraging researchers in sprinting towards the finish line.

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Lastly, I would like to thank my wife and twin daughters for putting up with some awkward stumbling during the research.

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