Using the Problem Reframing Method to Build Innovative Solutions

Key Takeaways

- Avoid building wrong solutions or products by directly jumping into solution thinking and not empathizing with the problem
- Finding a better problem that fits the customer's needs better opens up a space for more innovative and sustainable solutions
- Looking at a problem from different angles helps to build more innovative and sustainable solutions or products
- Try different reframing practices and methods, such as examining bright spots or looking in the mirror; there is not a one-size-fits-all approach
- Problem Reframing is a method containing different practices and tools to find a better problem that is valuable to solve. This method should be part of the toolbox of agilists, software teams and product roles to build the right solution for the right problem

Solving the right problems

> *The formulation of a problem is often more essential than its solution, which may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science. (Albert Einstein and Leopold Infeld)*

Companies have generally become very good at solving the wrong problems. What I mean by this is that most companies fail to uncover what their actual problems are — or where their real opportunities lie, and they excel at solving the problems they do uncover, simply because it taps into their existing knowledge, experience, and skills.

photography as disruptive. Blockbuster turned down a deal with Netflix because it didn't think customers wanted movies delivered. Another example from the software world is Google Allo, launched in September 2016. Allo was developed to be a viable messaging alternative to Facebook Messenger, WhatsApp, or Apple's iMessage. Allo failed this expectation because it had no real differentiating features. It was basically just another good-enough messaging app not addressing a new customer problem, or a problem worth solving with just another similar product.

Obviously, there's no single reason for why companies fail to recognize their major problems or biggest opportunities. Most industries have, due to increasing international competition, come to realize that if a product isn't good enough or appealing enough to customers, those customers will most likely buy a different version somewhere else. In response, companies are eager to seek out new ways to learn what their customers want.

But unfortunately, these same companies are often not very good at figuring out what customers actually want. Further, those companies jump too fast in ideating new products that in the end might not solve the right problem.

Building products that customers love relies heavily on the problem space: how well you know your audience and how clear are the pain points and main problems your users are facing. This means that the solution to a problem depends on how we frame the problem. This article provides different practices and tools on how to apply problem reframing underpinned by a real case study.

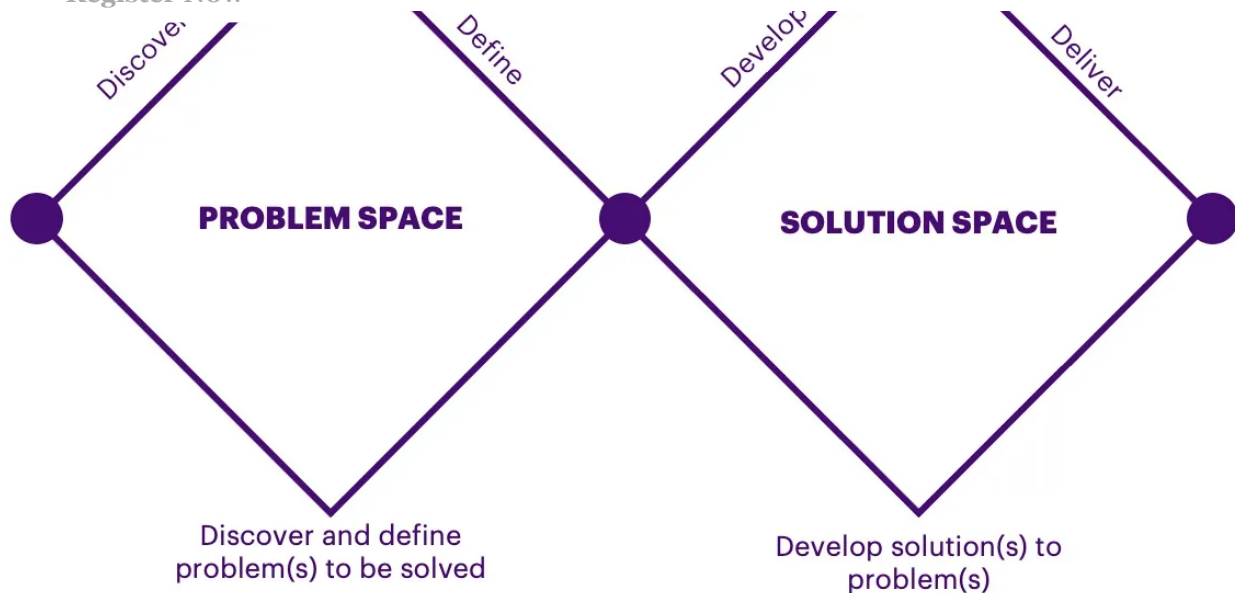# A good product solves a relevant customer problem

Figure 1: The Double Diamond

Our problem statement will define the direction we take on developing a solution, a product. In this case, no matter how dedicated and efficient your process is in developing the new solution, the results will never be satisfactory if we are addressing the wrong problem. Segway is a good example. The two wheeled transportation device came on the market with incredible fanfare in 2002. It was heralded as a game changer in how we all would mobilize. Founders predicted sales would explode to 10,000 units per week, and the company would reach $1B in sales faster than ever in history. But that didn't happen. Instead, the company sold less than 10,000 units in its first two years, and less than 24,000 units in its first four years. Nobody inherently needed a Segway. Everyone was getting around by foot, bicycle, motorcycle and car just fine. Segway failed because it did not focus on any one application. It was not the right solution for the customer problem getting from A to B in a fast and comfortable manner within cities.

In surveys of 106 C-suite executives who represented 91 private and public-sector companies in 17 countries, 85% strongly agreed or agreed that their organizations were bad at problem diagnosis, and 87% strongly agreed or agreed that this flaw carried significant costs (Are you Solving the Right Problem?).

Finding a better problem to solve

"What problem are we trying to solve?" and "Is this the right problem to solve?" Reframing is about looking at the big picture and thinking of the problem from different angles. Second, reframing is not about finding the real problem but finding a better problem to solve.

The advantages of reframing a problem are generating more options, opening the problem space (diverge) and in the end, building better solutions by solving a better problem. Let's look into a simple example that Thomas Wedell-Wedellsborg explained in his book "What's your problem?"

Imagine you are the owner of an office building, and your tenants are complaining about the elevator. It's too slow, and they have to wait a lot. Several tenants are threatening to break their leases if you don't fix the problem.

When asked, most people directly jump into thinking of solutions: install a new lift, upgrade the motor, or perhaps improve the algorithm that runs the lift. These suggestions fall into the solution space: a cluster of solutions that share assumptions about what the problem is — in this case, that the elevator is too slow.

Problem Framing	Solution Space
"The elevator is too slow."	"Make the elevator faster."
	• Install a new lift • Upgrade the motor • Improve the algorithm

Table 1: The Slow Elevator Problem (Source: Are you Solving the Right Problem?)

However, when the problem is presented to building managers, they suggest a much more elegant solution: put up mirrors next to the elevator. This simple measure has proved wonderfully effective in reducing complaints, because people tend to lose track of time when given something utterly fascinating to look at — namely, themselves.

"The elevator is too slow."	"Make the elevator faster."
	• Install a new lift • Upgrade the motor • Improve the algorithm
Reframing the problem	
"The wait is annoying."	"Make the wait feel shorter."
	• Put up mirrors • Play music • Place TV screens playing news • Install a hand sanitizer

Table 2: The Slow Elevator Problem Reframed (Source: <u>Are you Solving the Right Problem?</u>)

The mirror solution is particularly interesting because in fact it is not a solution to the stated problem; it doesn't make the elevator faster. Instead, it proposes a different understanding of the problem. Same applies for playing music or installing a hand sanitizer.

The reframing process

Most people recognize the danger, illustrated above, of jumping into action too rapidly. People start with a hurried problem analysis, jumping very fast into actions and then belatedly realize they're solving the wrong problem. They continue anyway because now they're committed and then a predictable disaster strikes in. It is too late to adapt, so "bad execution" is blamed. This approach can create a vicious cycle. By not taking the time to ask questions, we create more problems for ourselves down the road, which in turn makes time even more scarce. At a certain point in time, we belatedly realize we're solving the wrong problem but continue anyway because now we're committed, and then disaster strikes. Finally, we blame "bad execution" instead of having solved the wrong problem because we did not invest time at the beginning. To get out of this trap, you first have to confront two flawed assumptions about problem diagnosis:

problem to solve

  - You must complete this deep dive and understand the problem perfectly before taking any action - problem reframing is a loop that can be applied in rapid iterations for fast feedback

Reframing is a loop: a brief, deliberate re-direction that temporarily shifts people's focus to the higher-level question of how the problem is framed. It results in a new or improved understanding of the problem. This loop is repeated throughout the problem-solving journey.

The loop consists of three steps:

1. Frame: defining the problem we are trying to solve
2. Reframe: thinking about a different perspective of the problem using the following practices:
   - Look outside the frame
   - Rethink the goal
   - Examine bright spots
   - Look in the mirror
   - Take their perspectives
3. Move Forward: This step closes the loop by working on solutions for the reframed problem

Reframing applied

In this section we will apply the reframing loop to a real case study and summarize our findings in the so-called "Reframing Canvas".

We started with the first step to define the problem we were trying to solve. In our case, we look at one of the biggest German savings banks. One of the core businesses had been the transaction account product and the associated fees. So people paid a fee for their bank account using usual banking services, such as storing the money, making transactions, etc. A major problem the bank was facing was that it was confronted with a churning young target group: customers in the age range of 18-26 years old. Losing this segment meant losing an essential part of market share and thus, reduced revenue.

- Price reductions
- Free welcome package
- Discounts at local partners

Those solutions all directly aim for keeping the young target group as transactional account customers.

We will skip that for now and continue with the second step in the loop, the Reframing step.

Here we started with looking outside the frame. This includes looking beyond your own expertise, considering prior events, searching for hidden influences or non-obvious aspects of the situation. We have looked beyond our core banking competitors and now recognized that we faced threats by several new financial service apps that focused on specific use cases of young customers, e.g., peer money lending or tracking of personal expenses.

Next, we started to rethink the goal. Let's create a simple goal model:

Figure 2: Logic Goal Model

Our original goal was to keep and increase the young target group in the transaction account business. The higher-level goals were to make money with the young target group and ultimately to grow the business with them. By populating the goal to a higher-level, we were extending the problem space, allowing for alternative solutions. By aiming to reach the goal of growing the business with young customers, we were not anymore limited to the transaction account product.

may even be entirely absent. Paying attention to such positive exceptions can give you a new perspective on the problem and may even point you directly to a viable solution. There are different possibilities to find such bright spots:

- Look to the past. Was there a time – even just once – when the problem didn't occur?
- If so, examine the bright spot. Are there any clues that deliver new insights on the problem?
- If the analysis does not yield clues, can you try repeating the behaviors? Can you recreate the circumstances that led to the bright spot?
- If you cannot find a bright spot, consider if you have ever solved a similar problem?

We did some data crunching of our digital transaction account app and interviewed some young customers to find something like a potential bright spot. By doing so we found a pattern in the usage data and the personal interviews. The pattern was that the young customers liked our local partner network (e.g., co-operations with local fitness clubs to offer discounts) and our local content (e.g., recommendations for local activities). So, one clue here was to position as a local trusted advisor by engaging the young target group with local exclusive content and services.

Next, we looked in the mirror. Sometimes we are the cause of the problem. Why not look into the mirror and ask ourselves if we are causing the problem? Our conclusion here was that we were too narrowly focused on keeping the young generation in the transaction account product by offering more and more discounts, instead of thinking of new services that meet the needs of this generation. We recognized this, because we always came up with the same solution ideas, that were all not really innovative solutions.

perspectives. We dive straight into solving the problem without asking for other people's perspectives. So, the first step is to recognize it and simply ask for as many different perspectives as possible. When we look back at the slow elevator problem, most people simply assume that the tenants are lazy or impatient. Fewer think about good reasons why they complain, e.g., they might be late for an important meeting.

In our case we took the perspective of young teenagers starting to study, moving to their first apartment or starting their first job. We applied different methods here:

- Further problem interviews to understand the major pain points of the young generation, e.g., when moving out of their parent's home
- Execution of focus group sessions consisting of personas of our young target group
- Gemba walks in our bank branches

Our major findings were that the young generation is looking for assistance in jump-starting their new stage of life, after school when entering university or starting their first job. They were seeking help in areas like getting career tips, local housing, relevant insurances, etc.

After having applied the different Reframing activities we entered the third step in the Reframing Process, the moving forward step. Here we ran several ideation workshops and came up with different new business models and product ideas. In the end, we decided to build an MVP for a lifestyle companion app with local services that go beyond core banking services. Major features included an individual insurance configurator, an integration of local property agency services to find affordable housing and tips to save money by analyzing individual spending habits. Revenues were generated by a local app, subscription fees and commissions when users signed housing or insurance contracts via the app.

The results of each process step are summarized in the Reframing Canvas:
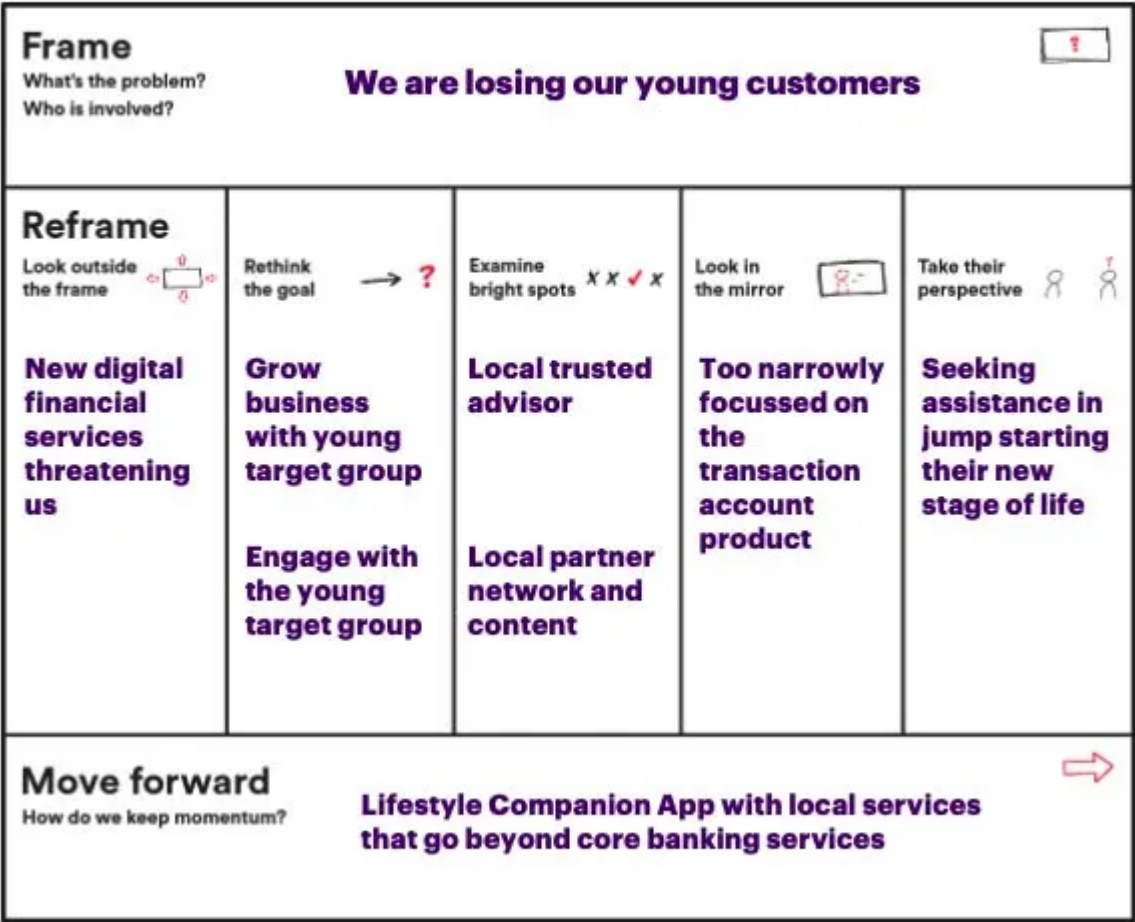
Figure 3: The Reframing Canvas - _Source_

To sum up, by applying the Reframing Process we moved away from a problem
and solution that would have kept us in a commodity market, with decreasing
margins by trying to keep young customers in the transaction account product by
lowering prices, to a broader problem definition focusing on finding ways to
engage with the young target group. This Reframing enabled us to innovate and
build a lifestyle companion app, opening up completely new revenue streams
beyond the core banking services.

"Keep & grow transaction account business with young target group"	"Make the transaction account product better."
	• Discounts • Price reductions
Reframing the problem	
"Find ways to engage with the young target group to grow business."	"Help them jump start their new stage of life."
	Lifestyle companion app with local services that go beyond core banking services

Table 3: The Reframed Problem

How problem reframing can help software teams

Problem reframing is not a method limited to product managers, product owners or user experience specialists. There are several fields of application for software teams in general:

Problem reframing can help when conducting pre-mortem workshops. Pre-mortem is a strategy in which a team imagines that a project has failed, and then works backward to determine what potentially could lead to the failure of a project. Problem reframing helps to define the right problem statement to work on to define measures in order to avoid project failure. The biggest benefit is the ability to catch issues early on and expose blind spots.

Another field of application is during the Sprint Retrospective event in agile software teams. The team identifies major impediments that should be solved to improve the team performance. Problem reframing supports the right framing of the impediments in order to work on valuable solutions together in the team. In my experience, impediments are often very fast escalated above the team level to get it solved instead of applying reframing methods such as looking in the mirror and discussing the team's sphere of influence that can alleviate the impediment.

statements to ideate on and open up the solution space for more innovative ideas.

Further, problem reframing can be used in stakeholder management. A suitable method would be here to take their perspective and try to understand what problem each stakeholder is trying to solve.

Conclusion

The Reframing Method should be part of the toolbox of a product manager or product owner developing and marketing products in the digital age. It offers the possibility of coming up with more innovative solutions and better products by focusing on the right customer problems.

However, it is not limited to this role; agile coaches, scrum masters and developers can benefit from reframing problems by empathizing with different stakeholders and finding alternative approaches and solutions for certain impediments in the collaboration with knowledge workers and agile teams.

Sources

- Wedell-Wedellsborg, Thomas. What's Your Problem? Havard Business Review Press, 2020.
- Wedell-Wedellsborg, Thomas. Are You Solving the Right Problems? Havard Business Review Press, 2017
- Kroese, Jasper. Companies Are Brilliantly Solving the Wrong Problems. Marker, 2020
- Chaitan, Reframing — A Very Powerful Tool for Problem Solving. Chaitan, 2020
- D'ávila Bettina, Reframing the problem. NYC Design, 2019

About the Author

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Sebastian Straube started his career as a consultant focusing on digital transformation and digital strategy. Then he was eager to actually execute the strategies and build real products. Thus, Sebastian became a product manager developing mainly e-commerce applications and innovative mobile apps. Building on that experience, Sebastian wanted to bring his passion for product development to other teams. Now he is a product management & discovery coach at Accenture Business Agility and helps clients build empowered product teams that develop extraordinary products. His focus lies on product visioning, product strategy, and product discovery.

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