



A DESIGN STRATEGY FOR STAKEHOLDERS

IN FUZZY FRONT-END OF SPORTS INNOVATION

AN OPPORTUNITY FOR ADIDAS ADIZERO FOOTWEAR INNOVATION

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PREFACE

GOOD DESIGN PROJECTS FLOURISH
WITH THE SUPPORTS FROM RIGHT STAKEHOLDERS

This graduation project combines my footwear industry experience with strategic design knowledge from TU Delft. It aims to explore a more interactive and user-centric approach to stakeholder management, departing from traditional business strategies that focus primarily on timelines and costs.

This project owes its success to the invaluable support of numerous individuals. First and foremost, my school supervisor, Lianne, your unwavering support from start to finish made this international graduation project possible. My school mentor Arjen, your guidance was greatly appreciated.

On the Adidas side, I extend my heartfelt thanks to all the team members under Adizero Footwear, especially Val and Robbie for providing both the graduation project opportunity and their steadfast support during my six months in Germany. I am especially grateful to Scott for his consistent and valuable project feedback weekly. Coralie and Ellis, your positivity and smiles infused my project with energy. And I can't forget the extraordinary Adidas MakerLab team, including Jordi, Andrea, and Adrian,

whose collaborative spirit fueled my creative ideas and contributed to the success of the thesis workshops. I also want to express my gratitude to everyone who took the time out of their busy schedules to engage in coffee chats or formal interviews as part of my thesis exploration process. Every word you shared has enriched the value of my thesis.

From a personal perspective, embarking on a project abroad was a formidable individual challenge. Many friends helped out with my moving and informed me school's notification related to graduation. I would like to highlight my thanks to Lia and Chia for several online discussions and substantial mental support, which proved to be invaluable and memorable. To my boyfriend, Aaron, your warm companionship and insightful opinions were truly priceless. Lastly, I owe immeasurable gratitude to my mom for her enduring and unconditional support; this abroad journey for study and graduation project would not have been possible without you.

PROLOGUE

"No one can whistle a symphony.
It takes a whole orchestra to play it."
– H.E. Luccock

Main Characters in this report



TARGET
CONSUMER



ADIZERO
MARKETER



ADIZERO
DESIGNER



ADIZERO
DEVELOPER



ARTIFICIAL
INTELLIGENCE

This report contains illustrations of these characters engaging in various activities, providing connections for each FFE process, and offering intriguing insights between each stakeholders.

In Fuzzy Front-End (FFE) innovation, managing stakeholders is like being the conductor of a musical ensemble, aiming to create harmonious music performance for audiences. Same for Adidas, to create great shoes for consumers. Here's a simplified guide to understanding this report:

Getting to Know the Team

First, we need to understand who is in the context. This report talks about five main players in Adidas Adizero footwear: the consumer, the marketer, the designer, the developer, and AI. In Chapter 2, the author interviewed employees at Adidas to learn more about their roles. Then the author found out the main challenge in this context - Engaging target consumers in the early stages of product development, which also means FFE. Therefore, in Chapter 3, the author tries to find opportunities to solve this challenge. Interestingly, Chapter 3 shows that participatory design tools, machine learning and AI can help people work better together and connect with stakeholders using

technology.

Weaving the Narrative

Using what we learned in Chapters 2 and 3, Chapter 4 brings all the roles together. Here, we have more formal interviews using creative booklets and journey maps with the team and target consumers. The interview content turned into the materials for coherent stakeholders in the Chapter 5 co-creation workshop.

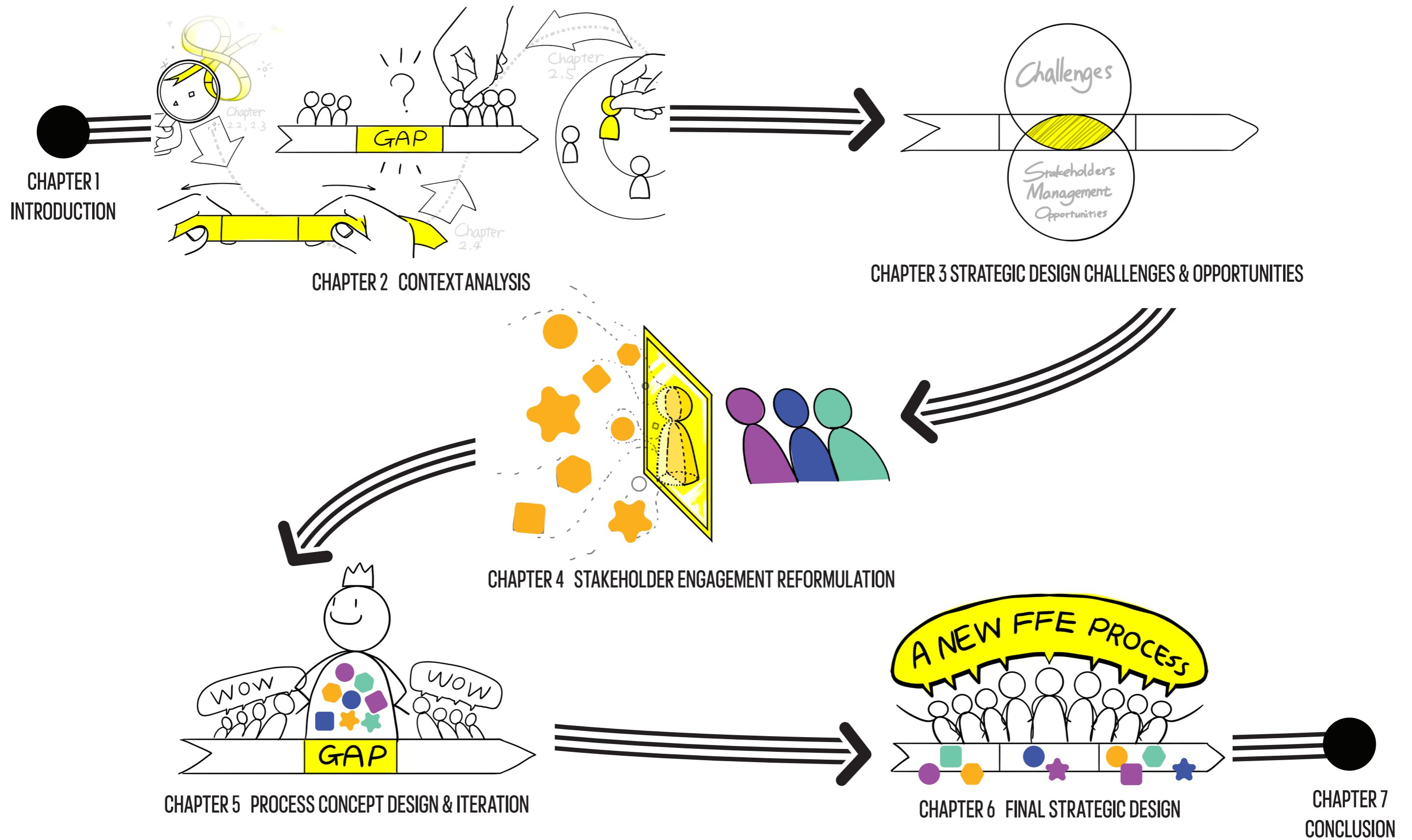
Practicing Together

Before the final show, we need to practice and get our strategies straight. In Chapter 4.2.3, every stakeholder tried to come up with a new process for FFE. It helps us in the Chapter 5 co-creation workshop to shape a new strategy concept.

Final Presentation

Finally, it's showtime! All our finalized plans and strategies are laid out for you in Chapter 6. **Welcome to the symphony of stakeholder management in Adizero FFE innovation.**

I hope you enjoy it!



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Executive Summary

1 INTRODUCTION

Adidas, aiming to enhance brand credibility and user experience, is revamping its 22-month product development process. A new “pre-development” stage is introduced, focusing on agile and user-centric design methods before entering the marketing phase. This stage emphasizes functional prototypes and user-centric visions, using performance data from athletes to inform design decisions. This project investigates design strategies and stakeholder communication for the fuzzy front-end (FFE) stage of Adidas Adizero Footwear, exploring opportunities in stakeholder management and tailoring design approaches to Adidas's context, thus aiming to redefine and optimize the innovation process for elevated user experience.

2 CONTEXT ANALYSIS

The author explores various facets of Adidas, beginning with investigative activities such as daily work observations and informal interviews with internal stakeholders. Adidas' history, organizational structure, and brand categorization are explained before diving into the specific

Adizero context. Subsequently, the Adizero franchise is highlighted, emphasizing its performance-oriented identity. The following section traces the history of Adizero, from its inception through groundbreaking moments to its key innovations. Finally, the Adizero front-end innovation model is introduced, with a focus on agile ideation and the critical Concept Review 0 phase. The author then unwraps the complex CR0 process model into a linear format for detailed analysis, aligning the timeline and stakeholders with the results of the stakeholder analysis to identify challenges in this specif context.

3 STRATEGIC DESIGN CHALLENGES & OPPORTUNITIES

This chapter examines the general challenges encountered in the fuzzy front-end of sports innovation, from the perspectives of target consumers and internal stakeholders. It underscores issues like the neglect of individual runner needs, the underestimation of consumers' potential for innovation, and the complexities in the early stages of development. Focusing on the challenges present in sports innovation, the subsequent

section conducts a specific literature review to identify opportunities to address these challenges. Well-balanced stakeholder engagement, participatory design methods, and emerging data-enabled engagement approaches are pinpointed as three opportunities, guiding the direction for subsequent research exploration.

4 STAKEHOLDER ENGAGEMENT REFORMULATION

Before developing a new stakeholder engagement strategy, it's essential to reconsider how stakeholders recognize, understand, and interact with one another. This chapter introduces an innovative method allowing stakeholders to understand each other dynamically, moving away from the traditional approach where only a project manager defines stakeholder management.

(1) Identify - the author facilitates a unique interview approach using a generative booklet and a footwear tester journey map to collect insights from stakeholders on FFE innovation activities spanning from the past to the future.

(2) Understand - a distinctive stakeholder analysis canvas is applied by the author to scrutinize the interview content and assess the significance of potential innovation activities for the future Adizero Footwear FFE.

(3) Communicate - To conclude the potential solutions for the challenges identified in Chapters 2 and 3, and additionally, to observe how stakeholders utilize the guidance tools developed by the author, a pilot testing session is conducted. This session aims to observe the interaction and co-creation among stakeholders using creative guidance tools to address a key challenge identified in earlier chapters and formal interviews.

5 PROCESS CONCEPT DESIGN & ITERATION

This chapter is organized into three main sections: (1) The development of a new guidance tool, named 'Superpower Element Sticker,' designed to encourage co-creation within the process. (2) A co-creation workshop that concentrates on developing a new engagement strategy. (3) The formulation and two subsequent refinements of a

new process concept.

To conclude this chapter, feedback from the Adizero footwear triad team and the author's self-reflections between current and potential FFE process aid in shaping the final design.

6 FINAL STRATEGIC DESIGN

In this chapter, a novel conceptual design framework has been delineated, aiming to facilitate multi-stakeholder co-creation and process implementation in the development of Adizero Footwear, as evidenced in Figures 6.2 to 6.9. This design involves innovative data tunnels enabling varied stakeholders like consumers, marketers, and developers to engage actively and offer insights. Emphasizing clarity and data visualization, it allows stakeholders to contribute to and refine the design effectively, spanning different seasons and stages of footwear creation. However, its implementation poses significant challenges, demanding meticulous navigation through technological constraints and adherence to Adidas's established methodologies. This framework is innovative but requires strategic execution to mitigate potential feasibility issues and maximize its benefits in enhancing the footwear design process.

7 CONCLUSION

This chapter synthesizes discussions on the study's contributions to both the academic field and the company. It also outlines the limitations encountered during interviews and in applying the conceptual framework in different contexts. Furthermore, the author emphasizes the need to monitor advancements in technology for stakeholder engagement, focusing particularly on the advantages of processing data and addressing the challenges posed by confidentiality concerns.

1 INTRODUCTION

- 1.1 Project Background
- 1.2 Project Objective
- 1.3 Research Questions
- 1.4 Project Approach

Brand Goal -

Adidas goal is to elevate the consumer experience by offering personalized offerings in digital and physical spaces.

Context Challenge -

The traditional 22-months new product development process at Adidas is no longer suitable for this rapidly changing world.

Future Opportunity -

create a new front-end product development stage to employ agile and systematic user-centric design methods with multiple stakeholders.

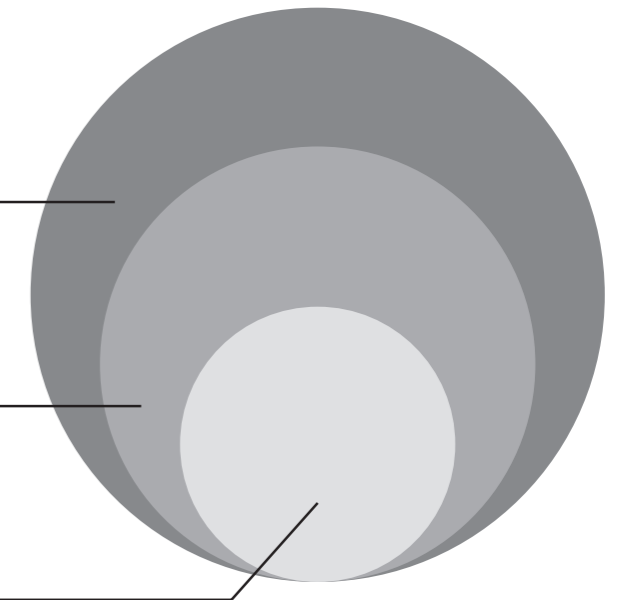


Fig 1.1 Project background overview

1.1 Project Background

Sport is Adidas's past, present, and future.

Context - In order to grow the brand, Adidas proposed "Own the Game" - the company growth and investment strategy which focuses on increasing the credibility of the Adidas brand, elevating the experience for consumers, and pushing the boundaries in sustainability. (Adidas, 2022) Regarding brand credibility, Adidas will sharpen its market position in Sports and Lifestyle through a clear brand architecture. Considering 'elevating the consumer experience', consumers expect to receive a brand and shopping experience tailored to their preferences, with personalised offerings in both digital and physical spaces. Regarding sustainability- Adidas will once again significantly expand its commitment to sustainability and move to a comprehensive consumer-facing program with a sustainable offering at scale.

Challenge - In light of the ongoing collective computing and digital transformation, rapid shifts in consumer behaviour, and the pressing challenges of climate change and environmental crises are expected. The conventional 22-months new product development process for each season in Adidas is no longer suitable for the rapidly evolving world we live in.

Opportunity - Therefore, Adidas needs a new fuzzy front-end product development stage to precisely frame problems and find the right agile and systematic user-centric design methods to accelerate and reach the company's strategic goals.

KEY WORD

Fuzzy front-end (FFE)

The fuzzy front end is the early stages of product development, where the problem is not well-defined and there is a lot of uncertainty. It is a critical stage, as the decisions made here will have a major impact on the success of the product. The fuzzy front end is often characterised by brainstorming, ideation, and concept development. In the context of Adidas, the fuzzy front-end is the stage where the company explores new ideas and concepts for new products. This is a time when the company is not tied down by any specific requirements or constraints, and can freely experiment with new ideas. (Koen, 2002) The fuzzy front-end is a critical part of Adidas’s new product development process, as it is where the company comes up with the innovative ideas that drive its success.

22-months new product development(NPD) process in Adidas

During the Adizero new product development(NPD) process, it is 22-months long and includes three main phases of this gating process. (1) Concept review 0(CR0): The gate to confirm the main footwear structure. (2) Concept review 1(CR1): The gate to confirm the footwear details adjustment. (3) Concept review 2(CR2): The gate to confirm the colour and material of the footwear. Within each circle phase, it is crucial to highlight that CR0 assumes a pivotal role in delineating the

novel structural framework for a new footwear design. As such, CR0 emerges as the primary phase that aligns with the characteristics and objectives associated with the stage of the fuzzy front-end, wherein the ideation and conceptualization processes take centre stage in the innovation journey.The Adizero new product development (NPD) process is a 22-months process with three main phases: Concept review 0 (CR0): This phase confirms the main footwear structure. Concept review 1 (CR1): This phase confirms the footwear details adjustment. Concept review 2 (CR2): This phase confirms the colour and material of the footwear. Within each phase, it is important to note that CR0 plays a pivotal role in defining the novel structural framework for a new footwear design. As such, CR0 emerges as the primary phase that aligns with the characteristics and objectives associated with the fuzzy front-end, wherein the ideation and conceptualization processes take centre stage in the innovation journey.



Fig 1.2 Adizero footwear New Product Development(NPD) Process

1.2 Project objective

The development team at Adidas faces a multitude of communication challenges arising from a diverse range of internal and external stakeholders. To enhance agility in the front-end innovation process, the Adidas footwear running team embarked on restructuring the conventional 22-month waterfall approach, which typically commences with a marketing brief. This restructuring led to the introduction of a new stage known as the “pre-development (pre-dev)” stage, aimed at establishing a agile design process preceding the brief stage. The implementation of this novel stage has afforded Adidas a distinct advantage by instilling a user-centric mindset prior to engaging in the marketing phase. Instead of investing significant time in drafting comprehensive plans or project initiation documents, the pre-dev stage places emphasis on the design, development, and user testing teams focusing primarily on creating functional prototypes, gathering performance data from athletes, and presenting a user-centric vision of the future products to the marketing teams. This transformative change has facilitated the attainment of a performance data-driven and user-centric design objective for Adidas, resulting in increased brand credibility and an elevated running experience for users. Furthermore, the pre-dev stage has provided valuable user-centric qualitative and quantitative data for informing subsequent design processes. It has served as a catalyst for guiding subsequent design decisions and evaluating potential design solutions for Adidas’ elite running footwear. Nevertheless, it is important to note that the pre-dev stage currently lacks official recognition as an essential development

process within the Adidas running footwear development team. Consequently, the teams involved encounter additional challenges in managing the expectations and needs of internal and external stakeholders throughout this stage. The primary objective of this thesis is to propose a design thinking process for effective stakeholder management during the pre-dev stage, addressing the inherent challenges associated with this critical phase of the innovation process.

1.3 Research Questions

Main research question and sub-questions
The main research question is formulated as follows:

How might we use Design Strategies to our advantage (according to theory & practice) in this specific context?

Three main components arise that need further investigation to answer this question.

RQ1. Design strategy for fuzzy front-end innovation

RQ2. This specific context: includes a fuzzy front-end innovation process with various stakeholders

RQ3. Advantage - the opportunities that arise (according to theory & practice)

Design strategy for fuzzy front-end innovation

First of all, Design Strategies for FFE will be explored and defined.

Sub Question:

- 1. How to create a design thinking framework that illustrates how to identify, understand and communicate with the stakeholders via design strategic methods in the fuzzy front-end of the innovation process.

This specific context: includes a fuzzy front-end innovation process with various stakeholders

The next step is to understand the context of the 'Fuzzy front-end innovation process with various stakeholders.

Sub Questions:

- 1. What is the current development process followed within the team?
- 2. Target group: - who are the key stakeholders in this FFE innovation process?
- 3. What type of products are made, and what are the specific attributes?
- 4. What are the gaps, pain points, and challenges faced within the FFE development process related to getting to the right thing to build?

These questions will provide themes, needs, and insights into opportunities for Design Strategy to complement the current process, narrowing the scope of the project.

The opportunities that arise (according to theory & practice)

Thirdly, in the conclusion 'using to our advantage' part insights of both components come together to determine the main research question.

Sub-questions:

- 1. What are the key opportunity areas for stakeholder management in the Fuzzy front-end(FFE) process with Design Strategy?
- 2. How to tailor this to the specific context of Adidas Adizero Footwear ?
- 3. How to identify, understand and communicate with the stakeholders via design strategic methods in the pre-development of Adidas Adizero Footwear?
- 4. How to (re-)design the fuzzy front-end of the innovation process for the Adidas pre-development stage?

THESIS STRUCTURE	KEY REASEARCH ACTIVITIES	KEY RESULTS		
DISCOVER	Observation	Adizero Footwear front-end innovation process & timeline P.14-P.15	Adizero Footwear Stakeholder Map P.16	Adizero Footwear FFE process stakeholder engagement gaps and painpoints P.17
	Informal interview			
	Literature review			
DEFINE	Literature review	Challenges in Consumer Engagement within Sports Innovation's FFE P.20-P.21	Opportunity 1 A User-driven innovation for Stakeholder Engagement P.24	Opportunity 2 A Future Vision for data-enabled Stakeholder Engagement P.25
	Case collecting			
DEVELOP	Formal interview	Stakeholder Identification Tool for Internal stakeholder P.28-29	Stakeholder Understanding Stakeholder analysis canvas (for Now & Future) P.32	Stakeholder Communication Superpower element Sticker-Based Brainstorming P.45-P.46
	Pilot testing			
	Co-creation workshop			
DELIVER	Conceptal Framwork Design	Design thinking framework for stakeholder management P.54-P.55	New Engagement Strategy for Adizero Footwear FFE P.57-P.60	Data Flow for The New Engagement Strategy P.61-P64
	Process Design			
	Design evaluation			

Fig 1.3 Thesis structure

1.4 Project Approach

This thesis, structured in four parts, aims to analyze, redefine, and address challenges and opportunities in the Adidas Adizero Footwear FFE context, focusing on innovative design strategies and stakeholder communication.

The structure of this thesis can be divided into four parts:

- 1. Discover
Explore and analyse the context to establish a comprehensive understanding. Collect the gaps, pain points and challenges under the Adidas Adizero Footwear FFE context(answering RQ2)
- 2. Define
Rethink the challenges present in the Fuzzy Front-End (FFE) of sports footwear innovation and uncover the opportunities therein from a design strategy viewpoint. (Addressing RQ3.1 and RQ3.2)
- 3. Develop

- Integrate design approaches to form a conceptual framework to identify, understand and communicate with the stakeholders(answering RQ1)
- 4. Deliver
- Use the conceptual framework to tackle the defined challenges and opportunities with stakeholders, then re-design Adidas Adizero Footwear FFE process.(answering RQ3.3 and RQ3.4)

Figure 1.3 outlines the structure of the thesis, highlighting the key research activities and results, complete with page numbers, facilitating easy access to specific content to address research questions.

2 CONTEXT ANALYSIS

- 2.1 Activities for Understanding Context
- 2.2 Company Introduction
- 2.3 Adidas Adizero Footwear Context Analysis
- 2.4 Adizero Fuzzy Front-End Innovation Model
- 2.5 Adizero Footwear Stakeholder Relationship
- 2.6 Chapter Conclusion

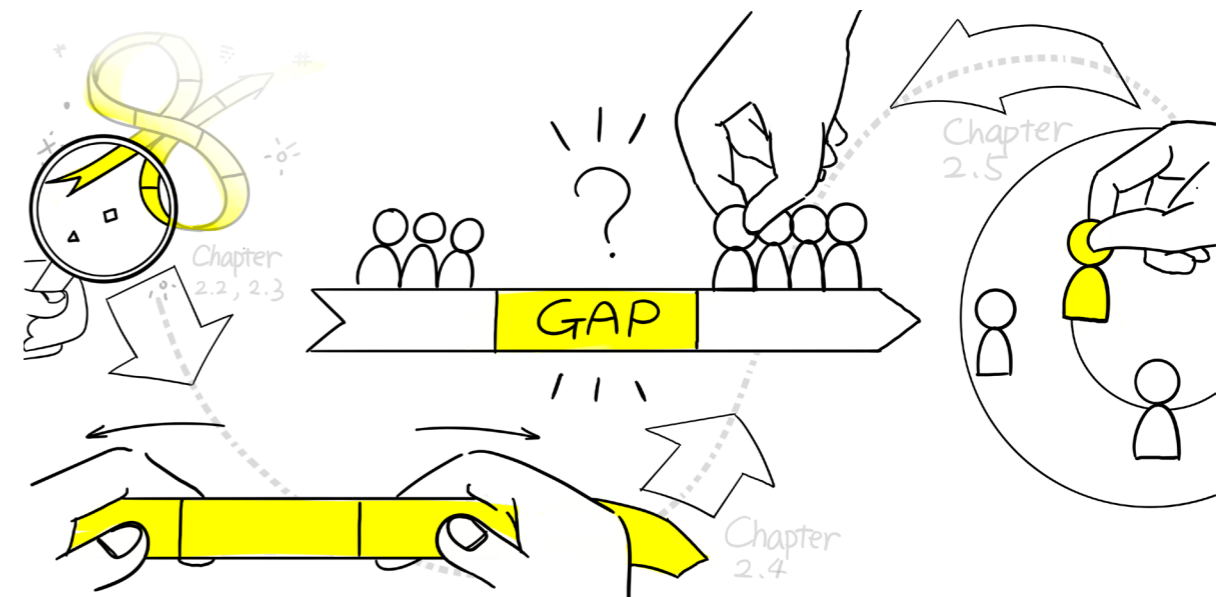


Fig 2.1 Context analysis Chapter Illustration

This chapter reports on my design research, which utilised my initial observations as a company intern, information from the company's official website, and 21 internal informal interviews(interview list in Appendix) to analyse the FFE context, with a particular focus on the Adizero footwear division.

Since most of the content in this section consists of analyses collected and compiled by the author through interviews and observations, the author's investigative activities during the six-month period from March to September 2023 are presented in Section 2.1. Immediately following this, sections 2.2 to 2.5 present the Adizero brand DNA and organisational structure of Adidas based on the results of these activities, followed by an overview of the franchise, the Adizero FFE model, and a stakeholder analysis in the context of the Adizero Franchise Scope.

2.1 Activities for understanding context

At Adidas, the process and innovation activities are evolving every season, so in order to acquire the latest context analysis, my personal observation and informal interviews are the main activities I conducted to get the latest context during the half year instead of

only referencing current company documents. The details of observation and interview approaches are as below.

Daily work Observation

The daily work observation focuses on two main activities at Adidas:

Work-Related Meetings:

I attend weekly meetings, seasonal brand kick-off meetings, and Seasonal Design Review meetings to understand how each stakeholder communicates.

Department Open Exhibitions:

At Adidas, the public valley area displays exhibitions on sustainability, sportswear, and basic patterns. These exhibitions, not officially scheduled on the annual calendar, spontaneously present the latest trends and innovative activities occurring at Adidas. By attending these internal exhibitions, I can construct a detailed stakeholder map, linking stakeholders during the Fuzzy Front End (FFE).

Informal interview

The semi-structure informal interviews are conducted to acquire three main context information. Interview guideline shows in Appendix Table 2.1 and the list of 21 internal stakeholders background information shows in Appendix Table 2.2]

Understand organisation structure, relationship with each stakeholder, and the innovation process at Adidas. Current engagement activities between target consumers and Adidas

The informal interview contents are used for context analysis, including the 2.2.2 organisation structure, 2.2.3 Adizero DNA, 2.4 Adizero front-end innovation Model, and 2.5 Adizero Footwear Stakeholder Relationship.

2.2 Company Introduction

Adidas has a long history and a bright future in the sports world. In the past, Adolf Dassler founded the business in his mother’s home, which is where it first began. The Gebrüder Dassler Schuhfabrik (also known as the “Dassler Brothers Shoe Factory”) was founded by him and his older brother Rudolf in 1924. Adidas has evolved into a top worldwide athletic brand. (Adidas AG, 2023)

2.2.1 Brand Logo

A distinctive symbol that represents Adidas is the three stripes, which have served as a marketing tool for the company’s clothing and shoe designs. But in detail, the Adidas identity can be further categorised into two primary domains: Sport and Culture. Products designed for performance purposes proudly bear the Performance (Sport domain) logo, for products that are born from sport and built for life bear the Sportswear (Sport domain) logo, while those catering to lifestyle preferences are grouped under the Originals (Culture domain) logo. (Adidas AG, 2022)



Fig 2.2 Adidas logos’ focus

2.2.2 Organisation Structure

Adidas has diverse business units catering to different sports purposes. Vertical BUs follow their own seasonal development schedule, while horizontal teams focus on advanced research, technology, and material exploration, unaffected by short seasons. When new technology is ready for trials, each BU receives tech information for the next season’s product development.

2.2.3 Adizero DNA

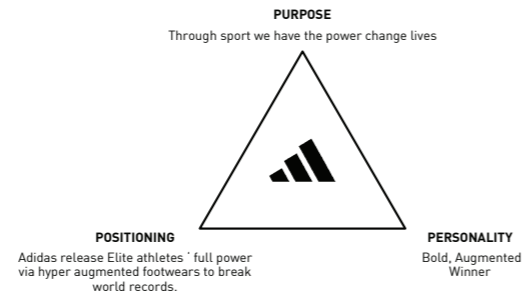


Fig 2.4 Adidas logos’ focus

For this research, the scope is focused on the performance identity of Adidas. Especially under the Adizero footwear franchise. In order to have a big picture about this franchise, this research base on internal interviews and 2022 Adidas annual report analysed the performance brand DNA as below.

- Purpose:** Through sport we have the power change lives (Adidas AG, 2023)
- Positioning:** Adidas release elite athletes’ full power via high performance footwears to break world records.
- Personality:** Bold, Augmented, Winner

2.3 Adidas Adizero Footwear Context Analysis

2.3.1 Adizero history

In 2004, Adidas aimed to redefine speed with a revolutionary shoe, enlisting Japan’s legendary shoe designer Mr. Toshiaki Omori. Meticulous consideration of materials, weight, and cushioning were keys. After years of development, Adizero was born. In 2008, Haile Gebrselassie, the Ethiopian runner, tested the prototypes, impressed by their responsiveness. The next day, wearing Adizeros, he shattered the Berlin Marathon world record by 29 seconds, achieving an incredible 2.03.59 finish time, marking his third consecutive victory. (Adidas AG, 2019)



Fig 2.5 The first Adizero prototype for the 2008 Marathon world record breaker Haile Gebrselassie (Adidas, 2019)

Since their splashy 2008 debut, Adizeros have collected over 150 victories in the world of elite racing. (Adidas AG, 2019)

2.3.2 Adizero key innovation



Fig 2.6 Adizero Pro key innovation - Energy Rod (Adidas, 2020)

In 2016, a revolutionary breakthrough in the sports industry occurred with the introduction of the “super shoe” which incorporates a running-specific fibre plate in the midsole. In order to make athletes win in the new era, in 2018, a dedicated team embarked on creating the Adizero adios Pro, collaborating closely with elite athletes to refine prototypes, challenge existing notions, and develop the fastest running shoe across three continents, transcending previous boundaries of performance.

To zoom in on the key innovation which has been applied on Adizero Adios Pro - EnergyRods. It comprises five carbon-infused rods meticulously tuned to replicate the structure of metatarsal bones in the foot. This innovative design maximises the footwear’s energy return and stiffness, to enable runners to sustain their speed over extended periods, maximising running economy, and minimising physical impact on the body.

2.4 Adizero front-end innovation Model

When we discuss how innovation happened at Adidas. We can not ignore their special new product development process. Researcher Lichtenthaler (2020) indicates that Adidas relies on the implementation of agile ideation during the initial stages of the new product development process to achieve innovation. By harnessing the advantages offered by sprints, minimal resource requirements, and immediate customer feedback, we are able to effectively drive our innovative endeavours. Subsequently, we proceed to develop numerous innovations through their well-established gating processes, which facilitate successful global marketing, manufacturing, and launch activities. However, it should be noted that the new product development model within Adidas is not distinctly visualised. Consequently, in order

to enhance the ease of contextual analysis in the subsequent sections, I conducted 21 informal interviews with internal professionals in marketing, development, design and related teams to gather pertinent information. Building upon the insights obtained from these interviews, I have constructed the Adidas Adizero footwear new product development model, as depicted in Figure 2.7. Unlike the Figure 1.2, this figure shows the stakeholders' collaborative relationship in NPD process. Within each circle phase, it is crucial to highlight that CR0 assumes a pivotal role in delineating the novel structural framework for a new footwear design. As such, CR0 emerges as the primary phase that aligns with the characteristics and objectives associated with the stage of the fuzzy front-end, wherein the ideation and conceptualization processes take centre stage in the innovation journey.

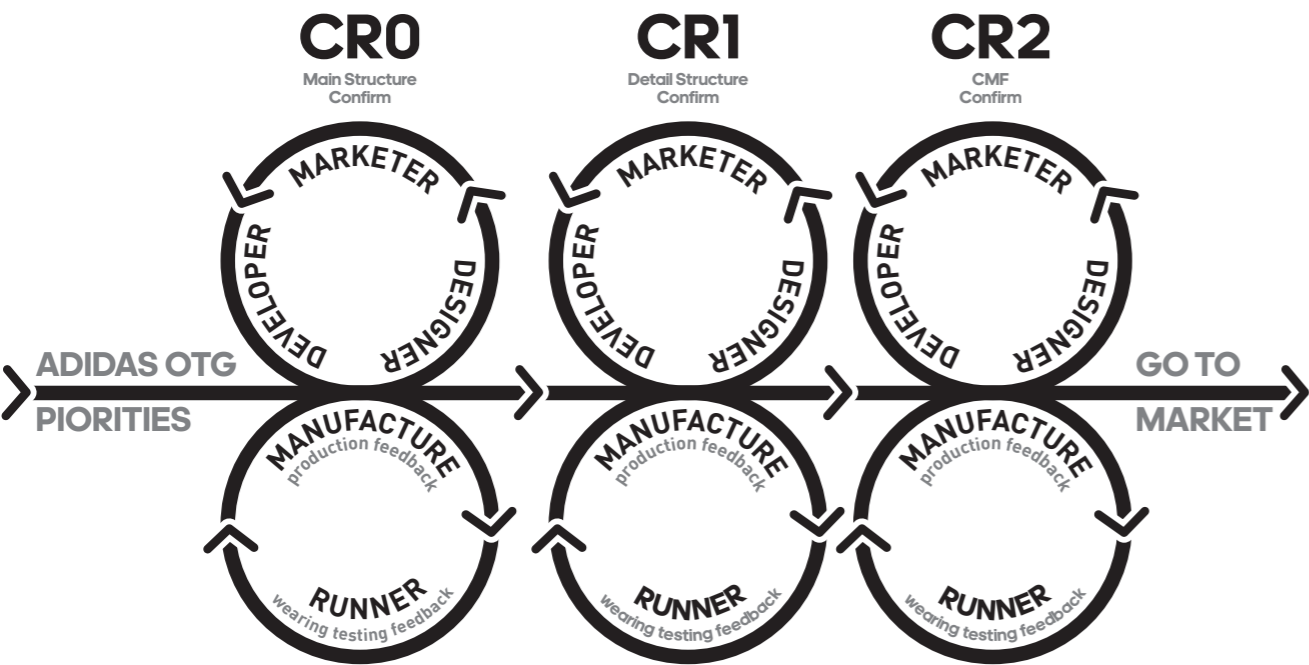


Fig 2.7 Adidas Adizero footwear new product development process

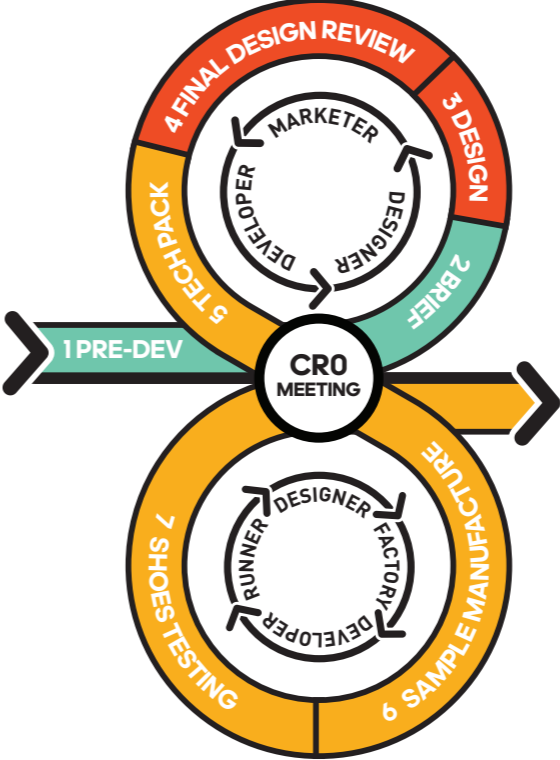


Fig 2.8 Adidas Running footwear front-end innovation process

The CR0 follows the process outlined in Figure 2.8, with each stage encompassing the following:

- (1) Pre-Development:** Prior to the marketing team's product direction briefing, the development team collaborates with the internal engineering unit for extensive research spanning 4 weeks or more. This research involves patents, technologies, materials, and competitor performance analysis, including 3D scanning and virtual FEA simulation. Functional prototypes are also produced for testing by elite athletes.
- (2) Brief:** Within four weeks, the marketing team incorporates pre-development findings, insights from focus group interviews, media insights, online consumer surveys, competitor market analysis, and market size analysis to forecast the footwear direction for the

- upcoming season.
- (3) Design:** Over a span of 4 weeks, the design team leverages the triad team brief discussion to initiate ideation, brainstorming, sketching of ideas, and conceptual prototyping. During this phase, the Adizero triad team engages closely, communicating intensively through footwear sketches, prototypes, or 3D models.
- (4) Final Design Review:** After 4 weeks of collaborative effort within the triad team, the design team presents the final design story and 2D renderings to all members of the running business unit. Feedback is solicited during this meeting, providing designers with the opportunity to refine their designs before submitting the final design tech pack to factories.
- (5) Tech Pack:** Collaboratively, designers and engineers employ the 2D design to create tech packages. These are delivered to manufacturing partners for concept validation and the creation of initial pullover shoe samples.
- (6) Manufacture:** Factory partners dedicate 10 weeks to confirm the concept for sample production. During this period, the Adizero triad team travels to the factory for collaborative work on the initial pullover samples.
- (7) Shoes Testing:** Upon receiving the first pullover samples from factories, the product testing team undertakes biomechanical testing, footwear mechanical testing, fitting testing, and long-term wear testing. All testing stages include assessments of competitor shoe models.
- (8) Concept Review CR0 Meeting:** This meeting serves as an exhibition showcasing all shoe samples, testing results, and triad team feedback. Differing from a conventional meeting, the concept review session functions

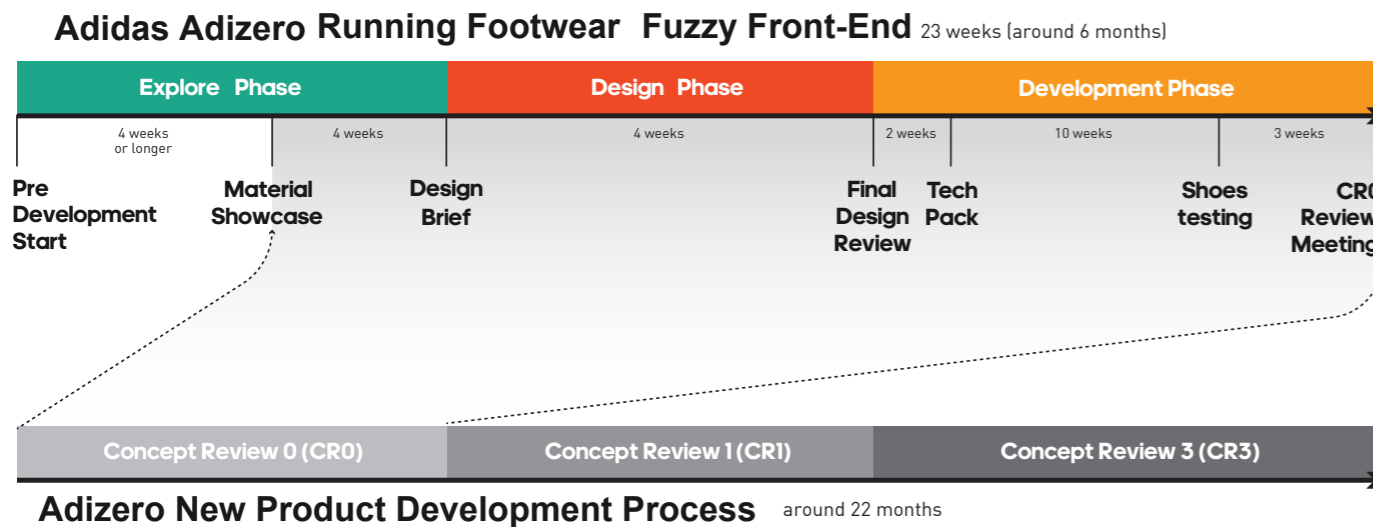


Fig 2.9 Adizero CR0 Phase fuzzy front-end process timeline

more like an interactive display. Participants gain insight into the journey from the concept story to prototypes and the creation of the first pullover shoes.

Since each stage takes a different time, so based on internal informal interviews, I visualised the timeline for Adizero footwear franchise CR0 timeline as Fig 2.9.

The timeline for the Adizero footwear team is roughly around 23+ weeks(around 6 months), during this period, there are three main phases: (1) Explore Phase - 1-2 months (2) Design Phase - 1 month (3)Development Phase - 4 months.

In addition, the pre-development stage is still not officially integrated in this timeline, so the innovation activities for the pre-development stage might be cross-seasonal.

Takeaway:

When comparing Fig. 2.8 and Fig. 2.9, it becomes evident that the design team plays a crucial role in incorporating the perspectives of other stakeholders during the design phase. Nonetheless, in contrast to other phases within Adizero footwear FFE, where the design team still has the opportunity to refine their designs during the development phase, they

are restricted to a mere 4-week timeframe for nurturing fresh ideas and prototyping. Consequently, devising a novel strategy to extend or enhance the design team's temporal and creative capabilities during FFE becomes a pivotal avenue for future strategic design considerations.

2.5 Adizero Footwear Stakeholder Relationship

In order to have a clear overview of the Adizero footwear stakeholder relationship during the fuzzy front-end inside and outside of Adidas, a stakeholder map has been made by me in this section. According to informal interviews, personal observation and internal documents, the value exchange between stakeholders are listed in the map.(Figure 2.10)

This stakeholder map predominantly comprises four categories of information: (1) Types of stakeholders; (2) Levels of importance of stakeholders for FFE; (3) Connection lines with each stakeholder; and (4) The deliverables and activities occurring between each stakeholder. The red lines highlighted on this map emphasize the pathway related to the 1st Pullover sample shoes.

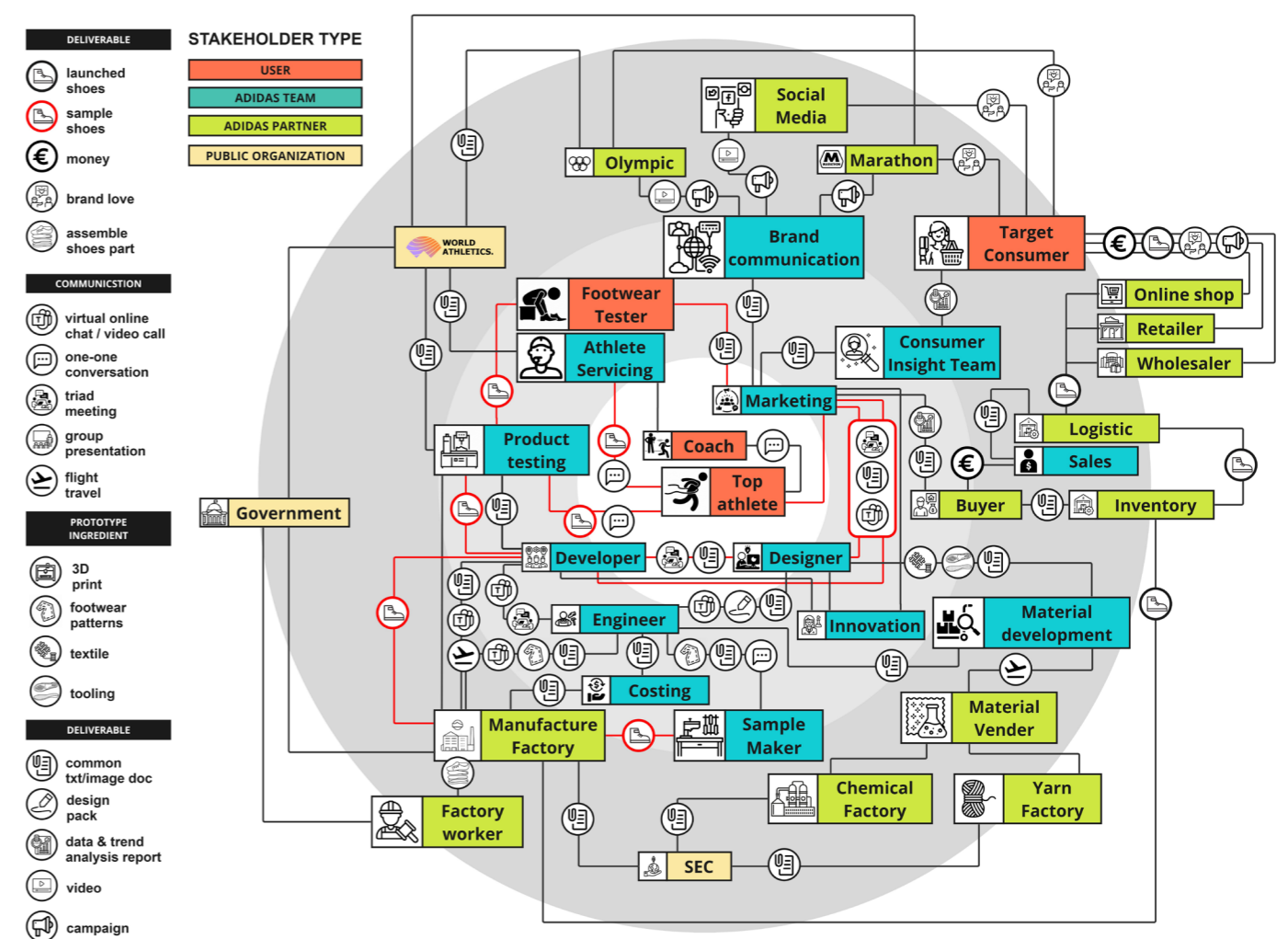


Fig 2.10 Stakeholder Map for Adizero Footwear

Key findings

1.Triad Team Oversight:

The Adizero franchise's Front-End of Innovation (FFE) process is overseen primarily by a triad team consisting of Marketing, Design, and Development, focusing on both internal members and external target runners.

2.Elite Athlete Focus:

Design research reveals that Adizero triad teams center their product innovation efforts around elite athletes during the FFE process, highlighting a commitment to athlete-driven innovation.

3.Lack of Direct Consumer Integration:

The broader market's target consumers'

perspectives are not directly integrated during the conceptualization of footwear ideas. Their requirements are interpreted by the Adidas consumer insight team and relayed to the core Adizero triad team.

Stakeholder Map Summary

Evidently, the Adizero team predominantly shapes race running footwear based on the needs of elite athletes, rather than prioritising the preferences of the global target consumers who directly influence the sales figures of Adidas footwear.

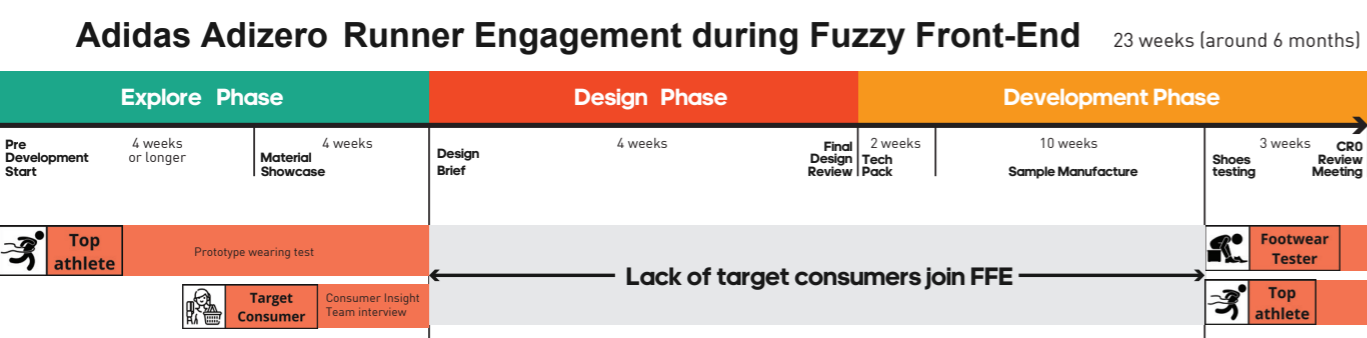


Fig 2.11 High-performance runners engagement during fuzzy front-end

Based on the results of the stakeholder map, emphasis within this FFE context is specifically placed on engaging key stakeholders including internal teams such as Marketing, Design, and Development, and external runners. As a result, a more intricate profile of these stakeholders has been examined and is articulated below:

A. External stakeholder profile - Runner

Subsequent to conducting interviews with internal staff members, it came to light that the Adizero footwear marketing team gathers feedback from elite athletes, footwear testers, and the intended consumer base. It’s crucial to recognize that these footwear testers and market target consumers fall into distinct categories. Notably, the level of involvement in the FFE process for Adizero footwear products varies significantly for market target consumers.

Furthermore, it’s worth highlighting that the pool of footwear testers for each model is typically limited to fewer than 10 individuals due to the constrained testing time frame before the review meeting. This limitation introduces the possibility of bias in the testing results and raises questions about whether the outcomes accurately represent the broader scope of Adidas’ global target consumers.

A1. Top athlete: Partnering with renowned athletes, the Adizero team enhances innovation

through prolonged wear tests conducted by athletes in Kenya. Additionally, science-based experiments are integrated into the “ADIZERO: ROAD TO RECORDS” event. Adidas assimilates feedback and running economy scientific data from these elite athletes, leading to iterative improvements in footwear design.

A2. The target consumer: This segment comprises performance-oriented runners who actively make purchases in the market. However, their direct participation in the Fuzzy Front-End (FFE) process within the Adidas Adizero team is limited. Their input regarding seasonal shoe models is gathered and assessed by the Adidas consumer insight team, which subsequently relays the findings to the market team. It’s noteworthy that while brands endorsed by elite athletes can sway their purchasing choices, the primary determinants for their purchase intent continue to be enhanced footwear performance and comfort.

A3. Footwear tester: There exist two distinct categories of footwear testing: internal recruitment by Adidas and, to a limited extent, engagement of external runners in the FFE process. This involvement is driven by three primary reasons.

Firstly, confidentiality remains a concern. Despite requiring the signing of Non-Disclosure Agreements (NDAs) before testing CR0 sample shoes, Adidas is committed to

minimising the risk of disclosing cutting-edge designs to external individuals.

Secondly, practicality plays a role. Testing sessions are usually scheduled on weekdays during midday on the Adidas campus. Consequently, involving employees is notably more feasible than accommodating external testers. Lastly, feedback based on knowledge is a significant factor. Internal staff possess a solid understanding of the correlation between footwear performance terminology and individual perceptual experiences. This awareness enhances the quality of feedback provided.

B. Internal Stakeholder profile - Marketer

The role of a Marketer involves serving as the intermediary between the franchise and external contacts, as well as internal executives. They are tasked with delineating the product’s focal points and devising strategies to broaden the market’s scope. Their primary objective is to establish connections that unite individuals under a shared objective, fostering collaborative achievement within teams.

C. Internal Stakeholder profile - Designer

The Designer assumes the responsibility of transforming footwear concepts from imagination into captivating and tangible designs. They weave narratives, sketch, craft prototypes by hand, and develop technical specifications for manufacturer partners.

D. Internal Stakeholder profile - Developer

Within the Adizero footwear team, the Developer’s role transcends mere focus on footwear performance and pre-production quality assurance. Many of them boast robust backgrounds in sports science. This expertise extends beyond seamless collaboration with technicians and factories to effectively translate the designer’s vision. Additionally, Developers are tasked with ideating novel footwear

structures and pioneering technologies for future incorporation.

Stakeholder Profile Summary

Within the examination of these profiles, a discernible engagement gap is evident in the Front-End of Innovation (FFE) product creation, particularly from the viewpoint of external stakeholders like runners. These stakeholders hold significant value in the innovation process. However, runners are segmented into three unique categories, with each having diverse extents of participation in the FFE process. Figure 2.11 accurately depicts the variations in runner involvement during the Adizero footwear FFE. This illustration uncovers a prominent discrepancy in runner engagement, especially the ranging from the design brief phase to shoes testing is lack of runner engagement.

2.6 Chapter Conclusion

Evidently, the Adizero footwear team strives to harmoniously meld the realms of running science and artistic design to cater to their target customers. Facilitated by the collaborative structure of the triad team, each member possesses equal potential to drive innovation forward. From a user-centred standpoint, the Adizero franchise leverages Kenya co-creation fieldwork and the annual “Break the Record” race-running event to both glean insights and foster engagement with elite athletes.

However, as Adidas endeavours to amplify market sales from target consumers, the challenge lies in striking a balance between the preferences of these customers and the demands of elite athletes. A potential solution entails a direct focus on listening to the voices of target consumers and enhancing their involvement during the Fuzzy Front-End (FFE) process.

3 STRATEGIC DESIGN CHALLENGES & OPPORTUNITIES

- 3.1 Challenges in
The Fuzzy Front-End
of Sports Innovation
- 3.2 Opportunities for
Stakeholder Management
in Sports Innovation
- 3.3 Chapter Conclusion

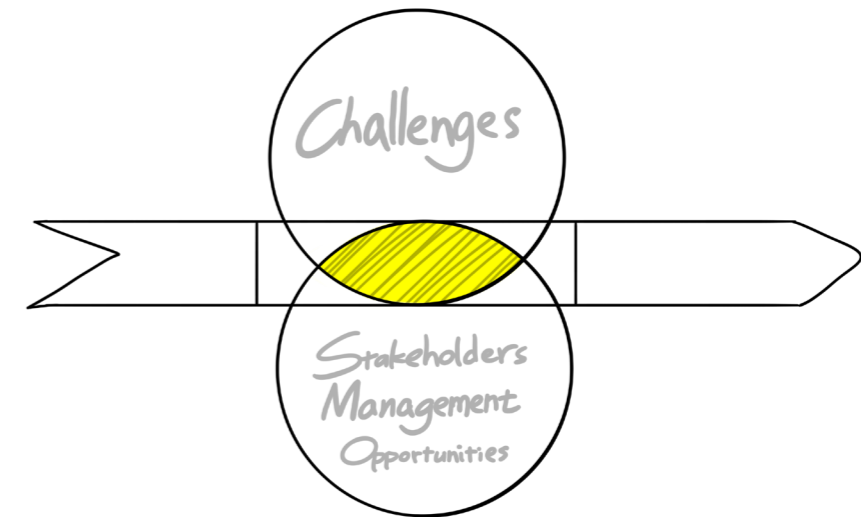


Fig 3.1 Strategic Design Challenges & Opportunities Chapter Illustration

3.1 Challenges in the fuzzy front-end of sports innovation

Drawing from informal interviews with Adidas internal stakeholders and the analysis presented in Chapter 2, this section aims to highlight the existing challenges faced by the Adidas Adizero team from both runners' and internal stakeholders' viewpoints.

Athlete-driven innovation stands as a prevailing industry norm adopted by numerous sportswear and sports equipment companies (Kaushikkar, 2020). Similarly, user-centric design has been a foundational principle across various sportswear sectors, including Adidas.

3.1.1. Challenges from the runners' perspective

Derived from the analyses presented in Chapter 2 and supported by existing literature, the challenges perceived from the perspective of runners are outlined as follows:

“Addressing the needs of the target consumers proves challenging within the current FFE process”

A. Ergonomic needs

Differences in foot bone structure among global runners have been identified as a significant factor influencing their running performance (Ali, 2018). Consequently, individuals engaged in performance running exhibit a heightened

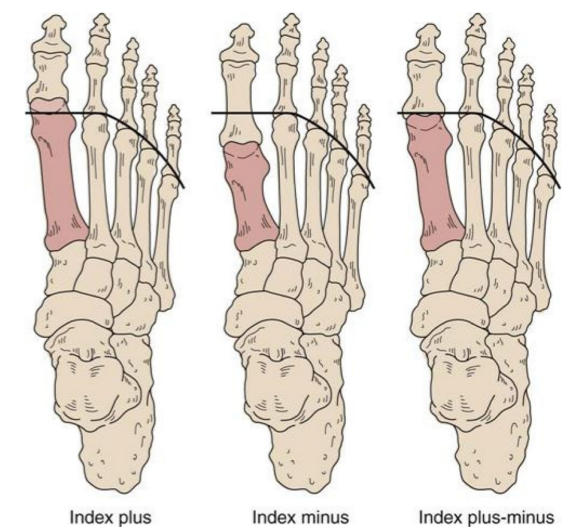


Fig 3.2 Forefoot morphotypes (Ali, 2018)

level of attention to the intricacies of their feet and footwear. This heightened attention is motivated by the clear and direct impact that these factors exert on marathon performance. It is evident that the harmonization of an individual's foot anatomy (see Fig 3.2) with the performance of their footwear plays a pivotal role in determining their overall performance.



Fig 3.3 Robert Karaś, who broke the world record Quintuple Triathlon by over four hours, modified his running shoes during the 2023 IUTA World CUP Brazil Ultra TRI

However, the Adizero Adios Pro footwear uses a standardized unisex shoe last, which may not suit every consumer's unique foot structure. Despite Adizero FFE process primarily involves high-performance runners to test shoes, but only focus on internal testers and Kenyan elite athletes in prototype testing. In light of these considerations, it is strongly recommended to contemplate the inclusion of the target consumer within the FFE process, underpinned by a novel design approach. Such an approach has the potential to significantly enhance consumer satisfaction.

B. The need of innovation engagement

Scholars such as Bogers (2019) have noted that users have often been excluded from the role of innovators, partly due to the perception that they may not fully grasp their unmet needs and partly due to debates surrounding their innovation capabilities and intentions. Same In the context of the footwear industry, especially in the domain of performance-oriented footwear, target consumers are often characterized as lacking deep footwear knowledge. Even if they engage in discussions

about shoe modifications on social media or forums, their inputs are frequently disregarded by sportswear brands due to the perception that these consumers lack professional expertise in sports science and footwear manufacturing. Nevertheless, the target consumers who adapt their footwear for superior performance in competitive settings(Fig 3.3). This highlights the untapped potential for soliciting innovative ideas directly from target consumers. While Adidas does offer a customization platform for consumers (Platform Website: <https://www.adidas.co.uk/forum-low-shoes/FY7756.html>), its primary emphasis remains on lifestyle customization rather than catering to the specific performance needs of runners. Under the current FFE process, more often than not, individuals directly involved in the footwear creation process are sports enthusiasts employed by sports companies (Chuang, 2019). Despite organizing engagement initiatives like the Kenya trip, Road to Record events, and the AR runner community to gather insights from elite runners, the direct engagement of target consumers in the fuzzy front-end for innovation remains a distant goal.

3.1.2. Challenges from internal stakeholders' perspective

Regarding user innovation from a corporate perspective, scholars Bradonjic, Franke, and Luthje (2019) have identified six reasons why decision-makers tend to underestimate users as sources of innovation, along with the resulting consequences (refer to Figure 3.4). After I conducted 21 rounds of informal interviews these findings throughout the innovation process, this research suggests that Adidas may have undervalued the involvement of target consumers in innovation due to factors outlined in Figure 3.4, including (1) a lack of direct contact with user innovators and their innovations, (3) limited media coverage of user-driven innovations, and (4) preconceived knowledge clouding their focus.

For sports companies

Although many brands have adopted athlete-driven innovation as an industry norm and have even expanded their efforts to gather feedback from consumers in the market, a prevailing belief that market consumers lack the capacity to directly engage in FFE.

From the perspective of the Adizero footwear

Adizero team remain hesitant to initiate changes in the current FFE process to enhance user innovation. This hesitation is based on the following considerations:

1. Desire for direct consumer interaction, but uncertainty about initial steps.
2. More influential factors and stakeholders are involved in FFE, as product development grows increasingly complex, making holistic understanding challenging.

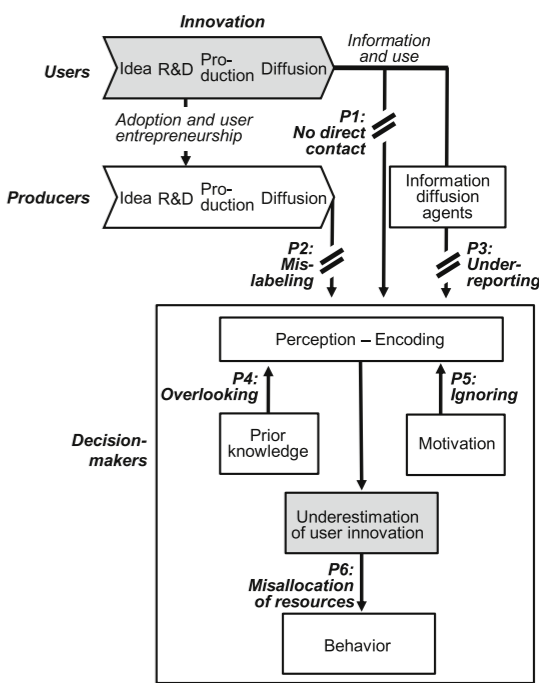


Fig 3.4 . Reasons for and consequences of decision-makers' underestimation of user innovation: Six propositions (P1-6). (Bradonjic,2019)

3.1 Takeaway

Challenges from both runners' and internal stakeholders' perspectives in the context of innovation within the Adidas Adizero footwear line. Runners face ergonomic needs and a desire for more innovative engagement in product development, highlighting the importance of accommodating their diverse foot structures. However, the current process primarily involves internal testers and elite athletes, leaving potential target consumer's innovations untapped. Internal stakeholders tend to underestimate target consumers as sources of innovation, hindered by limited contact with target consumers' innovation and preconceived notions. Despite recognizing the need for changes in the FFE process, the Adizero team is hesitant to immediately change due to uncertainty and increasing complexity in product development.

3.2 Opportunities for Stakeholder Management in Sports Innovation

Addressing the challenges identified in section 3.1, which pertain to the needs and engagement of target consumers within the FFE process, presents a complex task. The intricacies of the FFE process involve multiple stakeholders, as depicted in Figure 2.10. Consequently, in Adidas effort to overcome these challenges, I will delve into opportunities for enhancing **stakeholder engagement strategies** for the Adizero footwear team in section 3.2.

Stakeholder Management Definition

The foundation of “stakeholder management” is rooted in stakeholder theory, initially formulated by Freeman in 1984. R Edward (Ed) Freeman emerged as an early advocate of the broader organisational stakeholder perspective, defining stakeholders as “any group or individual who can affect or is affected by the achievement of the organisation’s objectives.” Existing literature reveals that the typical steps within stakeholder management can be distilled into four primary stages: (1) gathering and analysing information, (2) devising and executing an engagement plan, (3) monitoring and evaluating outcomes, and

(4) adapting engagement strategies. Despite its apparent linear structure, stakeholder management is a dynamic, ongoing process operating within a feedback loop. Therefore, the final goal for stakeholder management is to plan stakeholder engagement strategies and dynamic adjustments during implementation.

Stakeholder Engagement in Sports Innovation

Within the field of the sports industry, the development of functional running shoes extends beyond mere product appearance design. The process involves substantial reliance on factual theories and experimental data from sports science, encompassing both front-end research and back-end product testing. Consequently, effective management of the engagement of diverse stakeholders becomes exceptionally critical and necessitates a heightened level of meticulousness compared to other product design endeavours.

Introduced in 2021, Hendricks’ “Dynamic Model for Innovation and Stakeholder Engagement” offers a dynamic framework tailored to the sports industry. This model aids in determining the optimal level of stakeholder engagement

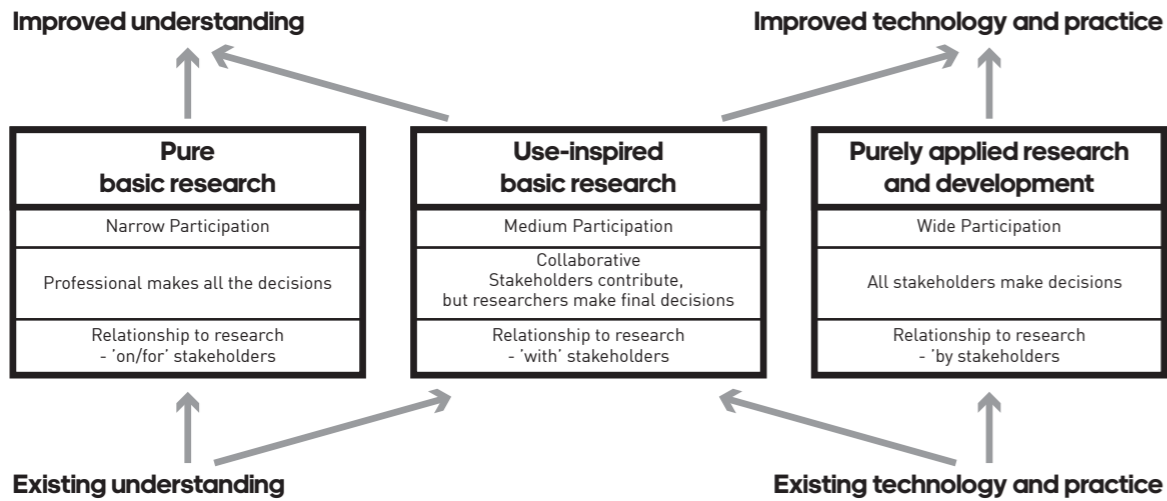


Fig 3.5 Dynamic model for innovation and stakeholder engagement (Hendricks, 2021)

when research and development efforts are centred on advancing both comprehension and technology. While research and development aim to enhance understanding, technology, and practical application, the collaborative input of stakeholders remains integral to the innovation process, even if final decisions ultimately rest with the researchers.

Current Stakeholder Management in Adizero Footwear Team

Adidas adopts an agile ideation approach in the early phases of innovation (Lichtenthaler, 2020), resulting in a less formalized stakeholder management structure. Particularly, the Adizero footwear team functions within a triad structure lacking a well-defined stakeholder management framework. This circumstance presents numerous possibilities for incorporating design thinking to formulate an improved stakeholder management strategy within the fuzzy front-end phase of Adizero. Subsequently, the Adizero teams can execute specific stakeholder engagement plans aimed at addressing the challenges posed by target consumers.

Opportunity 1 - A User-driven Innovation for Stakeholder Engagement

“From elite athlete-driven, user-centric to user-driven innovation”

User Engagement Evolution

In order to achieve user-centric design, sports brands customarily rely on elite athlete-driven innovation throughout the early stages of new product development (Kaushikkar, 2020). However, this strategy has caused a disconnect between the innovation process and the target audience’s tastes. It is crucial to understand that the consumer base of

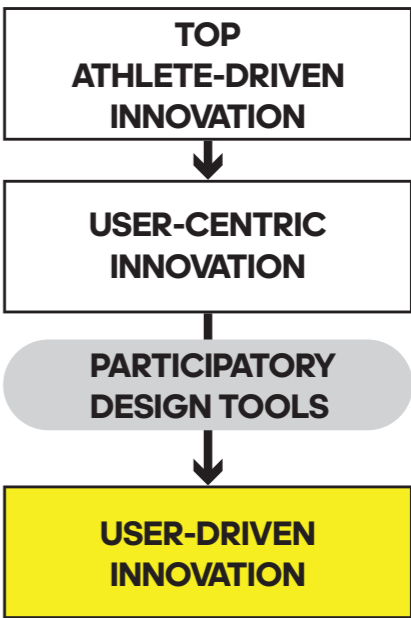


Fig 3.6 The evolution of innovation-driven power sports brands consists not just of professional athletes but also of sports enthusiasts. As a result, it becomes necessary to adjust the athlete-driven innovation process in order to better serve a larger consumer base. Looking ahead, sports brands will need to increase consumer involvement in innovation, shifting towards a user-driven approach to strengthen brand loyalty. “Democratising innovation,” proposed by scholar Eric von Hippel in 2006, has proven effective in promoting user-centric to user-driven via participatory design. This framework encourages both internal and external stakeholders to naturally participate in new product development. According to Calabretta (2015), the participatory design tools such as storytelling, early prototyping, generative sessions, and stakeholder mapping can maintain stakeholders’ support during the fuzzy front end. Particularly, utilising participatory design during pre-design, early design, and post-first-prototype phases has gained prominence (Vandekerckhove,

Case	2016 - Futurecraft M.F.G. & AM4NYC	2019 - Adidas Ultra Boost 19	2020 - Adizero Pro 2	2021 - Soccer GLITCH
Range	Customised innovation	Run energise	Run for win	Football - style
Reference picture				
Engagement channel	Some pop-up stores to engage consumers with limited shoes production. But after 2020 Adidas closed the speedfactories. [X][X][X][X]	Invite runners to Herzo to co-create together[X]	Travel to Kenya for field works with local elite runners, and implement experiments for prototypes validation[X]	Vurvey (invited-only mobile application)[X]

Fig 3.7 Adidas footwear external stakeholder engagement activities

2020). Strategic prototyping has also emerged as a means to enhance stakeholder engagement (Coulentianos, 2022) (Rodríguez-Calero, 2023). By embracing these collaborative practices, sports brands can create products that resonate more closely with consumers while fostering brand loyalty. In conclusion, the challenge faced by sports innovation lies in effectively interacting with specific stakeholders within concrete engagement plans. This task demands careful consideration and attention.

Opportunity 2 - A Future Vision for Data-enabled Stakeholder Engagement

Over the past five years, Adidas has witnessed significant growth in its external stakeholder engagement activities for product creation. Notable examples include the introduction of Speed Factories in 2017, the launch of Adidas Ultraboost19 in 2019, the release of Adios Pro 2 in 2020, the unveiling of Adidas Soccer GLITCH in 2021, and the collaboration with Moncler in 2023. Additionally, the brand organised the Adidas Sneaker Design Tournament in 2023. However, it's important to highlight that the predominant focus of most external stakeholder engagement initiatives has

been directed towards Lifestyle products rather than Performance-oriented ones. Furthermore, these engagement endeavours have leaned heavily towards new technological approaches rather than traditional marketing strategies. Research by Pedrini and Ferri (2019) underscores the growing integration of stakeholder management within corporate practices, and the advent of the internet, social networking, and Big Data has intensified the pressure on companies to develop fresh tools and techniques for managing stakeholders online. Consequently, incorporating a review of contemporary advanced technologies aimed at augmenting stakeholder interaction would serve as a valuable reference for the forthcoming design strategy section. This approach would empower Adidas to explore innovative avenues for engaging external stakeholders and bridging the divide between brand and consumer needs, especially concerning performance-driven products.

Technology 1 - Internet

- from offline product development to online co-creation

With over six decades of evolution, the

Internet has brought about revolutionary changes in conventional communication channels like telephone, radio, television, paper mail, and newspapers. It hasn't merely reshaped and redefined these mediums, but has also introduced entirely novel services like email, Internet telephony, online music, Internet television, digital newspapers, and video streaming platforms. This profound metamorphosis in media interaction has also paved the way for enhanced engagement opportunities between sports brands and consumers. Through customised products and co-creation contests, sports brands are able to fuel their creativity and innovation while fostering a stronger bond with their audience. (Sawhney, 2005)(Cardamone,2022). These initiatives provide opportunities for personalised experiences and encourage active participation from consumers, enabling them to contribute their ideas and preferences to the brand's development process. The successful case is NikeiD, a customization platform offered by Nike that allows customers to personalise and design their own footwear, apparel, and accessories. With NikeiD, users can select colours, and materials, and add custom details to create unique products that reflect their individual styles and preferences.

Technology 2 - Social Media

- from virtual social networking to physical community

Internet advancements enable seamless connections and shared interests irrespective of time and space. Platforms like Facebook, Instagram, TikTok, and sport brand apps have become crucial channels for brands to enhance consumer engagement and foster

brand loyalty.

Technology 3 - Big Data and AI

- from seasonal research to dynamic real-time prediction

The rise of the internet and social media has not only transformed how people engage with brands and communities but also presented challenges in managing such interactions. Brands now face the task of navigating extensive amounts of interaction data and extracting valuable insights to inform product and service design, effectively catering to consumer needs. In the realm of sports brands, there has been a recent focus on integrating data analysis and artificial intelligence (AI) into the product creation process. For instance, Adidas researchers have explored the use of body-worn sensors to collect biomechanical data from individual runners, providing informative feedback to enhance running efficiency and reduce injuries (Campbell, 2020). Nike, in 2023, unveiled the ISPA Universal, a cutting-edge footwear innovation that combines 3D printing, AI design, and eco-friendly materials. Similarly, Under Armour leverages AI for consumer-sentiment analysis and social listening to understand customer perceptions and identify market gaps.

3.3 Chapter Conclusion

The integration of user-centric and diverse stakeholder feedback, along with advancements in technology, can lead to innovative products that better align with consumer needs, enhancing brand loyalty and consumer satisfaction. The hesitancy to change existing processes and underestimation of consumer insights are challenges that need addressing to fully realize the potentials of user-driven innovations.

4 STAKEHOLDER ENGAGEMENT REFORMULATION

- 4.1 Reformulation Approach
- 4.2 Reformulation Result
- 4.3 Discussion
- 4.4 Chapter Conclusion

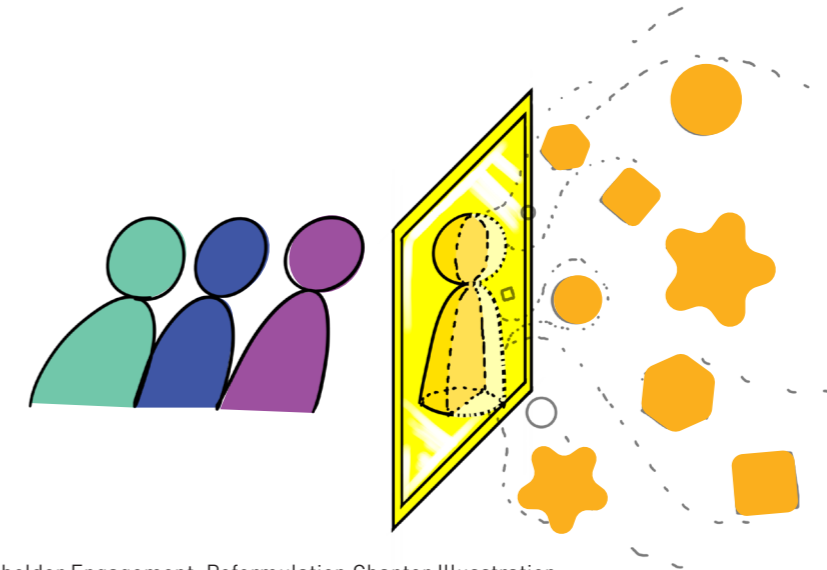


Fig 4.1 Stakeholder Engagement Reformulation Chapter Illustration

The outlined approach is multi-faceted, focusing on comprehensively understanding and mapping current front-end innovation challenges and stakeholder engagement activities at Adidas. It utilizes sensitizing design tools like the Stakeholder Cube and Superpower Metaphors to garner deep insights into stakeholder perceptions and abilities, facilitating impartial and detailed portrayals of each stakeholder. Formal interviews with internal and external stakeholders, generative booklets, and user journey brochures were also deployed to comprehend innovative activities within the Adidas Adizero team. The Stakeholder Analysis Canvas was used for analyzing interview outcomes and planning future strategies. Finally, a pilot testing session was conducted to address consumer engagement challenges and assess the effectiveness of new guidance tools in generating ideas for enhanced stakeholder engagement strategies.

4.1 Reformulation Approach

The following booklet and pilot session can support stakeholders understanding and mapping out the current front-end innovation challenges and the engagement activities.

4.1.1 Sensitizing Design Tools

A.Stakeholder Character Cube

Prior to formulating a stakeholder engagement plan, the initial and pivotal phase involves stakeholder identification. In this research, the Stakeholder Cube (Murray-Webster,2006) was selected to assist triad teams in metaphorically conceptualising each other. Rather than directly employing metaphors found in existing

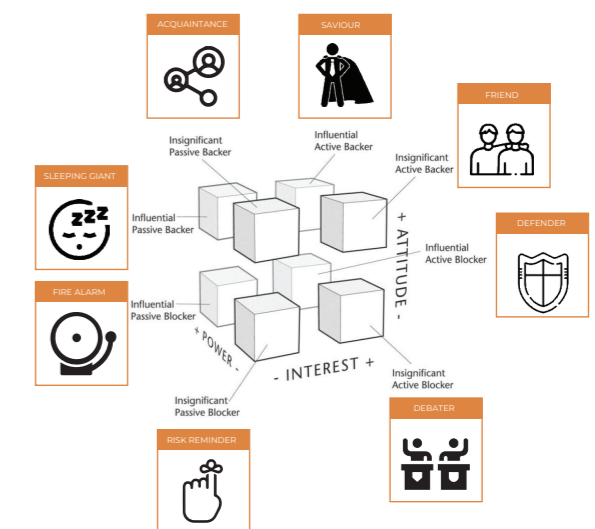


Fig 4.2 Stakeholder Cube (Murray-Webster,2006), author redrawed

	Characteristic	Probable Behaviour	Metaphor character
1	High power, high interest, positive attitude	Influential active backer	Saviour
2	High power, low interest, positive attitude	Influential passive backer	Sleeping Giant
3	Low power, high interest, positive attitude	Insignificant active backer	Friend
4	Low power, low interest, positive attitude	Insignificant passive backer	Acquaintance
5	High power, high interest, negative attitude	Influential active blocker	Defendor
6	High power, low interest, negative attitude	Influential passive blocker	Fire Alarm
7	Low power, high interest, negative attitude	Insignificant active blocker	Debater
8	Low power, low interest, negative attitude	Insignificant passive blocker	Risk reminder

Table 4.1 Behaviour definition for each metaphor characters

literature, a custom approach was adopted. (See Fig 4.3) This decision was influenced by the observation that during interviews, individuals tend to refrain from using overly critical or unfavourable metaphors when describing their colleagues. Consequently, any “blocker” metaphors were replaced with more neutral alternatives.(See Table 4.1) However, minor adjustments to the metaphorical character were made based on the explanations provided by participants during the interviews. Nonetheless, while categorising other stakeholders individually proves beneficial for project managers, this research introduces a constructive approach. In order to offer a more impartial portrayal of each stakeholder, a generative tool was developed for conducting interviews. (See Fig 4.6)

This tool prompts stakeholders to articulate their self-identification and their perception of others using metaphors, thereby facilitating a deeper comprehension of stakeholder



Fig 4.3 Characters metaphor for internal stakeholder booklet

identification.

B. Superpower metaphor for internal stakeholders’ FFE activities

Everyone is a hero in a team. This research uses superpower as a metaphor to trigger interviewees thinking of their specific abilities and other stakeholders’ abilities in FFE.(Fig 4.4) Instead of asking the regular normal question about their work responsibilities, the superpower metaphors can digg more in-depth knowledge about each stakeholders’ innovative activities.Moreover, giving interviewees freedom to define the relations between their works and superpower can gain more understanding about the role’s identification in details.



Fig 4.4 superpower metaphor for internal stakeholder booklet

CONSUMER PRODUCT DEVELOPE ENGAGING JOURNEY

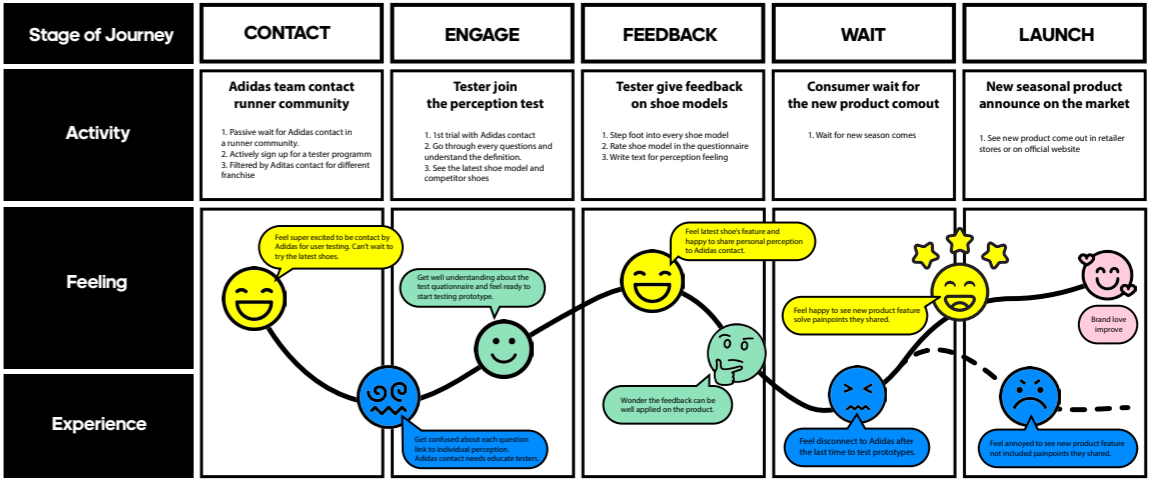


Fig 4.5 User Journey map for external stakeholder

C. User Journey map for external stakeholders’ engagement activities

The target consumers are not fully included in the FFE process at Adidas. Therefore, this research aims to base on the activities they joined for the engagement research. Therefore, the testing session with a user journey map can be a reasonable method to recall interviewees’ experience and ask them future expectations for each journey stage. Based on the informal interviews for the Adidas footwear testing process with 2 product testing managers and 1 concept testing manager, I made Fig 4.5 as a consumer engaging journey map for the external stakeholder interview booklet.

4.1.2 Formal interviews

Author conducted interviews with - generative booklet(Fig4.6) and brochure(Fig4.7).

	Team	Position	Background	Experience (year)	Run as an athlete
1	Marketing	Sr. Manager	International business	8	
2	Marketing	Manager	Sustainable Business	3	2 yrs
3	Marketing	Manager	Business & Commerce	4	
4	Design	Designer	Industrial Design	10	
5	Design	Designer	Industrial Design	10	
6	Development	Director	Exercise Science	15	16 yrs
7	Development	Sr. Manager	Sports Engineering	8	
8	Development	Manager	Ergonomics Engineering	4.5	1 yrs
9	Development	Developer	Mechanical Engineering, Sports Engineering	1	10 yrs

Table 4.2 Internal interview list

The Interviewees are 9 internal stakeholders and 5 external stakeholders.

A. Internal stakeholder Interview

Criteria:

- (1) Work experience for more than 5 years
- (2) Have experience to launch products in the market.

B. External stakeholder interview

The upcoming external interviews for Adizero will focus on existing footwear testers to identify suitable candidates due to the fuzzy front-end not directly involving target consumers.

Criteria:

- (1) Experience with Adizero running footwear fitting and testing
- (2) External or Adidas runner with less than half a year at Adidas
- (3) Over 5 years of running experience
- (4) Minimum of half marathon running experience

	Role	Background	Running footwear	Run as an athlete
1	Internal (intern)	Mechanical Engineering	Saucony, ASICS, Nike	16 yrs
2	External	Sports technology	Nike, Adidas	2 yrs
3	Internal	Footwear design	Adidas	
4	Internal (intern)	Sports product design	Nike, Adidas	7 yrs (National team)
5	Internal (intern)	Data Science	Nike , Adidas	

Table 4.3 External interview list

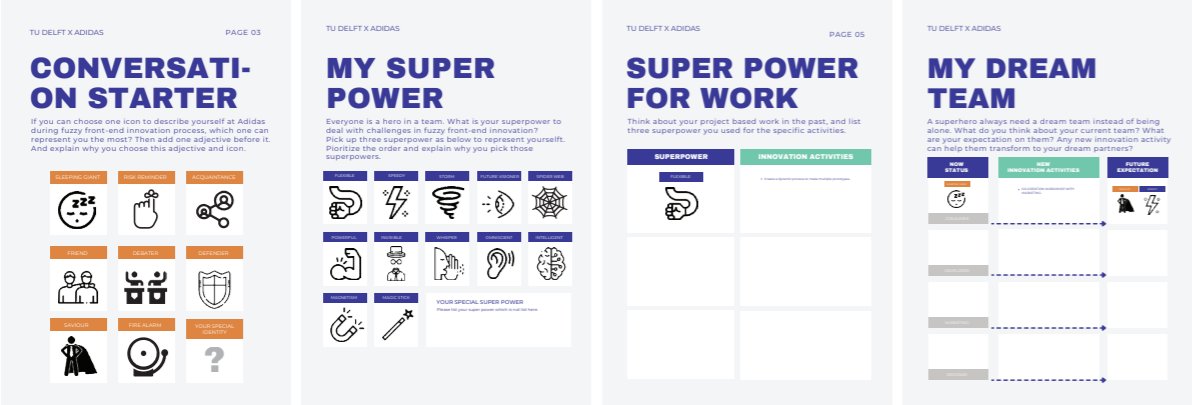


Fig 4.6 Internal stakeholder Interview - Generative Booklet

Generative booklet for Internal stakeholder:
for understanding innovation activities in Adidas Adizero team. I create a sensitising booklet in which I use superpower as a metaphor for stakeholder identification and navigating interviewees to elaborate on their current innovation tool, method and activities, furthermore to express their future vision for each stakeholder at Adidas. To see the booklet Appendix P.79-P.86

User journey brochure for external stakeholder:
The external stakeholder interview employs the user journey map to visualise the footwear testing experience. This approach helps guide testers in articulating their prospective involvement in the fuzzy front-end. The interview aims to comprehend the ongoing target consumer engagement initiatives within the fuzzy front-end, along with their immediate and future expectations for engagement. To see the brochure Appendix P.94

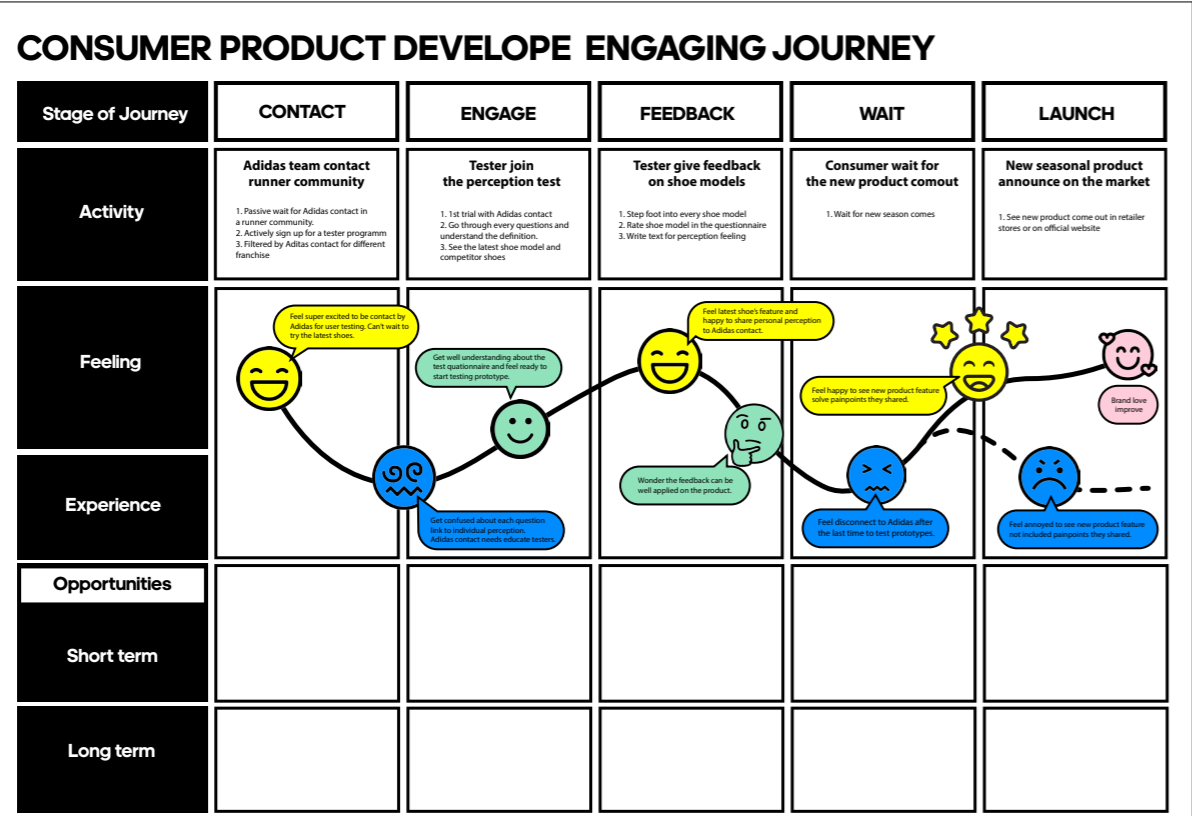


Fig 4.7 External stakeholder Interview - User journey brochure

4.1.3 Stakeholders analysis canvas

Based on the interview with the Adizero footwear triad team members, the three different types of stakeholder analysis canvas are designed as follows .

Character	Superpower	Action	
		Now	Future
		Tools/Methods	
Consumer			
Developer			
Marketing			
Designer			

Table 4.4 Canvas design option 1

Character	Stakeholder Identification			Internal		External	
	Power	Interest	Attitude	Regular	Innovation	Regular	Innovation
Now							
Future							

Table 4.5 Canvas design option 2

		FFE for Now		Character		FFE for Future	
		Activity		Now	Future	Activity	
		Regular work	innovation			Regular work	Innovation
Power	Internal						
	External						
Interest	Internal						
	External						
Attitude	Internal						
	External						

Table 4.6 Canvas design option 3

To facilitate a more distinct comparison of activities between the present and future states, canvas design option 3 offers a more lucid depiction of stakeholder identification and activity analysis derived from interviews.

The method of using stakeholder analysis canvas

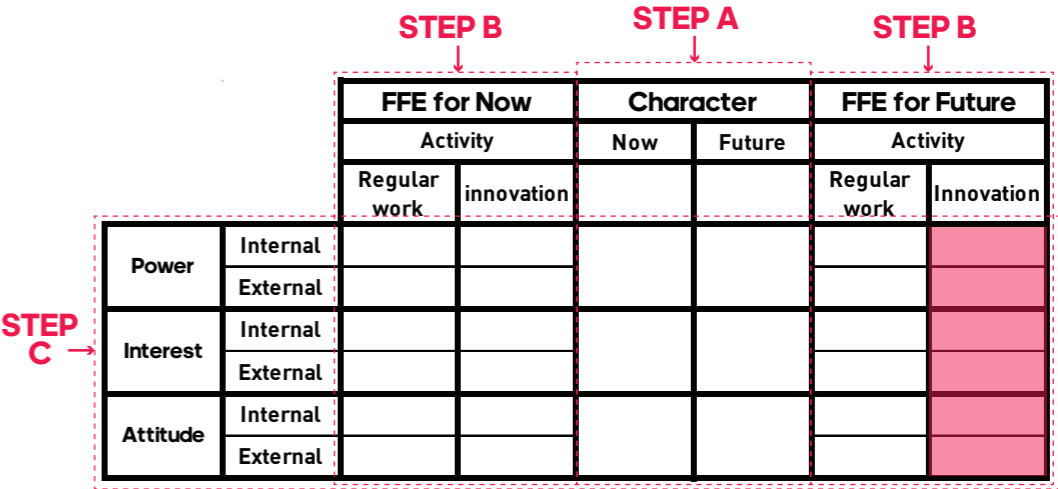


Fig 4.8 Information fill in orders in stakeholder analysis canvas

Stakeholder analysis canvas is developed by this research author. This tool is in order to easily analyse interview outcomes for the future strategy design. Unlike the regular context mapping process, using stakeholder analysis canvas need to follow the following specific steps:

A. Fill in Stakeholder character -

put the stakeholder current character and future expected character in “Character” column. And trace back to stakeholder cube to fill in the certain character’s power, interest and attitude definition. Then we will have a clear overview for the stakeholder’s future change focus. For example, if we want to change the current marketing from sleeping giant(High power, low interest, positive attitude) to Saviour (High power, high interest, positive attitude), we can clearly recognize the

future strategy should aim on more innovative activities for increasing interest.

B. Fill in FFE activities for now & future -

Put the current activities in column “FFE for Now” and the future expecting activities in column “FFE for Future”. Based on the interviewee description of activities, categorise them into regular activities and innovative activities. Then distinguish the activities that belong to power, interest or attitude characteristic from internal context or external context.

C. Highlight the relevant innovative activities

For the future strategic design, we will focus on innovative activities for the future. And the character analysis which is based on stakeholder cube can help us to give more weight on certain characteristic enhancing activities.

Based on the analysis logic of the figure, each stakeholder interview are analysed and the outcomes are attached to the Appendix P.99-P.102.

What is The Next Step?

After collecting and analysing stakeholders’ identification and innovation activities for FFE, superpower cards are designed as a toolset to evaluate the most desirable and feasible idea for the new strategic design. A pilot testing session will be hold to see the cards viability.

4.1.4 Pilot testing session

Overview

The pilot testing session focuses on addressing the target consumer engagement challenge identified through context analysis and formal interviews analysis. Its objective is to evaluate the effectiveness of the guidance tools, namely the ‘FFE Deliverable & Tools Poster’ and the

‘Superpower Card Set’ in facilitating idea generation for a new engagement strategy within a 1.5-hour timeframe. The card set is based on the stakeholder analysis canvas innovation activities, to choose the top three activities for each stakeholders.(see Fig 4.9)



Fig 4.9 The superpower cards for the pilot testing

After the testing session, feedback will be collected on the guidance tools, and a second iteration tools for the strategy co-creation workshop will be developed based on this feedback.

Objectives

This workshop focused on how to **brainstorm new ideas** to solve the key challenge - “How to make ADIZERO Target consumers more engaged in CR0 phase?”

Participants

Participants are the same group from the pilot testing session - 6 people

1 Marketing Manager,1 Designer,3 Developers and 1 Target consumer.

Setting

The workshop was set up in Adidas HQ MakerLab. The space is an open working space for all employees to create their design and hold workshop. I reserve a huge table to display FFE process poster and provided pens, markers and stickers for ideas free drawing on the poster. Face the challenge together and brainstorm. Based on the most desirable

CHALLENGE

How to make ADIZERO Target consumers more engaged in CR0 phase ?

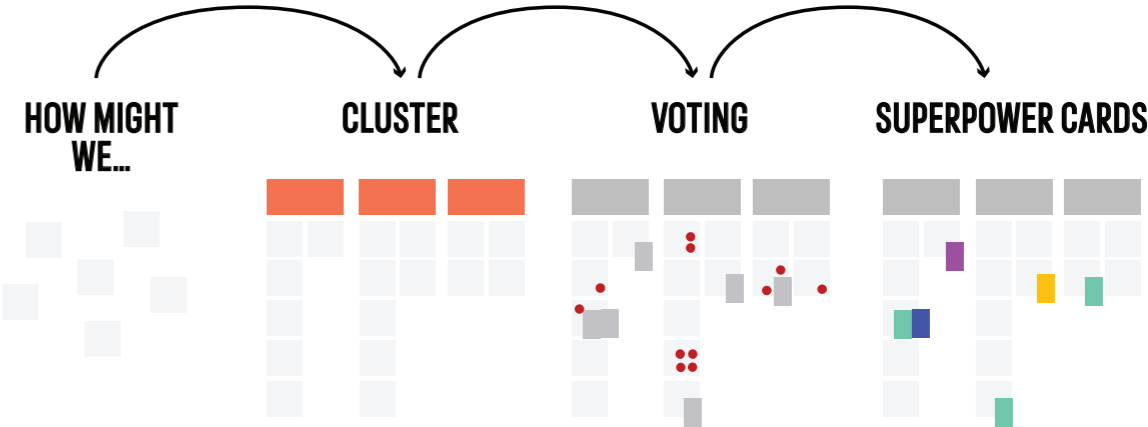


Fig 4.10 The pilot testing structure

idea, five triad team members and one target consumer elaborate more details and plans for achieving the idea based on the concept template. However, the triad team and target consumer didn’t use superpower cards during the pilot testing session. The participants at the end of the session picked up three ideas they like together.

Pilot testing Structure

The pilot testing session was held on 16th August from 15:00 to 16:30.

Section 1: Introduction - 3 mins

Introduce the research purpose and the workshop agenda to participants.

Section 2: Explain Challenge - 3 mins

Based on stakeholder map analysis and interview contents, the stakeholder engagement challenge has been pointed out is - How to make ADIZERO Target consumers more engaged in the CR0 phase?

Section 3: Share Interview insights - 5 mins

Share the insights from all formal interviews for stimulating teams’ future vision.

Section 4: Rapid Map - 30 mins

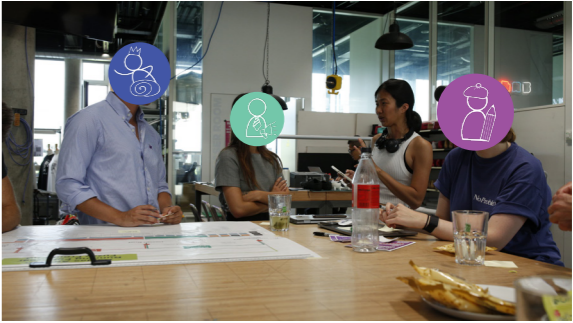


Fig 4.11 Explain the pilot testing process



Fig 4.12 Brainstorm ideas



Fig 4.13 Cluster similar ideas

Initiate the process by employing the “How Might We” design thinking method to stimulate participants’ creativity in reframing opportunities to the challenge. Subsequently, group together ideas that share similarities or common themes. Once the clustering is complete, each stakeholder can leverage their respective superpower cards to align with the ideas that are within their realm of feasibility. To conclude, all participants are provided with three red dots, which they can use to cast their votes in favour of ideas they are enthusiastic about implementing in the future.

Section 5: Ideation - 40 mins

During this section, all participants pick 1-3 ideas with the most superpower cards and red dots together and come up with a new design concept in the concept template.

10 mins - Section 6: Feedback

4.2 Reformulation Result

4.2.1 Stakeholder Identification result

This section’s analysis result is based on the data collection from 4.1.1 sensitising design tools - stakeholder cube character and superpower metaphor. The result is crucial for understanding the dynamic relationship between stakeholders. Furthermore, the result can be applied in 4.2.2 stakeholder analysis canvas.

External stakeholder - Target consumer

In the internal stakeholder interviews conducted, all three internal stakeholders expressed a shared belief that the current level of involvement of target consumers in the innovation process is insufficient. They collectively refer to the target consumers as a “Sleeping giant,” “Acquaintance,” or “Friend.” According to the stakeholder cube method the characters selected by internal stakeholders

to identify target runners fall within the high attitude zone. However, there is a discrepancy in the definition of target runners among team members. The Adizero team defines top athletes as having a high attitude, interest, and power in the innovation process. On the other hand, target runners who will be purchasing footwear in the market are considered to have a high attitude but low interest and power in the FFE.

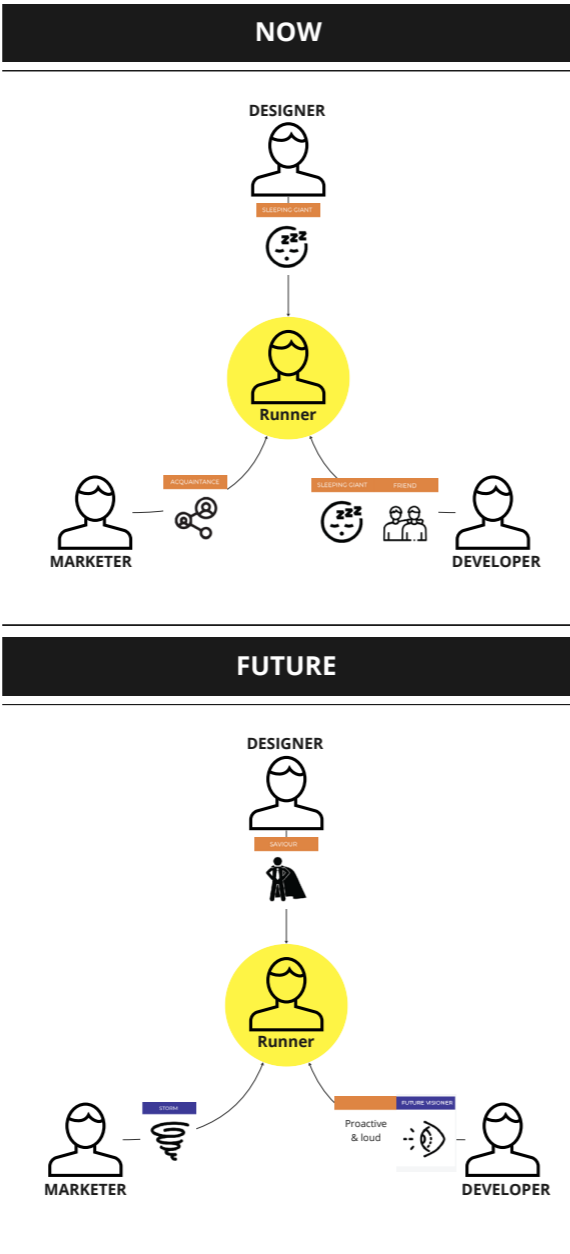


Fig 4.14 Target consumer identification for now and future

Developers: when they discuss the engagement activities, particularly highlight the Kenya field trip where they interacted with elite athletes, leading to a strong sense of friendship and collaboration with them, but developers still wonder how to release more potential engagement influence from elite runners.

Marketers: who believe that the target runners in running footwear marketing extend beyond just top athletes. According to the marketers, the target runners are still not adequately engaged with the Adizero franchise innovation process.

Designers: The designer expressed their eagerness to directly engage with target runners and gain tangible insights from them.

Conclusion - Adizero team has built a collaborative relationship with top athletes. But with target consumers in the market, the team’s members expect they can engage the target consumers in the FFE process more. Potential engagement activities they mentioned during interviews are shown in the stakeholder interview result Appendix P88-P.93 & P.95-P.97.

Internal stakeholders

- Marketer, Designer, Developer

For the internal stakeholder identification, the booklet character icons show different meanings for each stakeholder. But there are three results should be highlight:

1. Designers ,compared to other stakeholders, tend to take a long time to identify who they are and people around them.
2. At least 3 people reflect the future expectation for every stakeholder who would all become saviours.
3. Most people identify their current status as either a defender or a debater. Some

stakeholders tend to be friends during fuzzy front-end.

Takeaway - The team dynamic relationship is situational and personal. Based on each stakeholders’ personality, the self-identification can be various. However, the most current character icons they choose are debater and defender, it shows the future activities for power equalisation can be part of

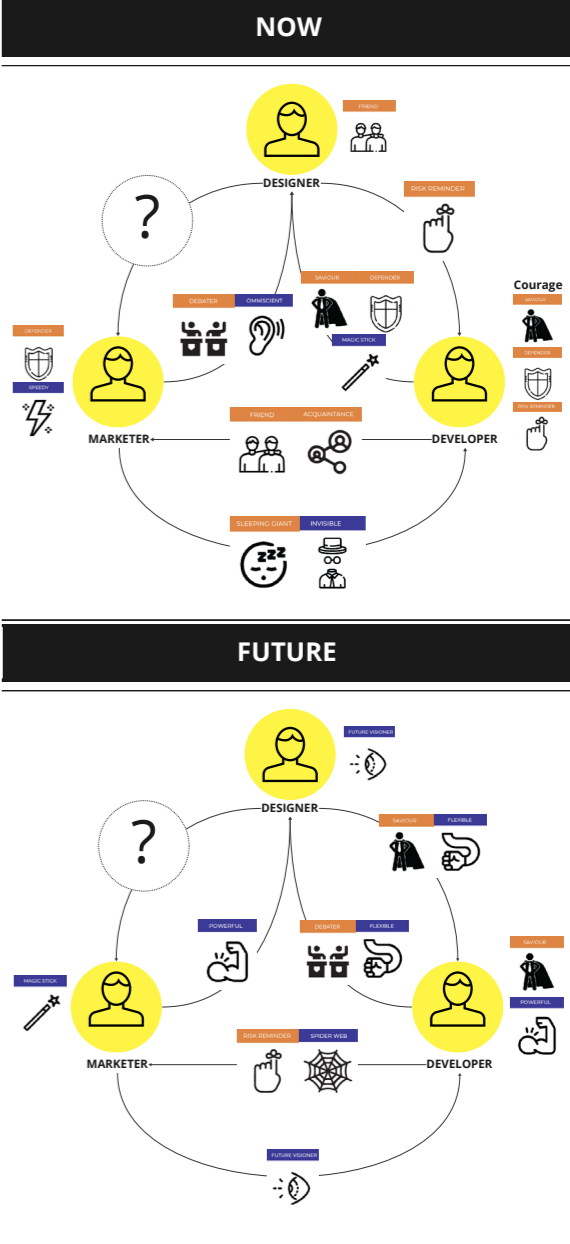


Fig 4.15 Adidas Footwear Triad members Identification for strategy focus.

4.2.2 Stakeholder analysis canvas result

Via the canvas analysis, each stakeholder analysis points out the critical areas and strategies that different stakeholders must focus on to drive future innovation and improvements in their respective domains (see table 4.5), contributing to the overall growth and development of the brand. Specific detailed analyses can be found in the appendix P.99-P.102.

Marketer Analysis:

Internally, marketers prioritize refining product requests, strategizing sales, and enhancing collaboration with E-commerce and PR teams. Externally, their focus is on integrating insights, anticipating market trends, and employing data-driven strategies to understand consumer impacts. The interest is predominantly in understanding market trends and consumer needs and creating compelling narratives to strengthen brand connections. Attitude development revolves around fostering positive environments and relationships, both internally and externally.

Designer Analysis:

For designers, internal power involves strategic and early planning, fostering idea generation, and utilizing various tools. Externally, power is manifested through a holistic approach, combining performance-focused design with business objectives and challenging traditional methodologies. Interest is directed towards integrating consumer insights and connecting with athletes. Attitudinally, they encourage creative ideas, defend design principles, and embrace diverse perspectives.

Developer Analysis:

Developers internally focus on innovative proposals, deepen expertise, and utilize risk management tools. Externally, they emphasize continuous innovation and collaboration. The interest is inclined towards collaborative brainstorming and cross-functional collaboration for richer insights during pre-development. In terms of attitude, there is an emphasis on nurturing creativity, embracing innovation, and stepping out of comfort zones.

Target Consumer Analysis:

Internally, the emphasis is on collecting extensive consumer insights and enhancing interaction through diverse channels, including AI-driven chatbots. Externally, innovative approaches like co-creation sessions and small group interviews aim to engage diverse communities and educate consumers effectively. The interest lies in simplifying knowledge and engaging consumers through educational endeavours. Attitude-wise, a collaborative and open-minded approach is key, focusing on listening to consumers, valuing data, and fostering innovation. Concerns related to brand reputation and suggestions like testers’ corners underscore a commitment to creating a positive and conducive environment.

Summary

marketers emphasize refining products, strategizing sales, and integrating insights, focusing internally on collaboration and externally on understanding consumer impacts and market trends, with a goal of strengthening brand connections. Designers wield internal power through strategic planning and idea generation, while externally they pursue holistic, performance-focused

		Marketer	Designer	Developer
Internal	Power (Influential)	1. Enhance product request precision and clarity in briefs. 2. Prioritise efficiency, particularly in design. 3. Strategically approach product sales. 4. Collaborate with E-com and PR teams for effective product storytelling. 5. Utilise prototypes to communicate and manage risks effectively.	1. Set a clear North Star plan. 2. Develop contingency plans, avoid reliance on one option. 3. Invest time in the Maker lab for foam tooling prototypes. 4. Start early on the next season's design brief. 5. Generate numerous ideas before crafting the brief. 6. Receive precise engineering guidance. 7. Use a toolbox with performance-focused ingredients.	1. Encourage the presentation of innovative proposals and ideas, particularly those related to mechanics and sports science concepts. 2. Emphasise innovation activities such as performance enhancements, technology markers, and deep product and franchise knowledge. 3. Aim to become genuine experts within a specific pillar, understanding consumer needs and product purposes thoroughly. 4. Utilising risk management tools to facilitate innovation.
		1. Gather, connect, and integrate insights. 2. Comprehend the consumer impact of design and development choices. 3. Leverage market data and volumes for decision support. 4. Develop strategies based on consumer insights. 5. Foster proactive approaches, not just reactive ones. 6. Clarify market needs and anticipate trends. 7. Encourage diverse contributions for a holistic view.	1. Focus on the big picture, including business and sales objectives. 2. Emphasise performance-focused design with visual appeal and manufacturing integration. 3. Collaborate closely with sports science and consumer insights teams. 4. Efficiently translate sports science and engineering into design. 5. Focus on manufacturing and cost-effective design. 6. Challenge traditional shoe-making in performance, sustainability, and construction.	1. Emphasise the need for continuous innovation, especially through the introduction of new technologies. 2. Collaborate with insights, sports science, and athlete science teams to incorporate their findings into the pre-development process. 3. Promote greater cooperation with the innovation team, with increased resources, time, and budget allocation to facilitate innovation.
External	Interest (active)		1. Integrate sports science expertise for heightened interest. 2. Collaborate closely with consumer insights for increased engagement.	
		1. Stay vigilant about market trends and competitors. 2. Define market needs, present and future. 3. Immerse in real-life running and understand athletes. 4. Evoke consumers' emotions, to engage with Adidas. 5. Utilise storytelling for brand connection.	1. Establish direct connections with athletes. 2. Engage in supporting science emporium symposiums.	1. Engage in collaborative product idea brainstorming sessions with team members. 2. Strive for continuous innovation, particularly in the integration of new technologies. 3. Collaborate with diverse teams, including insights, sports science, and athlete science, to inform the predevelopment process with valuable insights and expertise.
Internal	Attitude (backer)	1. Encourage a positive and enjoyable atmosphere for debates and discussions.	1. Encourage a wealth of creative ideas before formalising a brief. 2. Advocate for the defence of essential design principles, ensuring visual consistency and agility. 3. Promote a bold and innovative approach to projects. 4. Challenge conventional shoe-making methods from performance, sustainability, and construction angles.	1. Promote stepping out of one's comfort zone
		1. Embrace the world of running, empathise with athletes. 2. Stir profound emotions to connect with Adidas. 3. Give precedence to storytelling for forging a brand bond.	1. Open to the different ideas from variant perspectives. Not only focus on design.	1. Embrace collaborative product idea brainstorming with team members to foster creativity. 2. Advocate for continuous innovation, including the integration of new technologies. 3. Encourage working closely with insights, sports science, and athlete science teams to enrich the pre-development phase with valuable insights. 4. Promote a willingness to step out of one's comfort zone and utilise risk management tools as part of an adventurous and innovative approach.

		Target Consumer		
		Contact & Engage	Feedback	Wait & Launch
Internal	Power (Influential)	1. Begin by collecting consumer insights from the outset. 2. Understand the needs of the broader target audience, not just elite athletes. 3. Gather more information directly from target consumers through methods like focus group interviews and athlete feedback.	1. Aim to accumulate substantial data for stronger product claims. 2. Enhance the influence of consumer insights on the entire product creation process, both at the start and throughout. 3. Use various media like pictures and videos to educate testers comprehensively. 4. Ensure testers understand questionnaires before starting their runs. 5. Provide clear preparation guidelines for testing. 6. Utilise AI to gauge tester preferences based on voice-over text. 7. Leverage AI to process and analyse textual feedback efficiently. 8. Consider implementing AI-driven chatbots for remote tester interaction in the future.	
		1. Implement new innovation activities and conduct small group consumer interviews. 2. Establish networks with coaching and athletic institutions, including universities. 3. Partner with marathon organisations to engage the running community. 4. Connect with diverse running communities, not limited to Adidas runners. 5. Recruit external testers online for feedback.	1. Observe consumer shoe interactions for insights. 2. Host creative co-creation sessions with toolboxes and material samples. 3. Organize workshops to foster creative thinking beyond the current season. 4. Collaborate with running watch leaders like Garmin and Apple. 5. Offer detailed 2D/3D shoe models for highlighting perception areas. 6. Utilize sensors for mechanical data during tester runs. 7. Enable mood expression through images, text, and voice recordings. 8. Design interactive interfaces for expressive feedback. 9. Extend long-distance testing. 10. Provide a versatile toolbox for various testing components. 11. Consider AI chatbots for remote tester interaction. 12. Use virtual shoes for detailed examination.	1. Keep testers updated during the product creation process. 2. Organise design tournaments for appearance ideas from consumers. 3. Educate consumers about shoe manufacturing constraints. 4. Offer long-term trial shoe rentals before purchase.
External	Interest (active)	1. Begin by actively gathering consumer insights. 2. Maintain an avid interest in understanding every detail of their shoes. 3. Stay proactive in expanding and deepening knowledge about footwear.		
		1. Engage with running communities on platforms like Instagram to promote the joys of running. 2. Connect with diverse communities beyond Adidas runners to gather valuable early-stage feedback.	1. Observe consumer interactions with shoes on a table to assess interest and understanding. 2. Expand the selection of competitor shoes available for extended wear testing. 3. Implement voice recordings to create a friendly and conversational experience. 4. Enhance interaction interfaces to enable expressive feedback, such as drawing on images.	1. Embrace future tech for long-term footwear development. 2. Keep testers engaged with newsletters and updates. 3. Educate consumers on manufacturing constraints and feedback feasibility. 4. Create a dedicated tester's corner for an engaging runner community. 5. Build consumer confidence by highlighting benefits. 6. Simplify and share professional knowledge accessibly.
Internal	Attitude (backer)	1. Prioritise listening to consumers from the outset, gathering valuable insights. 2. Recognize the importance of understanding the needs of target consumers, including non-elite athletes.	1. Acknowledge the significance of abundant data for making compelling claims. 2. Express a strong desire to collect more consumer insights to positively influence the entire product creation process, both at the beginning and throughout.	
		1. Advocate for building a network of coaches and athletes linked to a university institution. 2. Foster partnerships with marathon organisations to enhance engagement. 3. Highlight the proactive involvement of the design team in Adidas runner sessions. 4. Support co-creation workshops that encourage thinking beyond the next season.	1. Encourage interactive shoe displays to observe consumer discussions and preferences. 2. Promote co-creation with tools and education for diverse combinations and materials. 3. Promote a collaborative attitude where everyone contributes small ideas to create a bigger picture without imposing boundaries.	1. Raised concerns about brand reputation if consumers can alter too many components. 2. Proposed a testers' corner or cheering zone to create a positive and engaging event atmosphere.

Table 4.5 Stakeholder analysis canvas result - Engagement activities for future innovation of Adizero footwear FFE

design, challenging conventional methods and connecting with athletes. Developers seek innovation, deeper expertise, and enriched pre-development insights, promoting a blend of creativity, risk management, and continuous innovation both internally and externally. Target consumers are approached with extensive internal insights gathering and innovative external engagement strategies like co-creation sessions, prioritizing education, collaboration, and an open-minded approach to foster innovation and maintain a positive brand environment.

“All stakeholders align in fostering positive relations and environments, with a shared focus on consumer engagement and innovative advancement.”

4.2.3 Pilot Testing Session Result

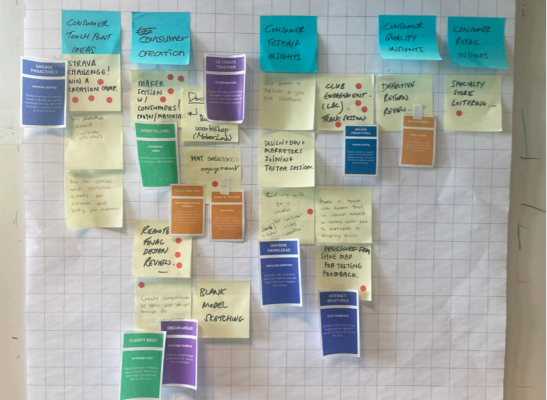


Fig 4.16 Ideas board with superpower card analysis

The session outcome

After a pilot testing session, three ideas were chosen to be further developed:

- Idea 1:** Use an app or Instagram to engage target consumers in a creation camp or field work with Adidas elite athletes.
- Idea 2:** Create a consumer creation engagement plan that includes maker sessions with consumers and documentaries for storytelling.
- Idea 3:** Expand consumer tester pools through

a Running Club Engagement (LAC) track session.

The initial process designs serve as reference material for the upcoming co-creation workshop, as illustrated in Figure 4.17.

Participants’ Feedback

- 1. Need more time to generate ideas and finalise concept
- 2. Need another workshop to map out the stakeholder activities on the design roadmap
- 3. Voting stage goes before the superpower card stage. Desirability goes first then feasibility. Hold the Ideation workshop, then concept detail worksho.
- 3. The concept ideation section is a bit hard for participants to elaborate their ideas.
- 4. Participants recommend having a more detailed card set for the second workshop.

Key Findings

- 1. **‘FFE Deliverable & Tools Poster’** proves valuable in stimulating participants’ brainstorming by encouraging connections between various tools across different phases.
- 2. **‘Superpower Card Set’** went untouched by participants during the pilot testing session. Nevertheless, after the session, I employed these cards as a tool to evaluate the ideas (see Fig 4.16). Interestingly, the idea that received the most red dot votes (Idea 2) was also the one paired with the most superpower cards. This suggests that when participants cast red dot votes, they are unconsciously considering which ideas will effectively engage their efforts.

4.3 Discussion

Limitation for the pilot testing

- 1. Finding external stakeholders with race shoe testing experience in sportswear companies is

- difficult.
- 2. The internal booklet helps in interviews but doesn’t always align perfectly with character selection.
- 3. The external booklet focuses solely on footwear testing, needing changes if future research covers different activities.

4.4 Chapter Conclusion

In this chapter, the stakeholder identification results unveiled a shared belief among internal stakeholders that current target consumer involvement in the innovation process is inadequate, referring to consumers as a “Sleeping Giant.” Internal stakeholders exhibit variances in self-identification, reflecting situational and personal team dynamics, but mainly identifying as debaters or defenders. The subsequent stakeholder analysis canvas highlighted differentiated focal points across marketers, designers, developers, and target consumers, revealing that each group has unique internal and external priorities and strategies to drive innovation and improve brand

growth, with a mutual emphasis on fostering positive relations and environments. Post the pilot testing session, participants preferred ideas integrating technology and community engagement, such as app-based creation camps, consumer creation engagement plans with maker sessions, and expanding consumer tester pools.

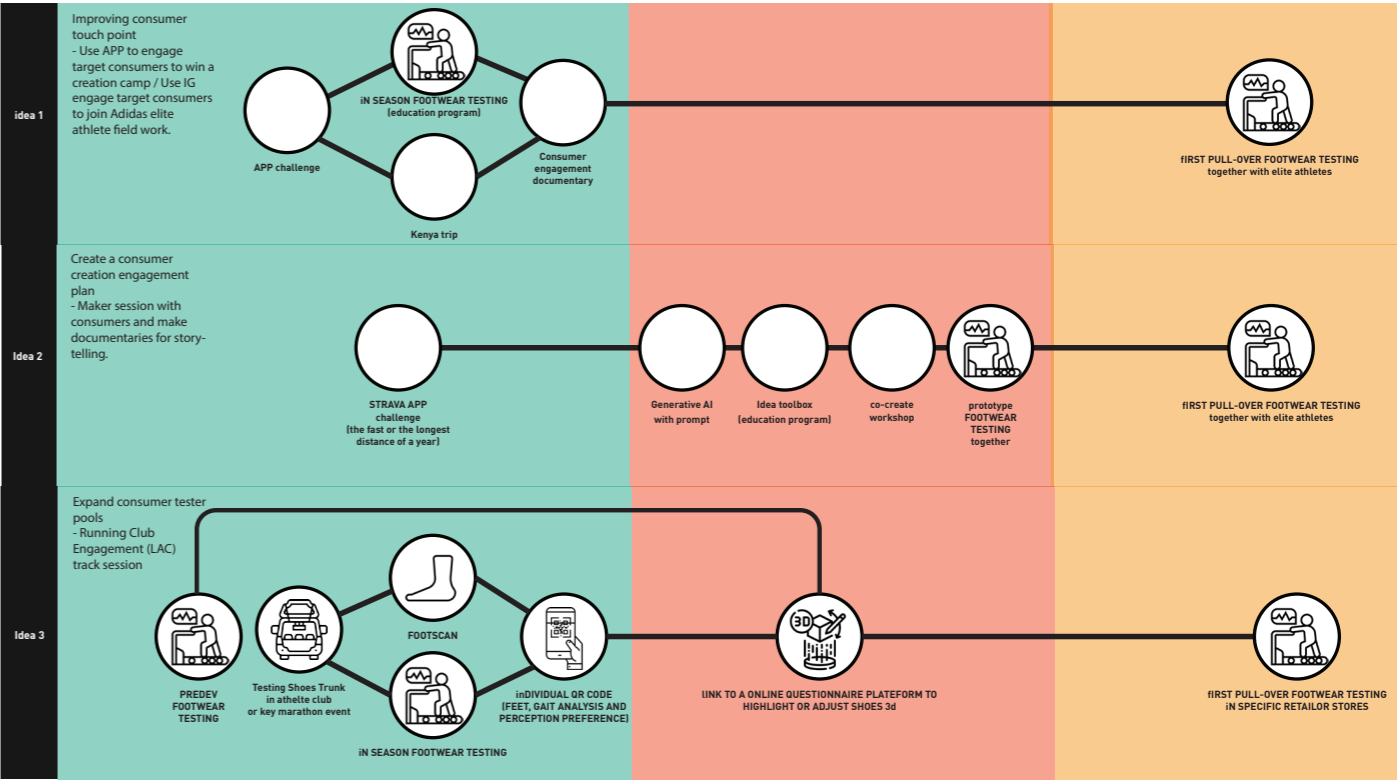


Fig 4.17 Pilot testing session top 3 ideas

5 PROCESS CONCEPT DESIGN & ITERATION

- 5.1 Design Focus
- 5.2 Initial Concept Design
- 5.3 Concept Iteration
- 5.4 Discussion
- 5.5 Chapter Conclusions

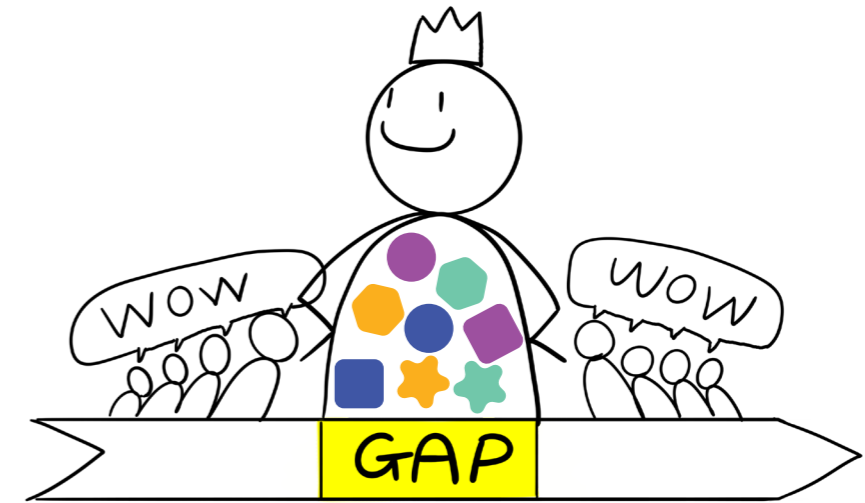


Fig 5.1 New Process Concept Design & Iteration Chapter Illustration

5.1 Design Focus

Goal

Develop an innovative engagement approach to incorporate the target consumer in the Fuzzy Front-End (FFE) process for the Adizero footwear.

Focus

1. Involvement of Target Consumer: Actively involve the target consumer in brainstorming and footwear assessment stages.
2. Enhancement of Creativity and Concepts: Optimize and cultivate inspiration and thoughts throughout the design stage.
3. Establishment of Intuitive Interaction: Formulate a natural and instinctive interaction to facilitate target consumer involvement in FFE.

Consequently, this section will detail the hosting of a co-creation workshop, founded on the structure of a prior pilot test but with refined guiding tools. Subsequent to the workshop, two design iterations will be carried out for comprehensive concept exploration based on the insights gathered during the workshop.

5.2.1 Initial co-creation

Overview

This co-creation workshop is based on the three ideas from the pilot testing. Before the co-creation workshop, the guidance tools - "FFE deliverable & tools Poster" and "superpower element stickers" have been shared with participants. Within the guidance tools, participants can co-create the concept details much easier than the pilot testing.

5.2 Initial Concept Design

A successful approach to developing a new strategy that encompasses the needs of multiple stakeholders is to conduct a co-creation workshop with them.

Observing their reactions and understanding their needs during such interactive sessions enables more precise insight-gathering and alignment towards a unified design goal.



Fig 5.2 Co-creation workshop on 22th August

Objectives

This workshop focused on how to use the guidance tools to co-create with multiple stakeholders for a new engagement strategy in Adizero FFE. The key challenge for them to develop ideas is - “How to make ADIZERO Target consumers more engaged in CR0 phase?”

Participants

Participants are the same group from the pilot testing session - 6 people
1 Marketing Manager,1 Designer,1 Development Director, 1 Development Senior Manager,1 Developer and 1 Target consumer.

Setting

The workshop was set up in Adidas HQ MakerLab. The space is an open working space for all employees to create their design and hold workshop. I reserve a huge table to display FFE process poster and provided pens, markers and stickers for ideas free drawing on the poster.

Workshop Structure

- Section 1: Workshop Introduction - 2 mins
- Section 2: Tools intro - 3 mins
- Section 3: Practise tool for ideation with a FFE process map- 5 mins
- Section 4: Detailed ideation- 30 mins
- Section 5: Feedback- 5 mins

Preparation and materials

- This co-creation workshop was facilitated with the following materials:
- Post-It’s
 - A wide range of coloured fine liners and markers
 - A small design brief on A4
 - A **“FFE Deliverable & Tools Poster”** Size: 310*180 cm paper at MakerLab. One poster was on the MakerLab table, and the other was posted on a whiteboard for reference.
 - A set of **“stakeholder superpower element stickers”**, each stakeholder has a specific sticker set
- It seems the last two items aren’t readily available at Adidas, hence the ensuing sections

will articulate the preparation process for these particular materials.

A. FFE Deliverable & Tools Poster

Incorporating the innovation activities that were mentioned both in the informal interviews (Chapter 2.1) and the formal interviews (Chapter 4.1), the author meticulously charted out the deliverables and the various tools and methods attributed to each stakeholder’s responsibilities within the Adizero CR0 Phase fuzzy front-end process timeline, as visually represented in Figure 2.9. This representation ultimately culminated in the final outcome, vividly illustrated in Figure 5.7. Furthermore, it’s worth noting that this poster was initially employed during a pilot testing session, where it garnered highly positive feedback from participants. They highlight it trigger them to links tools in this figure. Given its effectiveness and utility, the author has opted to continue using it for the upcoming co-creation workshop.



F5.3 Marketer discusses engagement need with a runner



F5.4 Author explains how to use stickers



F5.5 All participants co-create the new FFE process

F5.7 The Current Deliverable & Tools in Adizero Footwear Fuzzy Front-End

	EXPLORATION PHASE										DESIGN PHASE										DEVELOPMENT PHASE									
Owner ship	Developer	All team members	Developer	Developer	Marketer						Designer					Designer					Designer & Developer			All team members		Testing team & Developer	Tester & Testing team & Developer		Developer	
Deliver able	Simulation	Research	Competi tor analysis	Sustaini bility	Focus group Interview report	Media insight report	Online consumer survey	Story telling	Competi tor market analysis	Market size analysis	Ideation	Sketch			Design Prototype					Tech Pack	Pattern Files	Functional shoes	Confirm documentation		1st Pull over sample	Shoes Perform mance testing	User Perception testing (DET)	Fit testing	Athlete-driven testing	Long-distance testing report
Tools / Methods	2D/3D scanning	Academic research	Reverse engineer ing	ESG report	Online Video call	Internal digital analyst report	Survey Monkey	Power Point	Category retailer report	Internal Sales report	Miro	Laptop	Photo shop	IPad	Phone	conceptal hand-made shoes	Softlast	3D scan	3D modeling	Digital Fabrica tion	Illustrator	Javero	Pattern	PDF	Power Point	Partner sample room	1st Pull over sample		Kenya field work	
		Patent research	Machani cal testing	Sustani bility material research	Semi-structure interview guideline	External digital analyst report		Video		External market sales report	Image board	Illustrator		Procreate			Mash-up	Polycam	Rhino	3D Print	Material Map	Pattern making	Confirmed Material					long-distance wearing test		
		Archive Review	Biomech anical testing															Grass hopper		Construc -tion manu -facturing dtail		Offline Communi cation								
		Material Develop ment	Finished goods testing																	Textile detail explain		Trial iteration								
		Tier 2 recieve package																												

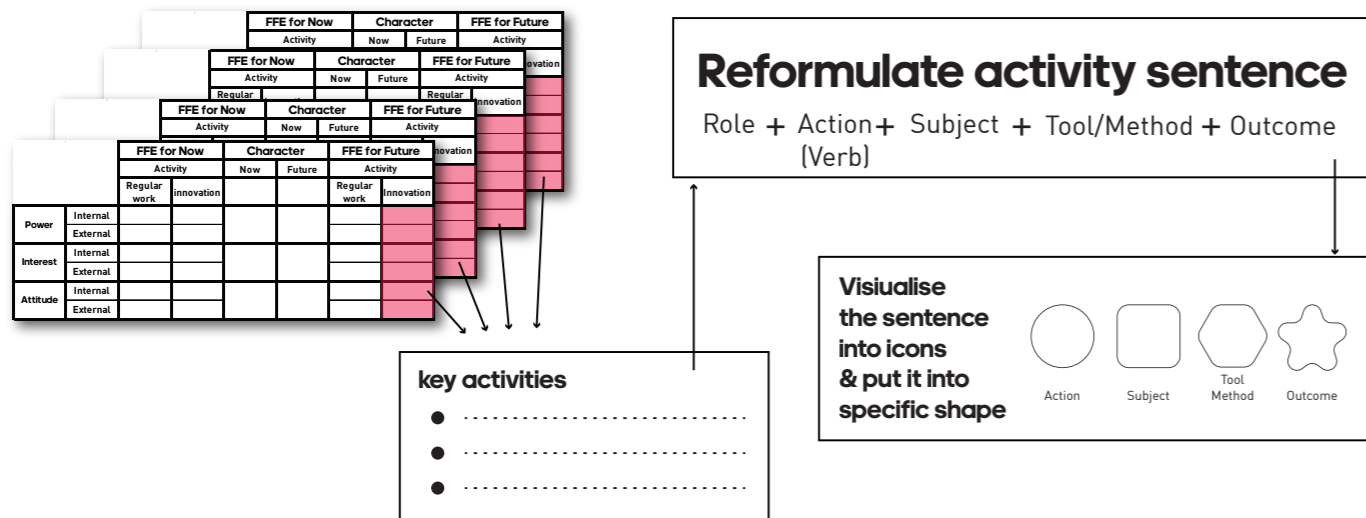


Fig 5.8 The Process to transfer data from Stakeholder analysis canvas result to superpower elements

Key Role	action	Subject	By tool/ method	outcome
Target consumer	Connect	Footwear testing	Registration channel	Running APP
			Local Athletic Club	
			Marathon Events	
			Continuous updating consumer journey	Newsletter, timeline or email/sms notification
	Learn	Sports science	Morphological chart	Education toolbox
			Material	Material Toolbox
	Envision	Future concept	Product Journey mapping	Visualisation about footwear life cycle
			Trend foresight	Consumer footwear expectation
	Engage	Other consumer	IG/FB/TikTok...	Photo/Video
			Marathon event feedback collection	Tester corner to share their experience
	Brainstorm	Future concept	Abandon sample shoes component	Reconstructed prototype
			Prompt	Futuristic 2D rendering
	Co-creation	Design	Model image details	Stable diffusion
				Multiple detailed ideas under same construction
			MakerSight	Trend reference
			Design engagement plan	Local region design tournament
			Prototype toolbox	Storytelling
			Generative AI	Ideas
Developer	Align	Market trend	Power BI	Business Insight
			Power BI	Testing data tracking
			Machine Learning model	Target consumer preference
	Analyse	Running economy factor	Morphological chart	Deconstruction options
			Harris Profile	Strength/weaknesses of concepts
			Weighted objective	Best concept
			FEA simulation	3D model
	Manage	expectation/ri sk	VR evaluation system	
			C-box	Innovation & feasibility evaluation
			Legal check	Legal guideline
	Estimate	Footwear cost	World Athletics regulation	
			Excel	
Designer	co-create	Target consumer	MarketSight	Trend reference
			Prototype toolbox	Storytelling
			Generative AI	Image board
			Prototype toolbox	Storytelling
			Generative AI	Image board
			Prototype toolbox	Ideas
	Align	Market trend	Power BI	Business Insight
			MarketSight	Design guideline
			Development Toolbox	
			Sports Science Toolbox	Visual guideline
	Prototype	Upper	Runner observation	Observation Video
			Shoes making education kit	Mass Production Video
			Soft Last toolbox	Hand-made prototype
			Heat press toolbox	
	Brainstorm	Future concept	3D Printer	Outsole detail pattern
			Hand sculpt foams	Soft Midsole
			Abandon sample shoes component	Rough midsole shape
			Reconstructed prototype	
Marketer	collect	Athletes	Experience interview	Consumer Insight
			Experience video	
			Online running community	Power BI
			Trend report	Market trend
	link	Designer	Storytelling	Market size
			storyboarding	Market trend
			Triad team	MakerSight
			Legal document	Design preference
	integrate	Target consumer	Storyboard	
			Midjourney	Storyboard
			User Engagement planning	Market trend
			Running APP	Guideline
	Avoid	Competitor	Local Athletic Club	
			Marathon Events	
			AI ML model	Questionnaire text feedback
			3D model in VR/AR	Questionnaire visual feedback
	Explore	Market trend	2D view on MakerSight	
			Storytelling	Direction/Guideline
			Patent check	Direction/Legal patent report
			Power BI	Market size
	co-create	Elite athlete	Trend report	Consumer needs
			Exhibition	Ideas
			Photograph / Illustrator	Ideas
			Prototype toolbox	Storytelling
	co-create	Target consumer	Generative AI	Image board
			MarketSight	Trend reference
			Prototype toolbox	Storytelling
			Generative AI	Image board
	Align	Performance	Power BI	Business Insight
			MarketSight	Design guideline
			Development Toolbox	
			Sports Science Toolbox	Visual guideline
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			Prototype toolbox	Storytelling
			Generative AI	Image board
			Prototype toolbox	Ideas
	Align	Market trend	Power BI	Business Insight
			MarketSight	Design guideline
			Development Toolbox	
			Sports Science Toolbox	Visual guideline
	Prototype	Manufacture	Runner observation	Observation Video
			Shoes making education kit	

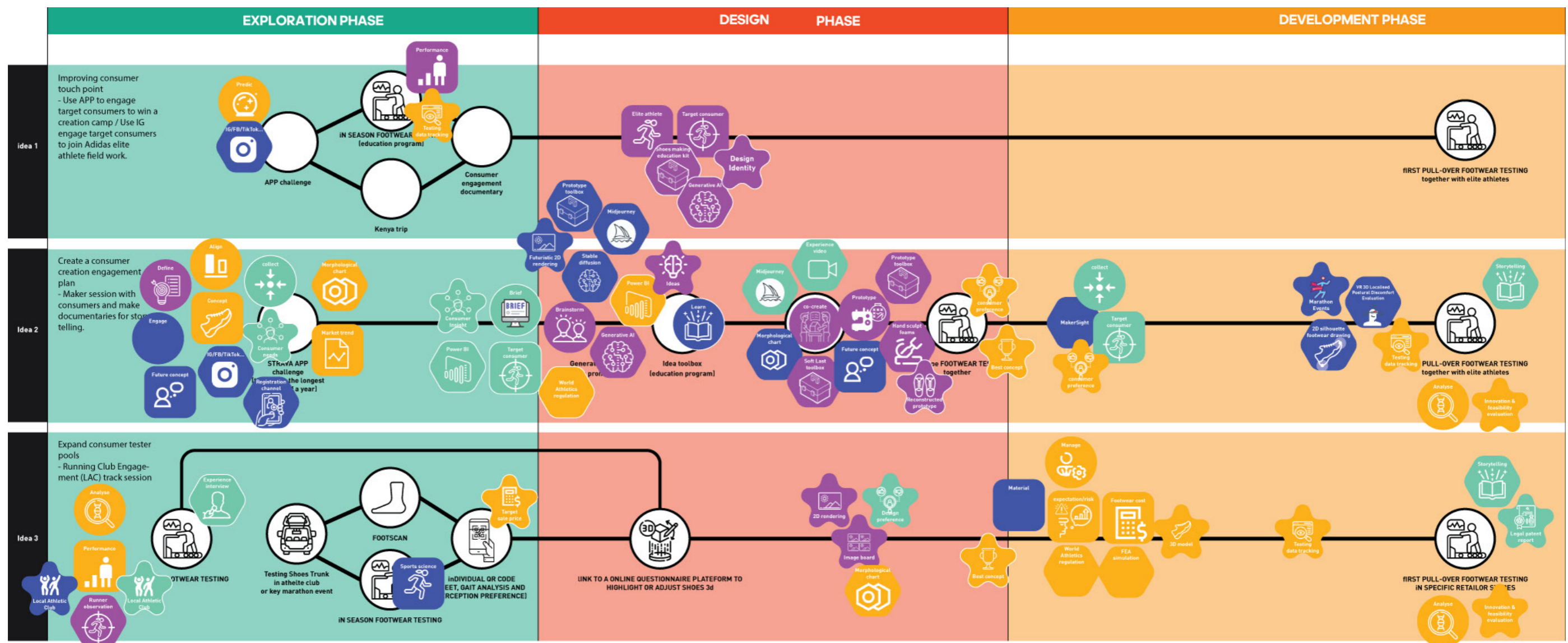


Fig 5.10 Co-Creation Result - Three Concepts for a New Stakeholder Engagement Strategy

Workshop outcome

The outcomes for this co-creation workshop are three new CR0 process designs (See Fig 5.10).

Idea 1 - Improving consumer touch point

Leverage a Running App to captivate target consumers by offering a chance to win a creation camp experience and utilize Instagram to engage consumers to participate in Adidas elite athlete fieldwork.

Idea 2 - Create a target consumer creation engagement plan

Organize maker sessions with consumers and produce documentaries for marketing

storytelling to create an engaging and interactive experience.

Idea 3 - Expand consumer tester pools

Integrate running local athletic club (LAC) engagement through track sessions to expand and diversify consumer interaction and feedback avenues.

Findings

1. Clarified Stakeholder Engagement through Color-Coded Stickers

This point summarizes the insight gained regarding the extensive stakeholder involvement in Idea 2, determined by the color representation of each stakeholder

on the stickers. It led to a strategic shift in focus towards developing and refining Idea 2 for enhanced stakeholder engagement in the subsequent design iterations.

2. Enthusiasm for Sticker-Based Brainstorming

The participants expressed a significant preference for using stickers during the workshop, likening the experience to a boardgame which they found enjoyable and engaging. They emphasized that this method spurred greater interaction compared to traditional workshop brainstorming, especially the aspect of exchanging stickers to generate

ideas, which was seen as particularly stimulating and interactive.

3. Design Phase Duration and Integration of Generative AI

This point outlines the team's consensus on the limitations of the 4-week design phase and the potential benefits of utilizing generative AI for fostering creativity and innovation. It also highlights the current lack of a formalized approach for integrating such advanced tools in the existing design process.

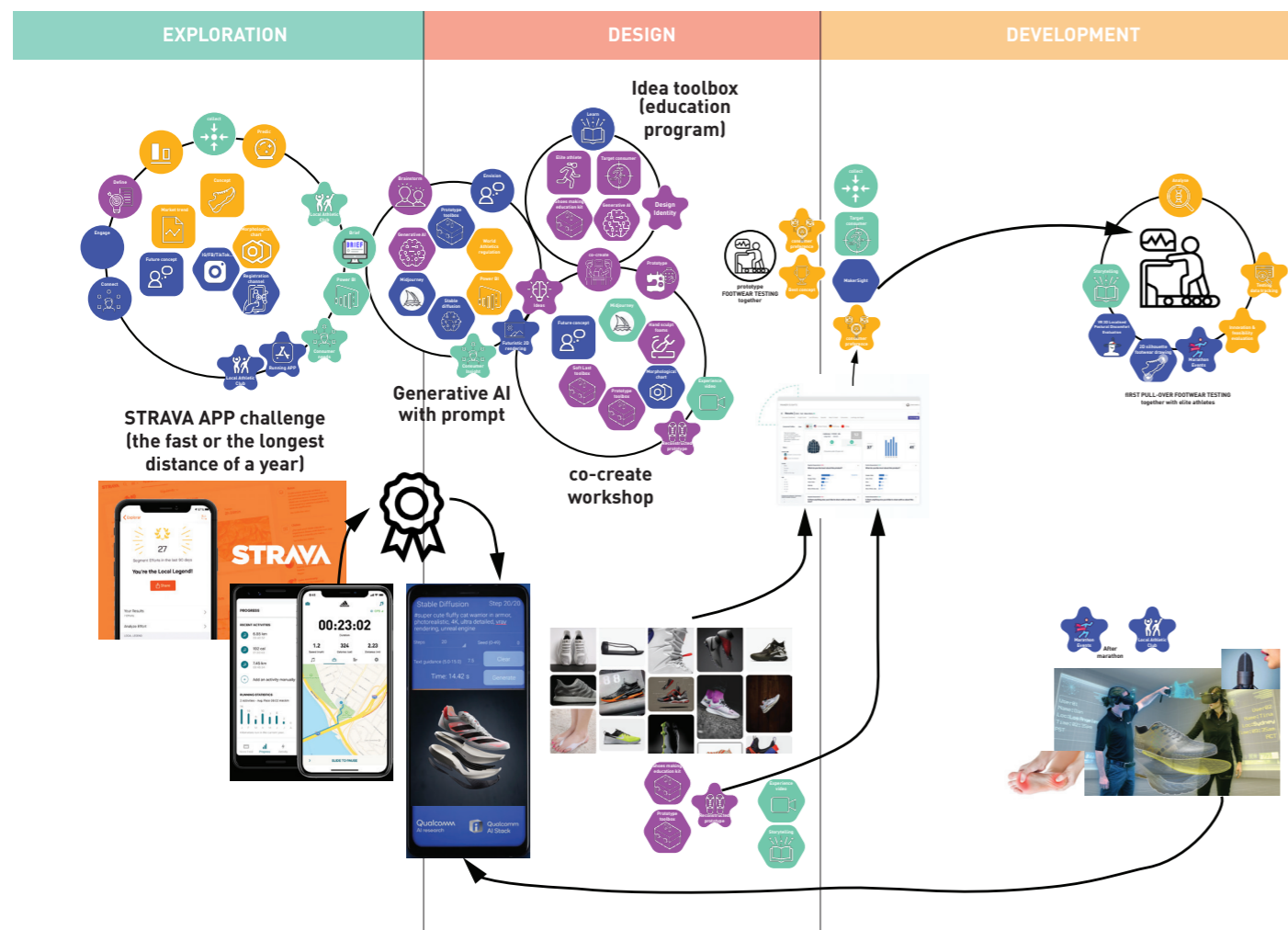


Fig 5.11 The first new strategic design process for Adizero footwear CR0 phase

5.3 Concept iteration

Leveraging insights and reflections derived from the co-creation workshop, I developed an initial design concept illustrated in Figure 5.11, structured in three pivotal phases:

Exploration Phase:

This phase aims to engage high-performance runners in the design process via an app, allowing them to influence Adizero footwear designs after achieving certain running milestones and earning challenge badges, leveraging generative AI to funnel their ideas to the Adizero team.

Design Phase:

The Adizero team extracts inspiration from the contributed ideas, selecting a few for a tangible co-creation workshop where participants are

given shoe-making kits and the marketing team captures the journey for compelling storytelling.

Development Phase:

The focus here is on revolutionizing traditional footwear testing, converting it into a more inclusive digital platform to reach high-performance runners globally.

Second Design Iteration

I refined the concept, visualizing the interactivity between each activity in Figure 5.10 and streamlined the processes in Figure 5.11. A key insight was recognizing the flexibility in the data flow within this innovative strategy, allowing it to be either cyclic or more complex.

Feedback from the Adizero team

1. Emphasized the necessity for improved visualization
2. Enhance comprehension and reader-friendliness
3. Ensure the utmost clarity of this novel engagement strategy

Fig 5.12 Each phase detail activities

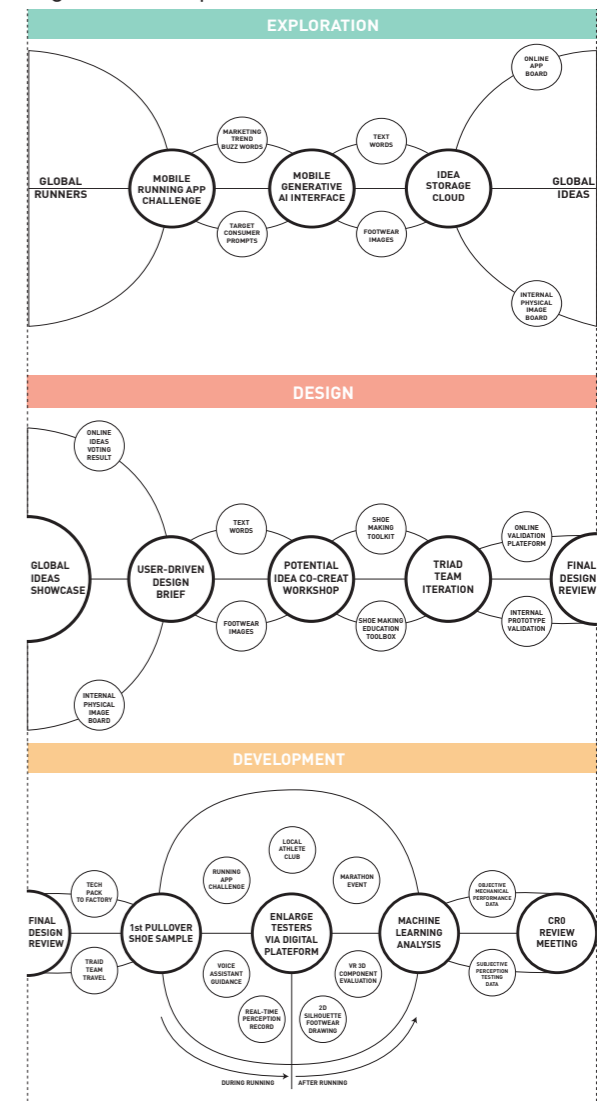
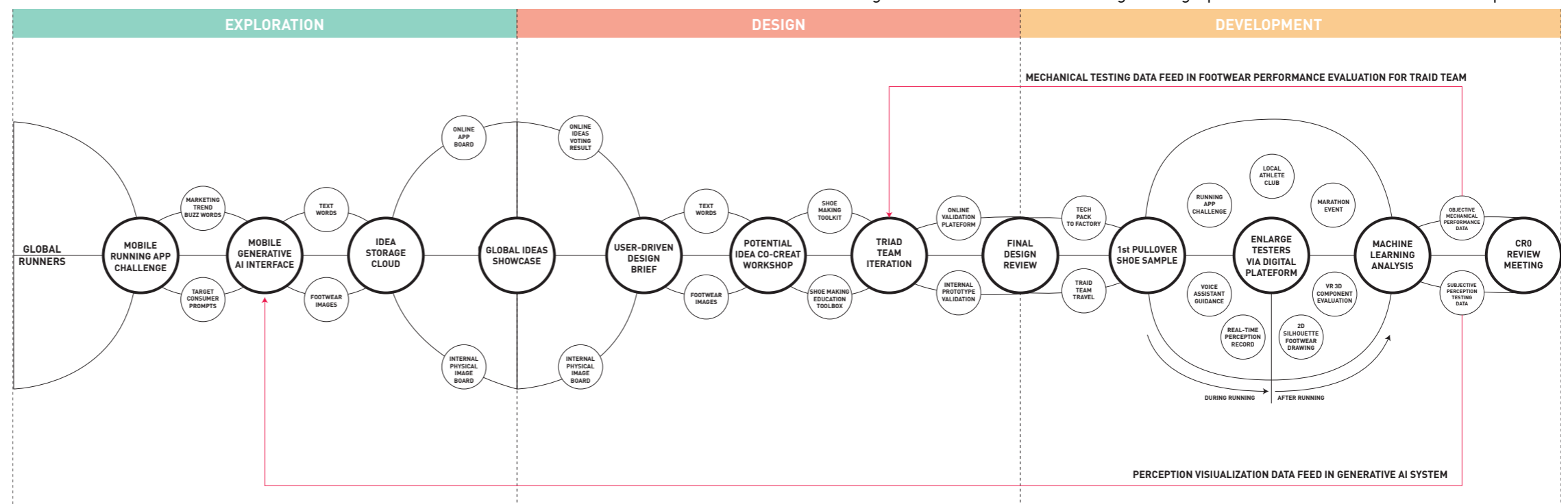


Fig 5.13 The second new strategic design process for Adizero footwear CR0 phase



5.4 Discussion

The reflections and findings derived from the co-creation workshop and subsequent concept iterations revealed several critical insights and implications for design strategy and stakeholder engagement.

A. Transformative Potential of Co-creation Processes:

In the workshop, the Adizero team highlighted the value of the innovative and cohesive approach applied in the pre-workshop preparation, which integrated various tools like a superpower generative booklet, stakeholder analysis canvas, and superpower element stickers. This recognition revealed a transformative opportunity, implying that the co-creation process itself could be refined and structured into a unique framework. Such a framework could offer a systematic method for co-creation, enabling the development of collaborative strategies and involving multiple

stakeholders. This underlines the principle that a process designed for co-creating new concepts can, intriguingly, be conceptualized as a design outcome in itself, providing a structured methodology for collaboration and innovation.

B. Complexity in New Process Design due to Data Flow:

After two rounds of concept iterations, it was discerned that the incorporation of data and tools in the process has generated a degree of flux, with elements oscillating back and forth, particularly after the introduction of the new target consumer engagement in Adizero Footwear's Fuzzy Front-End (FFE) (as visualized in Fig 5.14). This dynamic is not confined to its implications on the target consumer; it also permeates to marketers, designers, and developers engaged in the process. This increased complexity suggests that the realization of the new strategy within

the evolved FFE process would demand meticulous attention and adaptation from the Adizero team. This complexity is primarily caused by the multifaceted data interactions, hinting at the necessity for sophisticated data management and process coordination strategies to navigate the intricate and evolving design landscape.

These insights highlight the need to understand and manage the complex and transformative aspects of creating designs together. They show the importance of a united and flexible approach that is aware of the many interactions within the design world. It's crucial to balance new ideas with clear and adaptable plans to successfully develop design strategies and work with different stakeholders.

5.5 Chapter Conclusions

the pilot testing generated three main ideas that, unexpectedly, could be blended into one coherent engagement strategy after the co-creation workshop. The core of this new approach is to engage stakeholders and share insightful data via a digital platform. However, simplifying the visualisation of the data flow for this new strategy could pose a challenge. After refining the concept with the Adizero teams' input, the final design will focus on providing a user-friendly and visually appealing infographic process.

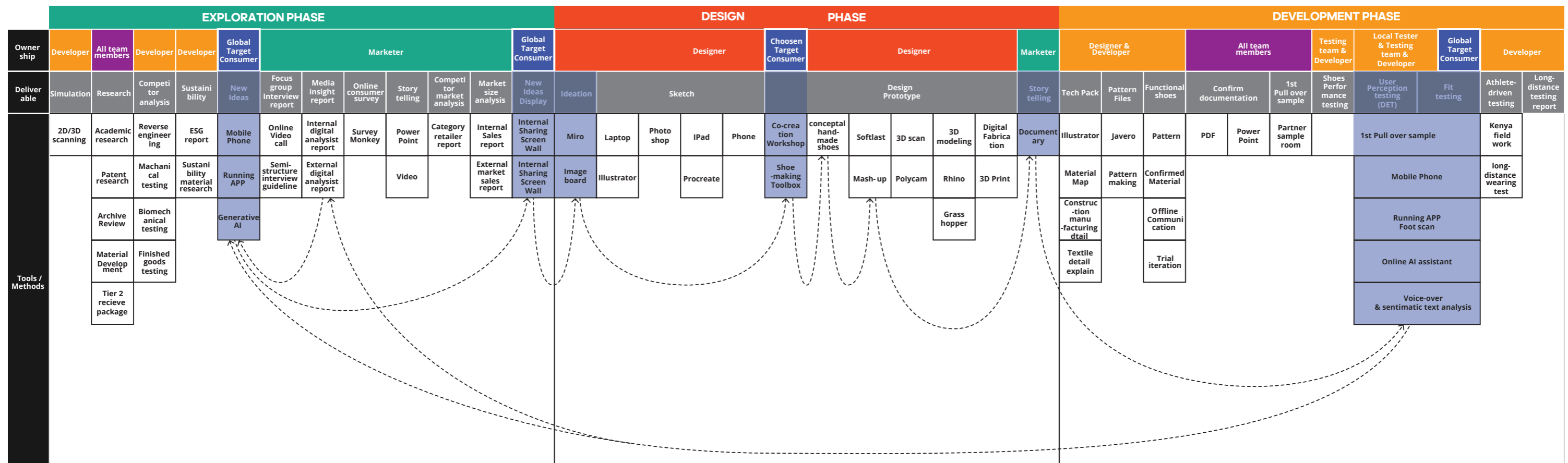


Fig 5.14 The highlight of novel deliverables, tools, methods and connections design process for the future Adizero footwear FFE

6 FINAL STRATEGIC DESIGN

- 6.1 A Conceptual Design Framework for Process Co-creation
- 6.2 A New Engagement Strategy for Adizero Footwear FFE
- 6.3 Design Evaluation

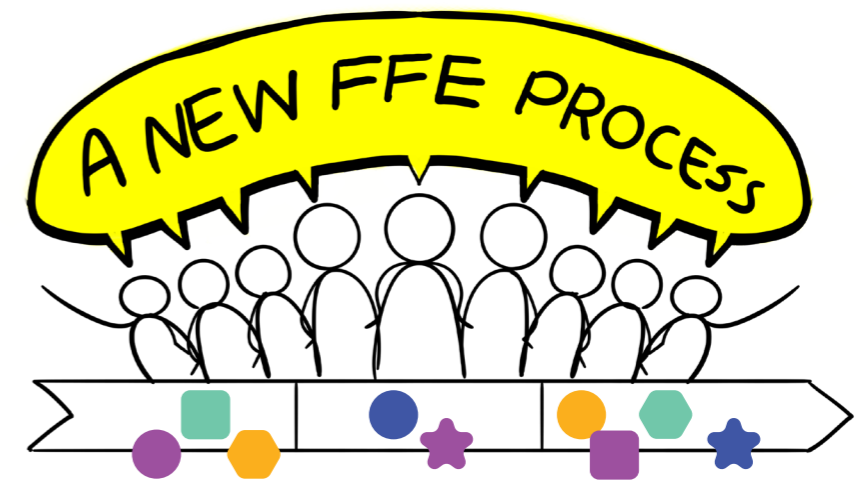


Fig 6.1 Final Strategic Design Chapter Illustration

This chapter offers a deep dive into a new design framework and engagement strategy for Adizero Footwear FFE, backed by a comprehensive evaluation from its core stakeholders. The feedback, while lauding the strategy's innovative approach, also highlights potential hurdles in its successful implementation. The overarching sentiment resonates with cautious optimism, emphasizing the balance between innovation and practicality.

6.1 A Conceptual Design Framework for Process Co-creation

This framework design(Figure 6.2) aptly addresses RQ1 effectively. However, before explaining how this framework facilitates the identification, understanding, and communication with stakeholders, it's pivotal to highlight its unique values compared to other design frameworks.

[1] This framework is specifically designed to enable multiple stakeholders to co-create actionable processes, moving beyond merely generating ideas.

[2] It builds on pre-workshop preparations

with stakeholders for ensuing co-creation workshops, ensuring that co-creation outcomes are practical and actionable for stakeholders.

This conceptual design framework still requires opportunities and time to validate its effectiveness. However, based on the feedback received during the co-creation session in Chapter 5, participants expressed a desire for and positive outlook on the feasibility of implementing this co-creation workflow with different teams in the future.

6.2 A New Engagement Strategy for Adizero Footwear FFE

This new engagement strategy for Adizero Footwear FFE is the design outcome to answer the RQ3.4. Following the design iteration, feedback, and discussions documented in Chapters 5.3 and 5.4, the concluding design is poised to meet two main goals:

- (1) Achieving Visual Clarity
- (2) Facilitating the Visualization of Data Flow.

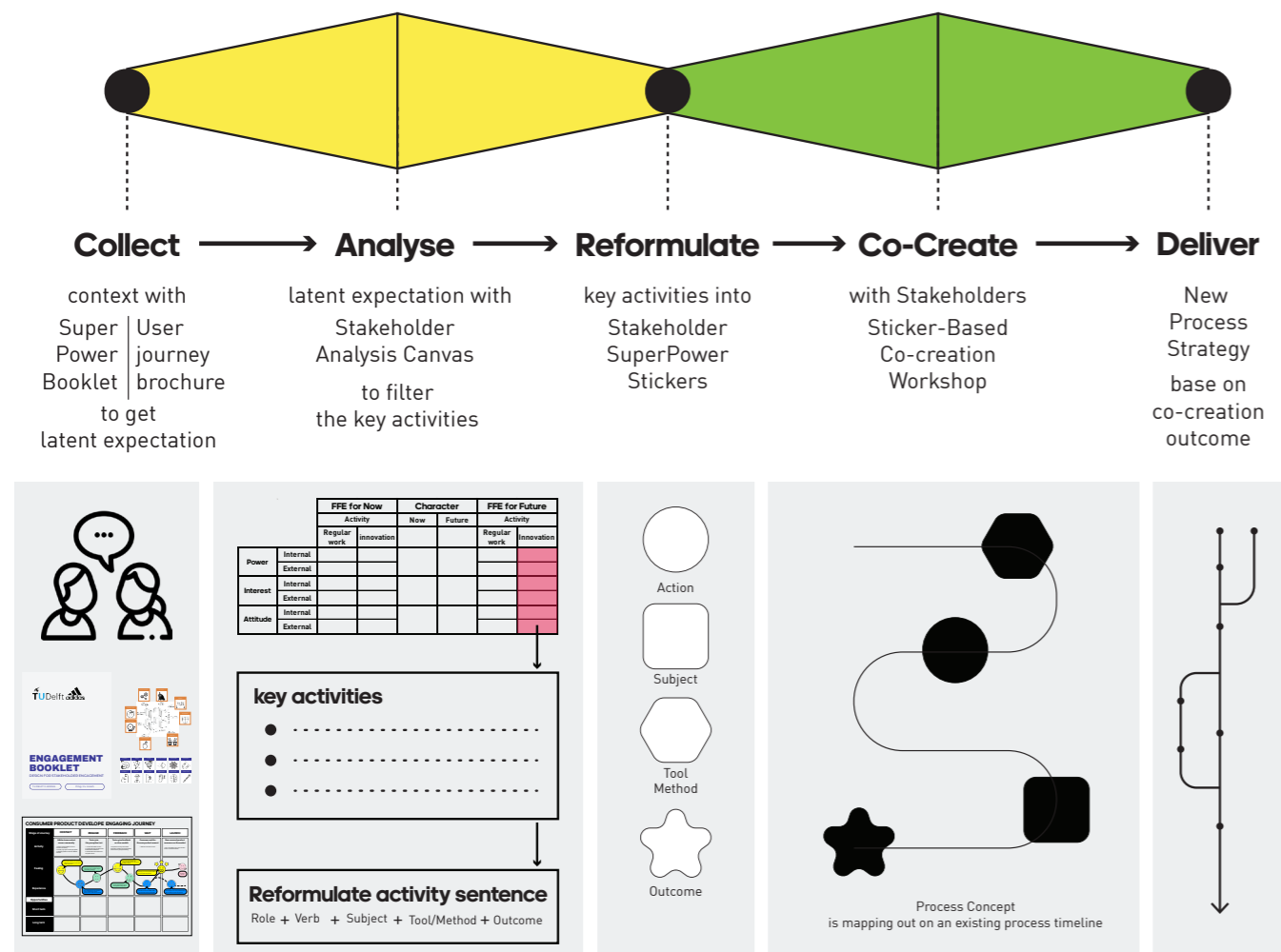


Fig 6.2 A Conceptual Design Framework for Process Design Co-creation

New Innovation Activities in Adiero FFE

First, to realize these objectives, each innovation activity, inclusive of the associated stakeholders, resources, data, and descriptions, will first be represented independently instead of illustrating the process steps in a single graph. The activities for each phase are illustrated consecutively in Figure 6.3, Figure 6.4, and Figure 6.5.

A New Engagement Strategy for Adizero Footwear Fuzzy Front-End(FFE)

Next, with all the future innovation activities' information, author map out those figure in a order to form a new process. Figure 6.6 showcase the revamped process design, clarifying the sequence of steps in the new Fuzzy Front-End.

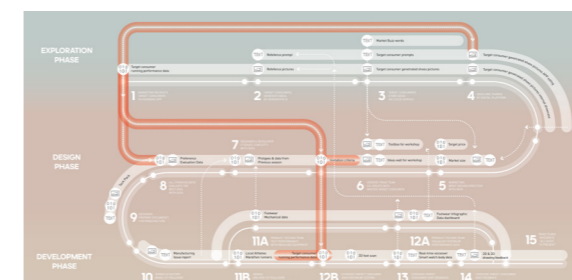
A Data Flow for the New Engagement Strategy for Adizero Footwear FFE

Lastly, to facilitate the intricate navigation through three types of data in this new design, a distinct infographic, illustrating a clear data flow process, is provided in Figure 6.7. However, merely depicting the data flow isn't sufficient to convey meaningful understanding to stakeholders. The author attempts to categorize specific data flow pathways into four distinct 'data tunnels' to fit particular contexts. These four tunnels are:

(Understand Figure 6.3-6.7 before read P.56)

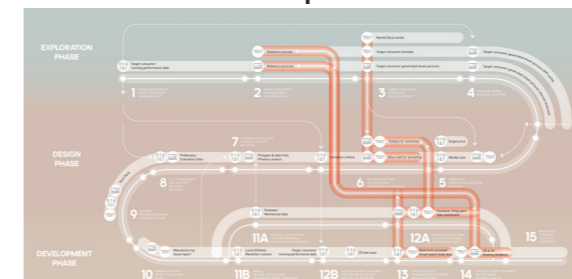
The four data tunnel overview in Figure 6.8

(1) User-Driven Tunnel - Target Consumer Event Engagement Data Tunnel:



Here, high-performance runners using the app can participate in several stages; they can vote on ideas before the design brief in stage 4, potentially join the co-creation workshop in stage 6, vote in the final design review in stage 8, and participate in sample shoes testing in stage 12B. Consequently, target consumers can proactively engage in the Adidas footwear FFE by maintaining high activity levels, rather than waiting to be approached by Adidas employees. This data tunnel leverages running performance numerical data to enable target consumers to have opportunities to join the Adizero FFE.

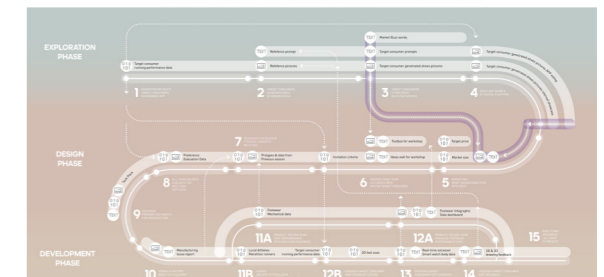
(2) User-driven tunnel - Target consumer cross-season idea loop data tunnel



This tunnel are the key data-enable tunnel to affect footwear design the most. Also the significant data flow to show how user-driven innovation happen in this new engagement strategy. The integration of data feedback from stages 13 and 14 back to the second stage, focusing on refining the design and usability of running shoes across seasons, are the main focus for this data tunnel. The

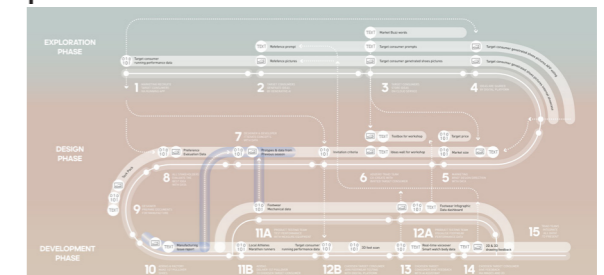
data feedback involves real-time voice-over perceptions and post-run 2D/3D drawings, emphasizing areas like cushioning, energy return, comfort, and identifying pain points during long runs. The purpose is twofold: to enable target consumers to easily generate ideas on in stage 2 based on their or other runners' running experiences and to serve as an educational kit during workshops, offering insights into the appearance, material, and construction affecting performance.

(3) Marketer-driven tunnel - data intergration tunnel:



This data tunnel primarily concentrates on how marketers utilize the new strategy to gather buzz words from consumers and comprehend consumer preferences in footwear design, leveraging designs provided by consumers from stage 3 and preference voting from stage 4.

(4) Developer-driven tunnel - shoes risk & performance monirot tunnel:



This data tunnel primarily allows developers to monitor the performance of in-season shoes and compare the risks of the previous season from manufacturing and testing perspectives.

Fig 6.3 New innovation activities in exploration phase

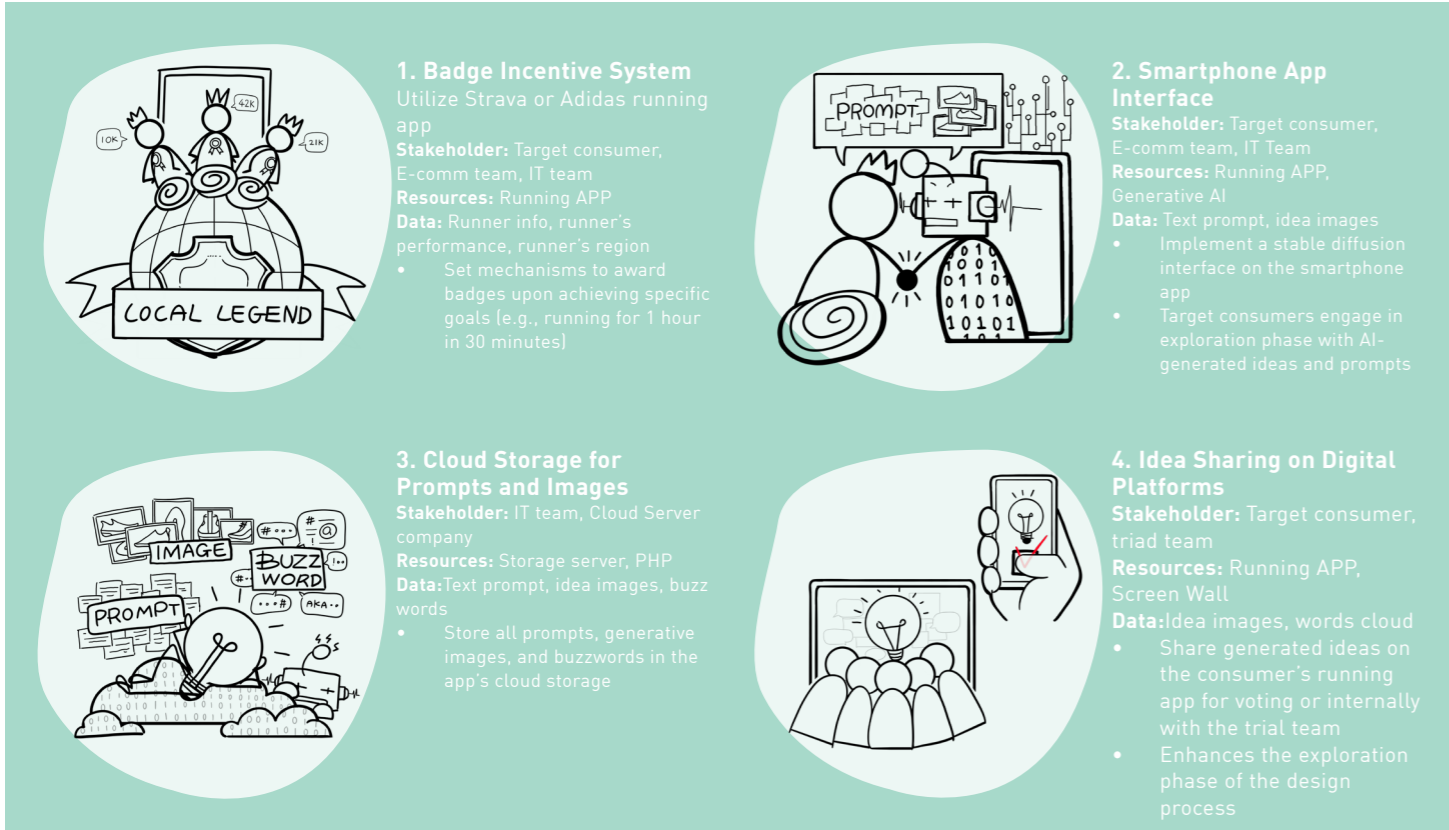


Fig 6.4 New innovation activities in design phase

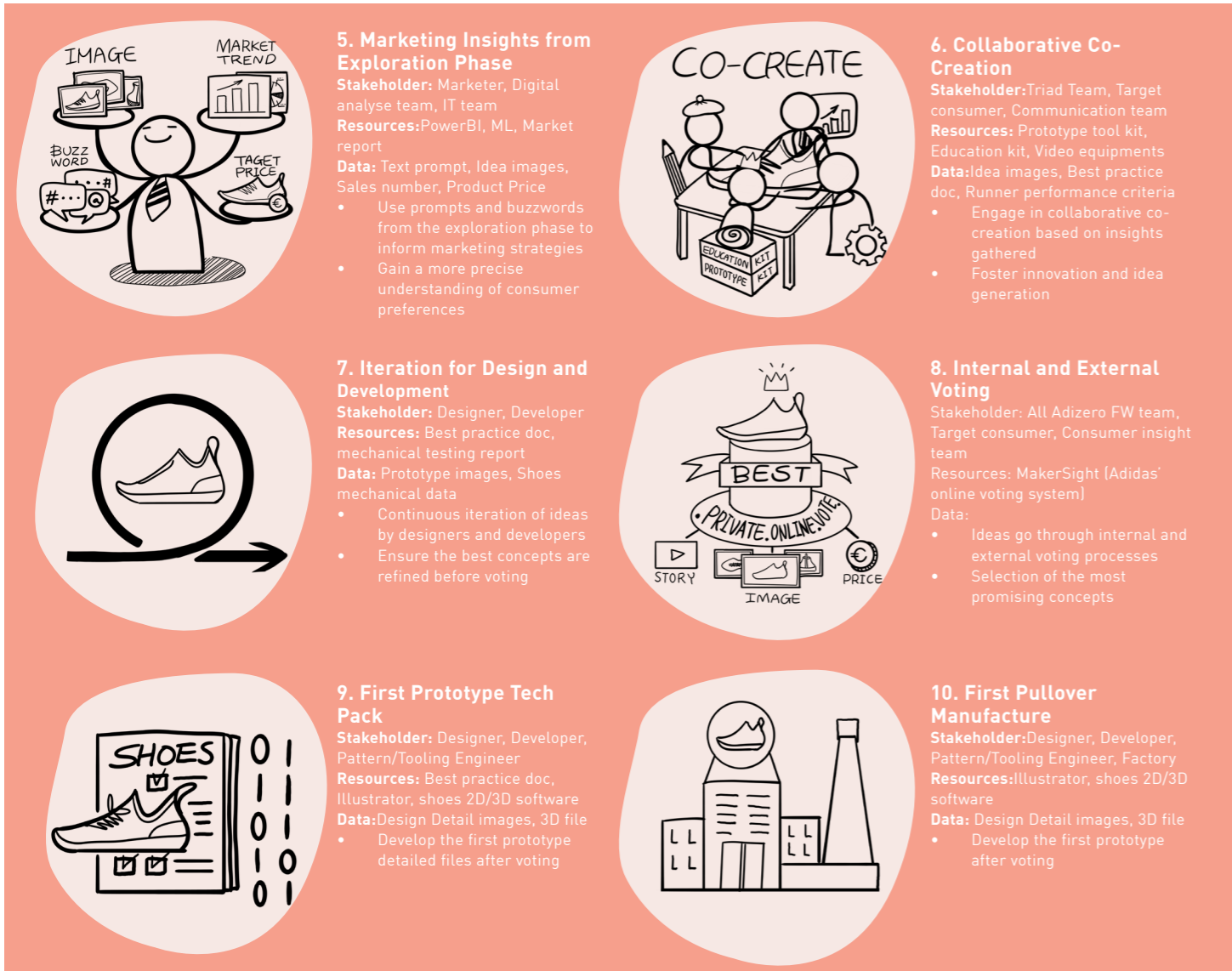
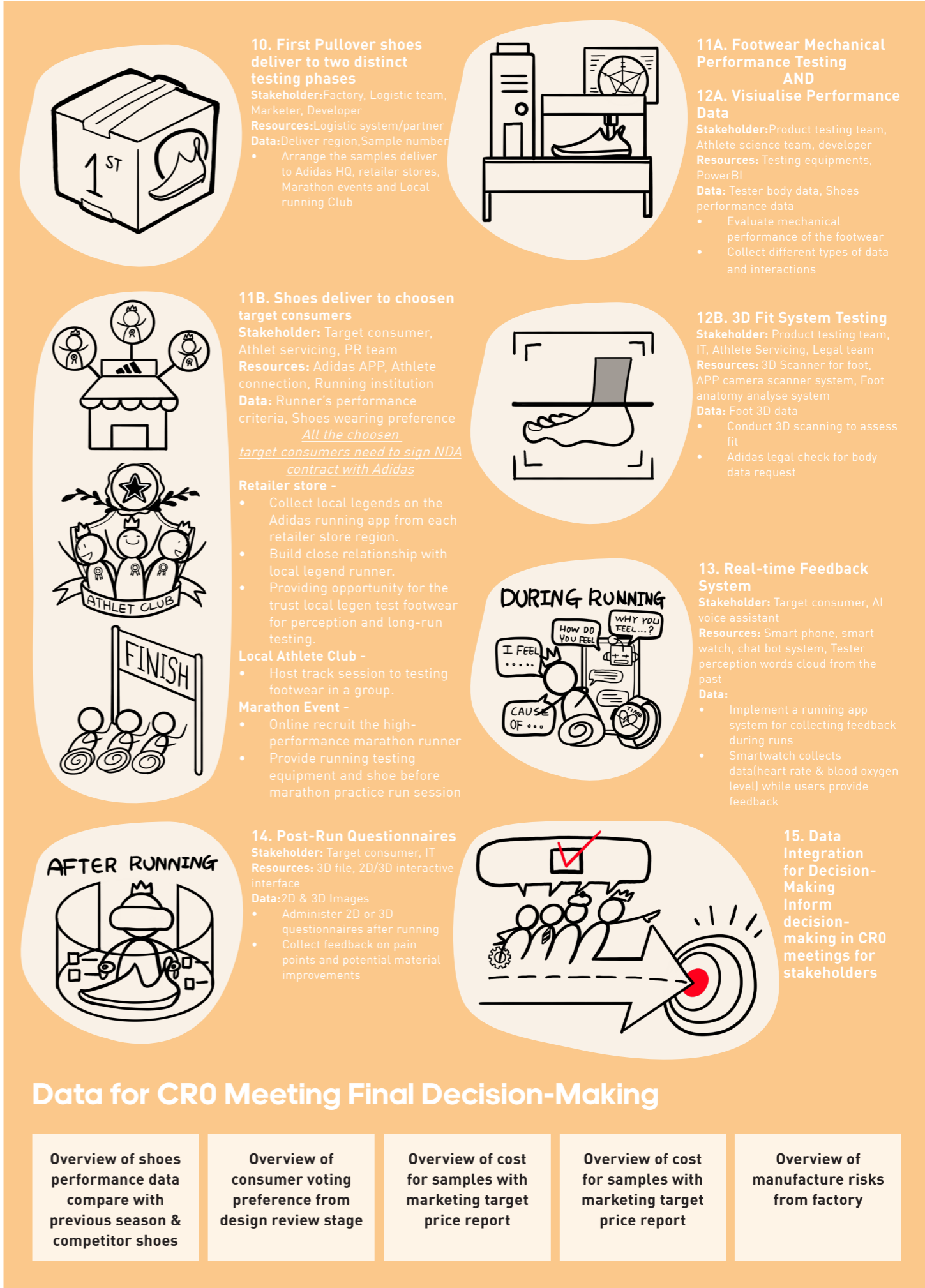


Fig 6.5 New innovation activities in development phase



A NEW ENGAGEMENT STRATEGY FOR FUZZY FRONT-END OF ADIZERO FOOTWEAR

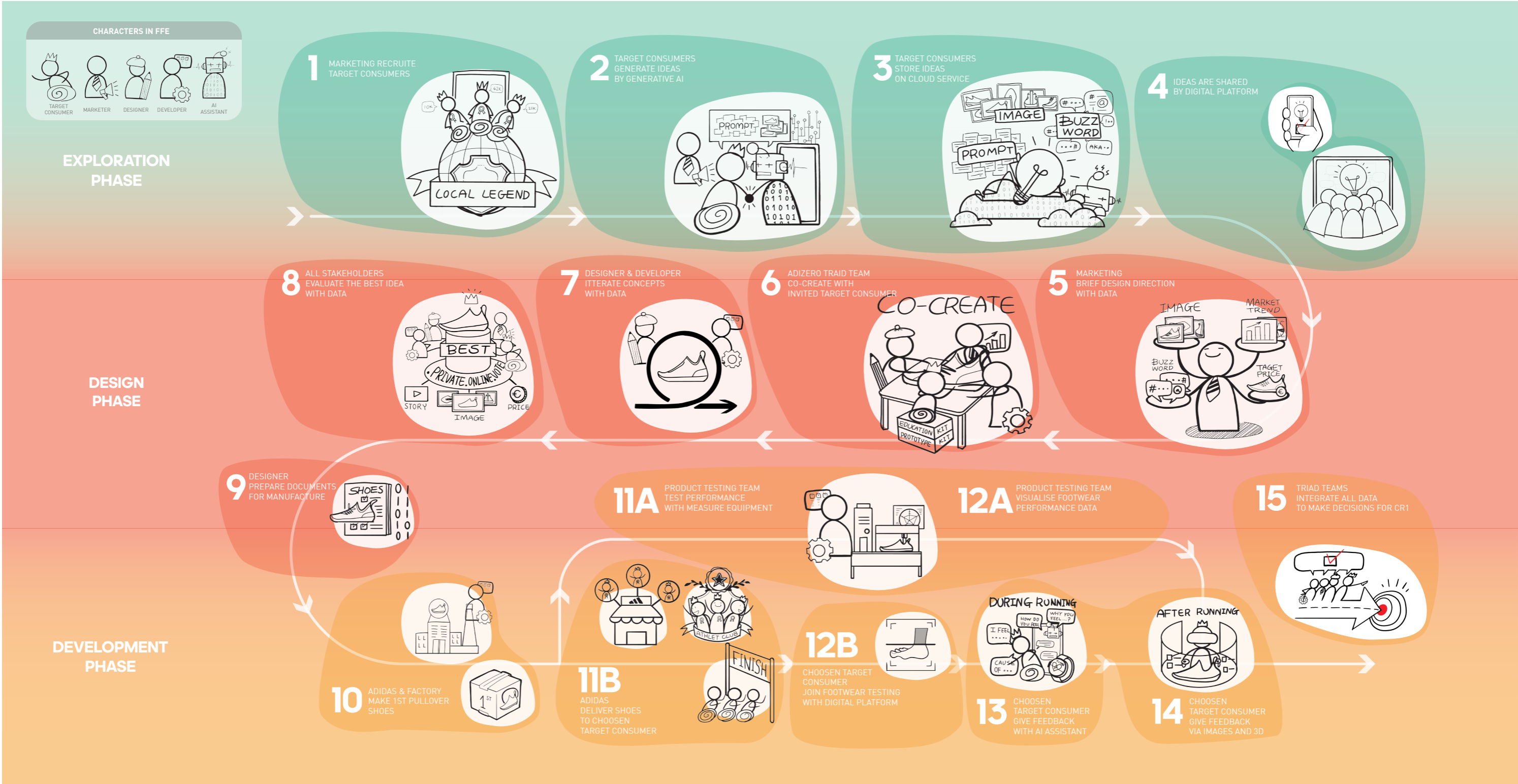


Fig 6.6 A New Engagement Strategy for Adizero Footwear FFE

DATA FLOW FOR THE NEW ENGAGEMENT STRATEGIC DESIGN

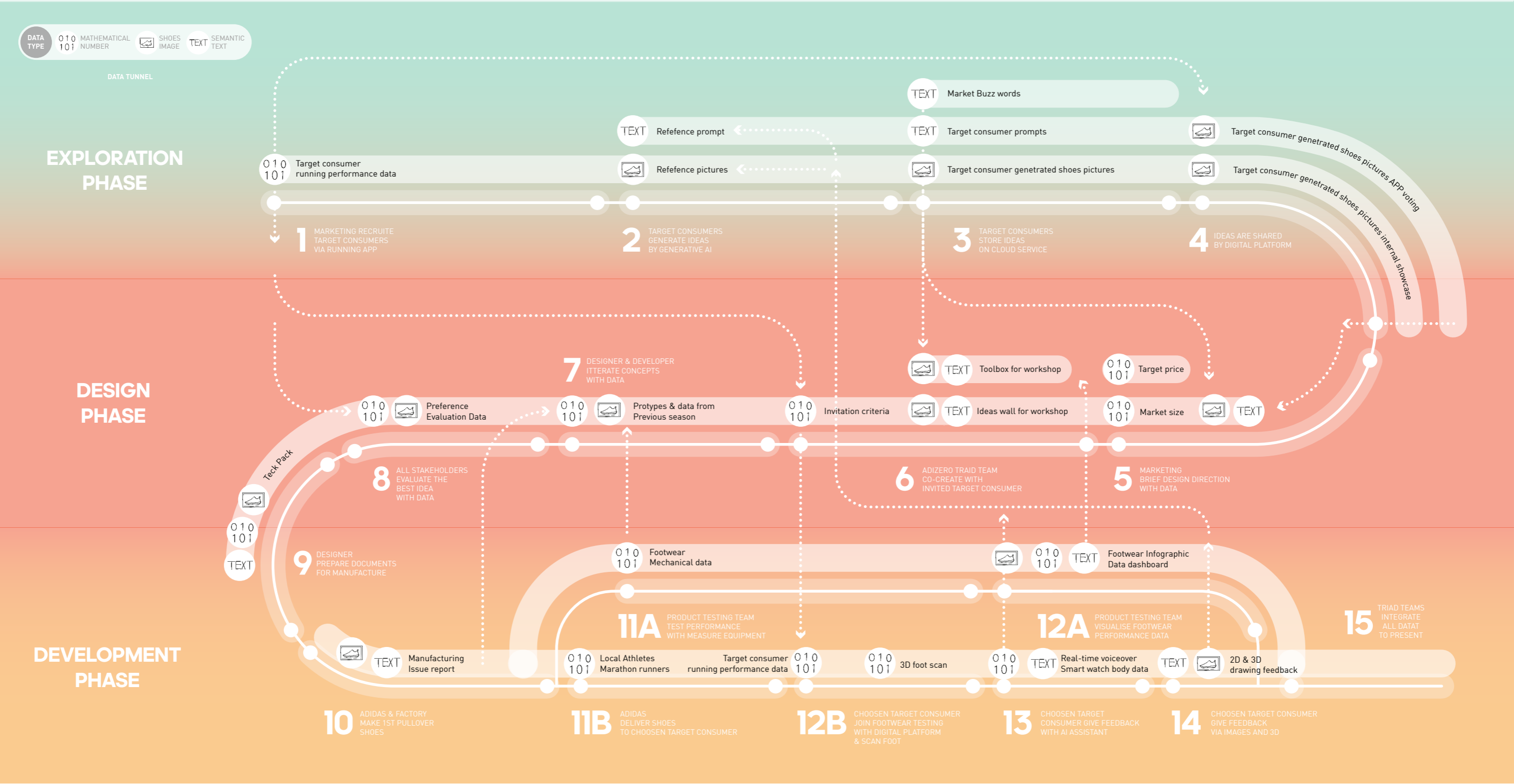


Fig 6.7 A Data Flow for the New Engagement Strategy for Adizero Footwear FFE

FOUR DATA TUNNELS FOR SPECIFIC PURPOSE

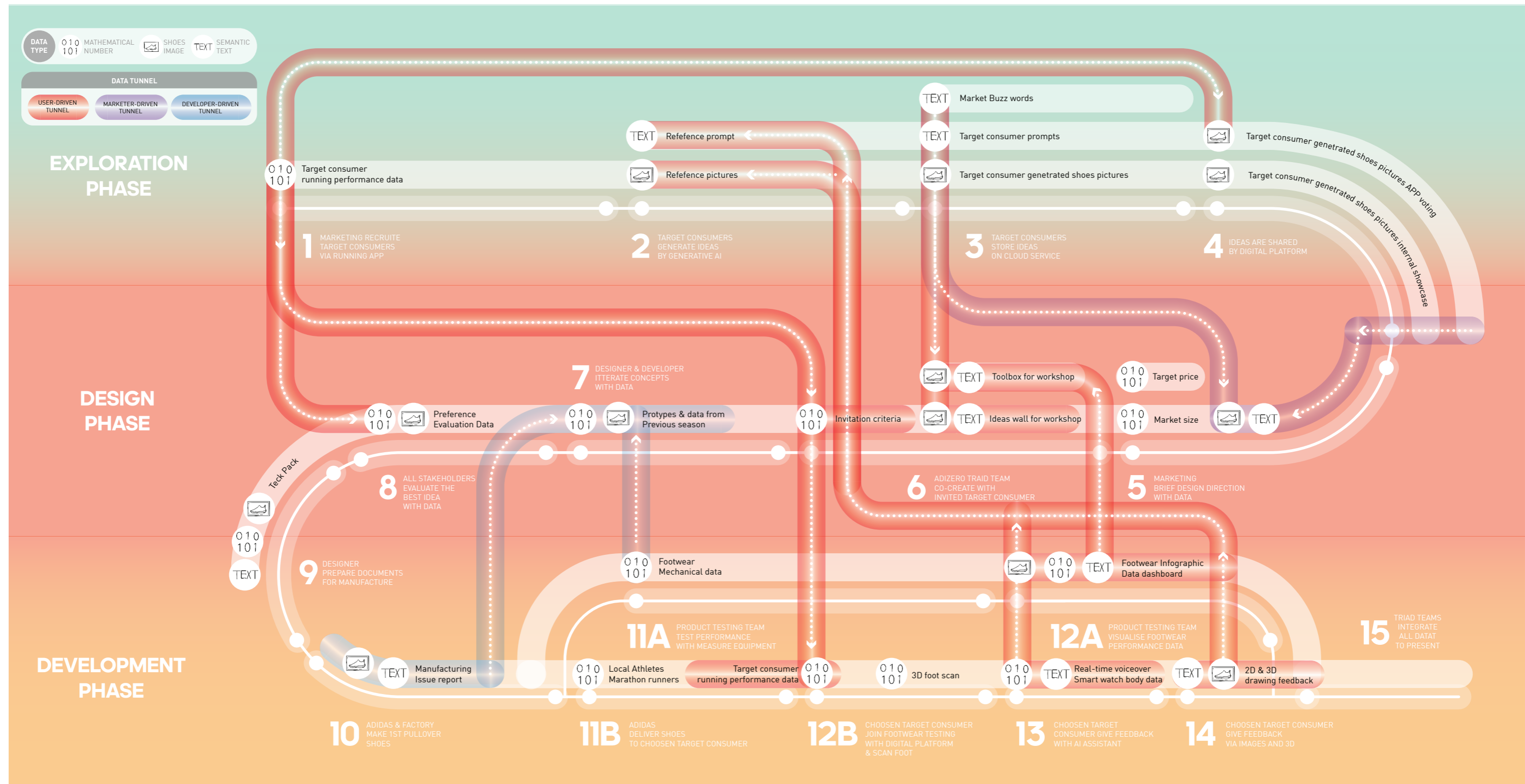


Fig 6.8 Data Flow for The New Engagement Strategy for FFE under Adizero Footwear Franchise

6.3 Design Evaluation for New Engagement Strategy

Designer, Marketer, and Developer Feedback on New Strategy

Designers, marketers, and developers provided varied feedback on the new strategy, revolving around aspects of clarity, desirability, feasibility, viability, and overall alignment with Adidas's approach to achieving its goal. Here is a consolidated summary of their feedback:

1. Clarity:

The new strategy is largely lauded for its clarity and multifaceted approach, blending aesthetic appeal with informative richness. It visually depicts the intricate process of shoe creation, offering ease of comprehension and maintaining engagement with diverse stakeholders involved.

2. Desirability:

The innovative integration of AI to enable consumer co-creation is seen as an exciting development, potentially ushering in new insights into consumer preferences and design inclinations. It promises a more nuanced understanding of consumer desires and needs, enriching the overall design language and product testing capabilities by leveraging larger sample sizes.

3. Feasibility:

However, apprehensions exist regarding the strategy's practical implementation, rooted in concerns about technological limitations, corporate constraints, legal implications, and potential confidentiality breaches. While the technological framework to support AI-driven creativity exists, reservations regarding

its incorporation in creative domains and the strategy's inherent complexity may pose significant challenges to its realization.

4. Viability:

The implementation of this strategy necessitates a comprehensive overhaul of existing tools, workflows, and processes, marking it as a high-effort, high-reward endeavor. While complex, its correct execution could yield significant benefits by incorporating consumer perspectives directly into the design process. However, the viability of the strategy remains contingent on navigating its complexities and potential complications effectively.

5. Adidas's Approach to Goal:

Adidas's existing methodologies, although not optimal, are deeply entrenched in established practices. The new strategy, with its comprehensive approach, is seen as imperative to address all functional areas despite its inherent challenges and complexities. The brand's current practices provide a contrasting backdrop, prompting a reevaluation of established norms and procedures.

Overall Impression:

The collective feedback underscores the strategy's innovative nature and visual excellence but also brings to the fore significant concerns related to its feasibility and execution. The strategy is marked by a juxtaposition of cautious optimism and apprehensive pragmatism, reflecting a nuanced understanding of its potential benefits and the myriad challenges it encompasses. The overall sentiment leans towards a thoughtful consideration of the strategy's innovative

CURRENT ADIZERO FOOTWEAR FFE FUTURE ADIZERO FOOTWEAR FFE

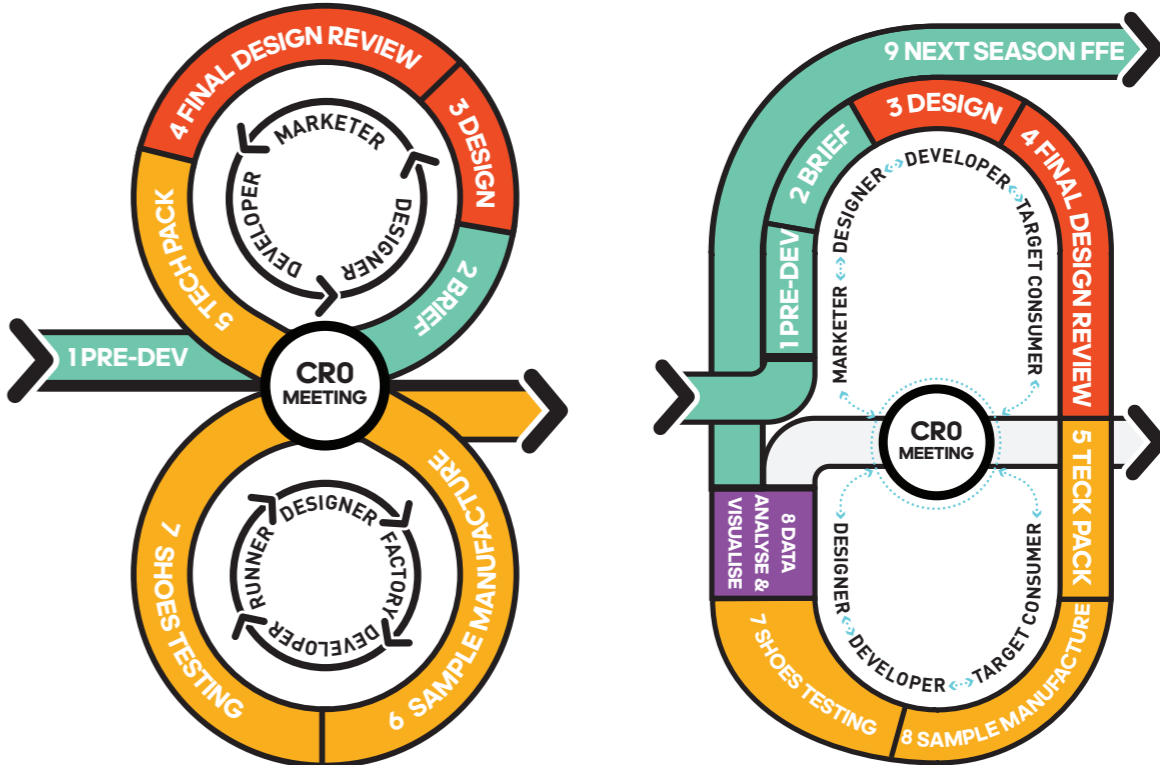


Fig 6.9 Adidas Running footwear front-end innovation process current & future model comparison

propositions while remaining acutely aware of the practical impediments to its successful implementation.

Reflection

After completing the process design, author revisited Chapter 2 to compare the original Adizero Footwear Fuzzy Front-End innovation process with the newly devised one, creating a new process diagram to illustrate the key differences. (See Figure 6.9) Three main improvements have been made in the new process:

- (1) The process twist is unwrapped by involving target consumers in the FFE.
- (2) Feedback and opinions from all stakeholders are better valued and acknowledged through a data-enabled engagement process, especially

after visualizing this data for decision-making of CR0 meetings.

- (3) Ideas and testing feedback are more easily referenced for the next season's FFE and are available for iteration.

7 CONCLUSION

7.1 Discussion & Limitations

7.2 Recommendation

7.3 Personal Reflection

7.1 Discussion & Limitations

Discussion

Addressed Research Questions

Revisiting the research questions outlined in section 1.3, this project has successfully deciphered the strategic design role in formulating innovative methodologies to identify, comprehend, and communicate with diverse stakeholders during the Fuzzy Front-End, specifically within the realm of Adizero footwear innovation.

Main Academic Contribution

The conceptual design framework, developed in this project, opens avenues for academics and designers. It provides a unique approach to integrating multiple stakeholders in process co-creation, serving as a potential template for researchers with analogous objectives.

Main Contributions to Adidas

The project has rendered a pioneering engagement strategy specifically tailored for stakeholders within the research scope, providing the Adizero footwear team with new insights and prompting the marketing team to conceptualize implementation strategies.

Applicability of the Design Framework

Attempting to utilize the established design framework for co-creating other processes is promising; however, its effectiveness is contingent on the specific context, including the focus area, organizational culture, geographical location, participants' personalities, and the interpretation of the framework, which could alter the outcome's quality, feasibility, and desirability. Especially the superpower sticker are depended on the quality of stakeholder analysis from the canvas (Figure 5.8,P.45).

Ownership of the New Strategy

Initially, since I am under development team,

it was naturly presumed that the developer director would own the design strategy. However, post multiple evaluations, the marketing team's burgeoning interest and constructive feedback have positioned them as potential owners of the new engagement strategy.

Inclusion Criteria for the New Strategy:

Post detailed process design(Figure6.3, 6.4, 6.5), entities like the IT team, digital analysis team, athlete servicing, and product testing have emerged as recurrent integral components in the process, warranting their inclusion in subsequent strategy discussions and refinements.

Implementation Start Point for the New Strategy

Evaluation insights pinpoint the "User-driven tunnel - Target Consumer Cross-Season Idea Loop Data Tunnel" as the most feasible and desirable stage to commence facilitation, highlighting its critical role in the strategic implementation process.

Limitations

Limited External Interviewees

- Research focuses on involving external consumers in the fuzzy front-end.
- Confidentiality concerns limited the scope to primarily internal employees due to links with product prototypes.
- Only one external target consumer with Adidas footwear testing experience was available for interviewing.

Potential Bias among Interviewees

- Interviewees were primarily internal employees with less than six months at Adidas, aiming to reduce brand bias.
- Despite efforts to minimize bias, it is

possible that respondents had developed preferences even in a short duration.

Topic Limitations

- Several promising topics and processes could not be included due to confidentiality concerns as they were initial concepts for future seasons in Adidas.

Research Scope Concerns

- In a large company like Adidas, more stakeholders may be involved than initially assumed.
- Research primarily focused on the traid team and target consumers, limiting practicality.
- Respondents noted the complexity of project implementation and suggested broader stakeholder scope to match reality.

Insufficient Time for Strategy Assimilation

- Time constraints hindered the ability to observe and analyze team reactions and iterations to new strategies in practical terms.

Challenges in Designing Roadmap

- Creating a design roadmap to align with ambiguous brand goals for 2023 proved difficult, especially with the transition in CEO leadership.

7.2 Recommendation

Application of Conceptual Framework in Varied Contexts

Due to the time constraints of this project, I was able to conduct only one co-creation workshop. For future endeavors, where stakeholder-centric process design is essential, I recommend employing this conceptual framework in diverse contexts to discern its adaptability and efficiency.

Translating Data to Guidance Tool for Co-Creation Workshops

In this project, I utilized a stakeholder analysis canvas developed by me to interpret data. However, transitioning data from interviews and canvases to practical tools like Superpower Stickers for workshops was time-intensive. I suggest future efforts could explore the use of machine learning or AI systems to streamline the translation of interview data for co-creation workshops, making the process more efficient and user-friendly.

Exploring Technological Impacts on Stakeholder Engagement in Product Creation

Presently, most technology-enabled stakeholder engagement strategies are confined to the e-commerce sector and are not integral to primary product creation. Further research could explore more data-driven strategies to enhance stakeholder engagement in product creation, broadening the scope and impact of technological innovations in this domain.

Involving Consumers in Product Creation While Addressing Confidentiality Concerns

Maintaining confidentiality is paramount for companies during product development, often leading to inevitable conflicts with external stakeholders. Therefore, exploring methodologies to mitigate or circumvent these confidentiality concerns can provide invaluable insights and solutions for numerous companies, fostering a more collaborative and inclusive product development environment.

7.3 Personal Reflection

Arranging a new project start in a foreign country

This graduation project allowed me to delve deeply into stakeholder management, presenting early challenges as it was independently sourced from Germany and initially framed as an internship. A swift turnaround of paperwork and alignment of project briefs and supervisors were needed. I encountered mismatches in expectations between TU Delft, Adidas, and myself, requiring thoughtful mediation and alignment. Relocating brought logistical challenges, necessitating remote coordination for housing. From these, I discern a need for increased support and flexibility from the IDE faculty for students undertaking international projects. Instituting a support community or a dedicated contact can mitigate these challenges, allowing focus on project work.

Facing the uncertainty

Reflecting solely on this project has helped me understand the important role strategic design plays in improving communication with stakeholders, particularly within a large, international company like Adidas where interactions can be very complex. Organizing meetings, interviews, and workshops was challenging due to everyone’s busy schedules and unforeseen cancellations. Additionally, creating a new tool meant for stakeholders from various backgrounds often led to unexpected feedback that required adjustments for future use. Clearly, besides solid research skills, being a strategic designer requires flexibility to manage uncertainties in the professional field effectively.

Developing Co-Creation Tools: A Journey of Discovery

Venturing into this project was akin to embarking on an uncharted journey. I was delving into the unknown, with no clarity on who my collaborators would be or what outcomes were anticipated over the ensuing six months. This veil of uncertainty stoked my curiosity and encouraged me to forge my unique pathways to identify, relate to, and communicate with people—it was a transformative experience of active listening and being heard like never before. This voyage illuminated the intrinsic human longing to connect, to understand who we are, and to recognize our individual strengths within a collective. It led to the conceptualization of ‘superpower’ as a metaphor in my thoughts, symbolizing our distinct identities and capabilities. When I shared this concept among the teams, it resonated, sparking conversations about their own interpretations and definitions of similar powers. It was the catalyst that allowed me to refine this idea into a generative tool for interviews—a medium allowing unrestrained exploration of one’s identity and aspirations. The journey to craft such communicative tools has been the most rewarding aspect of this project for me, enabling the freedom to imagine who we are and who we aspire to be.

EPILOGUE

I MAKE SNEAKER CONTACT BEFORE EYE CONTACT.



This key ring is significant to me;
I received it from Lee, a shoe pattern master, at my first job in 2014.

As I approach the final stages of my thesis, I find myself reflecting on my decade-long journey within the field of shoe design. In the beginning, I grappled with the complexities of stakeholder dynamics and underestimated the pivotal role of stakeholder engagement in driving product innovation. As time passed, I honed my skills and became more adept at managing these relationships. However, the rapid advancements in technology have

brought about a profound transformation in stakeholder interactions. It is now clear that I must recommit myself to mastering stakeholder management in the context of evolving technology to thrive in this ever-changing professional landscape.

After all, who can predict how technology will reshape human interactions in Fuzz Front-End in the next ten years?

Stakeholder engagement is like the pulse of a vibrant symphony - it's not merely the dialogue between individuals, it's a dance of technology and environmental echoes, each note shaping the rhythm and resonance of the interaction.

