Corporate Innovation

Research Dissertation

Jayesh Sandhu

Honours Project
2020

Abstract

Asbtract

Corporate innovation is a widely discussed topic and considered a core element for corporate growth and crucial for companies in attaining a sustainable competitive advantage (Ahn & Kim, 2017). Innovation is determining the way business happens at all levels. Leading strategic thinkers are pioneering innovation beyond traditional product and service innovation to processes, value chains, business models and all functions of management (Kuratko, Hornsby, et al., 2014). Despite this, the fact remains that "successful implementation of corporate innovation is quite elusive for most companies" (Kuratko et al., 2014).

Corporate identity - Innovative images - bring better talent, better products, and better demand.
How can designers amplify the innovation efforts of companies and their employees.

The purpose of this study is to explore the area of corporate innovation. A literature review examines the current state of corporate innovation research and, extending on that, a study was designed and conducted to identify novel opportunities for designers in the field of corporate innovation. This study looks at the front end of innovations process and how to best facilitate the creative activities and decision making activities of team and individuals during this process within the context of a corporate environment. The qualitative research study involved a literature review to identify the knowledge gap and research question "How can we best facilitate the creative and decision making activities throughout the front end of innovation?".

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Introduction

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Corporate innovation is a widely discussed topic and considered a core element for corporate growth and crucial for companies in attaining a sustainable competitive advantage (Ahn & Kim, 2017). Innovation is determining the way business happens at all levels. Leading strategic thinkers are pioneering innovation beyond traditional product and service innovation to processes, value chains, business models and all functions of management (Kuratko, Hornsby, et al., 2014). Despite this, the fact remains that "successful implementation of corporate innovation is quite elusive for most companies" (Kuratko et al., 2014).

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"TODAY IS A TIME OF GLOBAL INNOVATION REVOLUTION."

(Kuratko, 2009)

Introduction

Innovation is a widely discussed topic and considered a core element for corporate growth and crucial for companies in attaining a sustainable competitive advantage (Ahn & Kim, 2017). Innovation is determining the way business is conducted at every level, thus producing an entrepreneurial imperative for the 21 st century (Kuratko, 2009). Leading strategic thinkers are pioneering innovation beyond traditional product and service innovation to processes, value chains, business models and all functions of management (Kuratko, Hornsby, et al., 2014). Despite this, the fact remains that "successful implementation of corporate innovation is quite elusive for most companies" (Kuratko et al., 2014).

A corporate innovation strategy is hard to create and perhaps even harder to perpetuate in organizations (Kuratko et al., 2014). Employees engaging in entrepreneurial and innovative behaviors are the foundation for organizational innovation (Kuratko et al., 2014).

A recent Accenture survey of more than 500 executives revealed that over 50% report a poor innovation process, while fewer than 18% believe their own innovation strategy provides a competitive advantage for the firm (Kuratko, Covin, & Hornsby, 2014). In order to develop corporate innovation, organizations must establish a process through which individuals in an established firm pursue entrepreneurial opportunities to innovate, without regard to the level and nature of currently available resources.

The purpose of this study is to explore the area of corporate innovation. A literature review examines the current state of corporate innovation research and, extending on that, a study was designed and conducted to identify novel opportunities for designers in the field of corporate innovation. Further, the specific objectives of this research study are: to provide new insights into the tools and methods used in the processes of innovation; to gain a better understanding of corporation's innovation capabilities and practices; to gain a better understanding of individual employee's innovation and creative capabilities and the support provided by the corporation in this regard.

The overall purpose of this study is to increase knowledge on what opportunities are available for the designers in the field of corporate innovation and how innovation capabilities are built when involving a broad base of employees in innovation in the organizations. More specifically, this study focuses on individual employee's innovation abilities and the organization's role to enhance those capabilities.

The research shows how involving employees in innovation can be made possible through a conscious and creative design and usage of routines and controls. This study intends to provide the knowledge on role played by individual employees' involvement in the process of innovation.
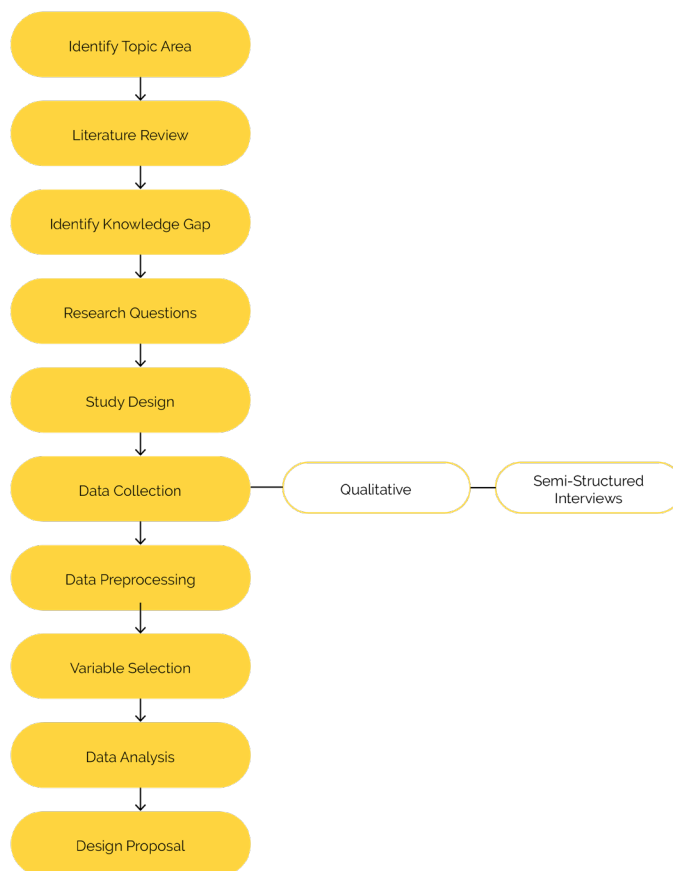
Research Structure Diagram

Figure 2: Research Project Diagram

Literature Review

Literature Review

Introduction
Numerous studies have been conducted examining corporate innovation. Over the following section this review will present a background on corporate innovation and focus on the repeating major themes that emerged across the literature reviewed. These include: A background on corporate innovation, The frustrations of corporate innovation, defining innovation, Front end of innovation, Innovation processes and methodologies, Role of teams and individuals, Literature presents these themes across a variety of contexts. This paper will focus on their application in the context of intrapreneurship.

Corporate Innovation in the 21st Century
Innovations role in positively advancing economic and societal development has been long established (Gregor & Hevner, 2015). Today, technology is evolving at a breathtaking pace and, for corporates, continuous innovation is needed to compete effectively in the global markets (Kuratko, Hornsby, et al., 2014). For larger companies they are challenged with developing new businesses as their product portfolio and technology matures and must create, develop and sustain innovative new businesses (Middel, 2018).

In a study by Accenture surveying over 500 executives, approximately 67% claimed they depended strongly on innovation for their long-term strategy success. Yet, fewer than 18% believed their own innovation strategy provides competitive advantages for their firm (Koetzier & Alon, 2019). The question arises, "why is innovation not working out the way most companies expected?" (Kuratko, Covin, et al., 2014). Organisations are facing times that require innovative vision, calculated risk-taking, courage and strong leadership.

Defining Corporate Innovation
It is important to address that as corporate innovation has evolved a variety of definitions have emerged. As these definitions have become more widely used, academia has dissected the specific components of innovations to identify what it is exactly that companies were seeking. (Kuratko, et al., 2014). O'sullivan & Dooley (2009) describe innovation as:
 "the process of making changes, large and small, radical and incremental, to products, processes, and services that results in the introduction of something new for the organisation that adds value to customers and contributes to the knowledge store of the organisation."

Numerous other definitions exist and there are many ways in which individuals apply creative thought to exploit opportunities. In a study conducted by Kuratko, et al. (2014) examining academic literature Yto explore "why implementing corporate innovation is so difficult" four key implementation issues[1] are identified as "representing the difference between those companies who can successfully implement a successful corporate innovation strategy and those who cannot" (Kuratko, et al. 2014). One implementation issue was the misunderstanding of what type of innovation is being sought. As such, they propose "any discussion of corporate innovation must first address the matter of how we categorize innovation - specifically, by type or trajectory". Without a clear understanding across the organisation the actions required at every level in the organization remain unclear. In this regard Kuratko (et al., 2014) use a framework to categorize innovation by type and trajectory.

Innovation can be categorized in terms of the basic types of innovation related to products, processes and services.
Product Innovation - Is about making beneficial changes to physical products.
Process Innovation - Is about making beneficial changes to processes that produce products or services.

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1 The four issues are: (1) understanding what type of innovation is being sought, (2) coordinating managerial roles, (3) effectively using operating controls, and (4) properly training and preparing individuals.

Service Innovation - Is about making beneficial changes to services that customers use.

Another way to categorize innovation is by the basic trajectory it may take such as radical, incremental, or disruptive.

Incremental Innovation - Refers to the systematic evolution of a product or service into newer or larger markets.

Radical Innovation - Is the launching of inaugural breakthroughs such a personal computers. Changes at a magnitude significant enough to change the organisation itself by changing the existing market.

Disruptive Innovation - Exceeds radical innovation and transforming business practices to disrupt the business practice of an entire market sector. Often occurs because a new technology is introduced or applied to a new market .

Categorizing Corporate Innovation

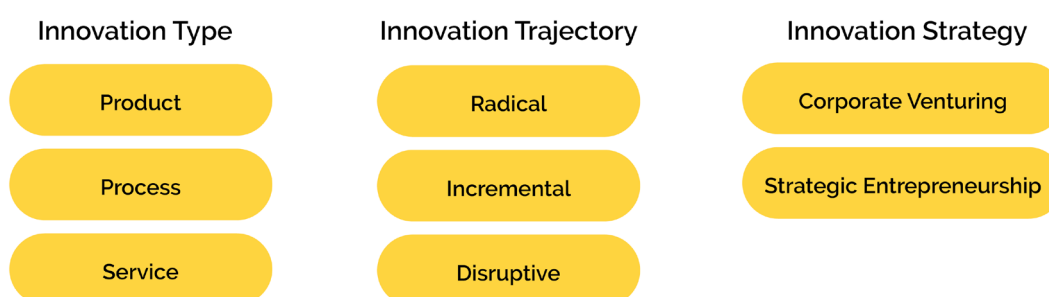| Innovation Type	Innovation Trajectory	Innovation Strategy
Product	Radical	Corporate Venturing
Process	Incremental	Strategic Entrepreneurship
Service	Disruptive	

Figure 1: Innovation Categories

Kuratko proposes there are two aspect to understanding innovation sought; Understanding the form of innovation sought, and the strategic focus of the organisation for it's process towards corporate innovation. The two major approaches to strategic innovation as described by Morris et al. (2011) are manifested through; corporate venturing and strategic entrepreneurship.

Corporate Ventures share the commonality that they are methods for creating, adding to, or investing in new businesses, which may be considered internal, external or cooperative/joint. Internal corporate ventures are housed within the organisational boundaries and may be formed as part of a pre-existing internal structure, or other maybe be housed within newly formed areas of the business. External corporate ventures are considered entrepreneurial activities in which new businesses are formed outside the corporation and subsequently invested in either through equity positions or acquisition. With corporate venturing, the main objective is to create an entirely new business.

Strategic Entrepreneurship, when compared to corporate ventures, constitutes a broader array of entrepreneurial activities "which do not necessarily involve new businesses being added to the firm" (Kuratko, et al. 2014).

Front End of Innovation

The innovation process covers an incredibly vast array of topics, the focus of this paper will investigate what is known as the "Front End of Innovation" (FEI). Front end of innovation (FEI) was recognized over 30 years ago by Cooper & Kleinschmidt (1987). Since then it has drawn attention to the need for successful management of this product development phase (Eling & Herstatt, 2017). FEI refers to "the activities in the innovation process where ideas are generated and evaluated, before ideas or prototypes are selected to continue through comparatively well-organised new product development processes" (Gregor & Hevner, 2015). Work by Koen (et al.) studies FEI through a New Concept Development model. This divides FEI into

three components: the engine, the wheel, and the rim.

The Engine: Organisational Attributes (core elements powering the process).
- i.e. Strategy, vision, resources, culture, teams and collaboration.

The Wheel: Five Activities (the inner part where ideas flow and iterate between activities).
- Opportunity identification, opportunity analysis, idea generation, idea selection, and concept definition.

The Rim: Environmental Factors (influencing the core elements and five activities).
- i.e. global trends, regulatory changes, organisation environment.
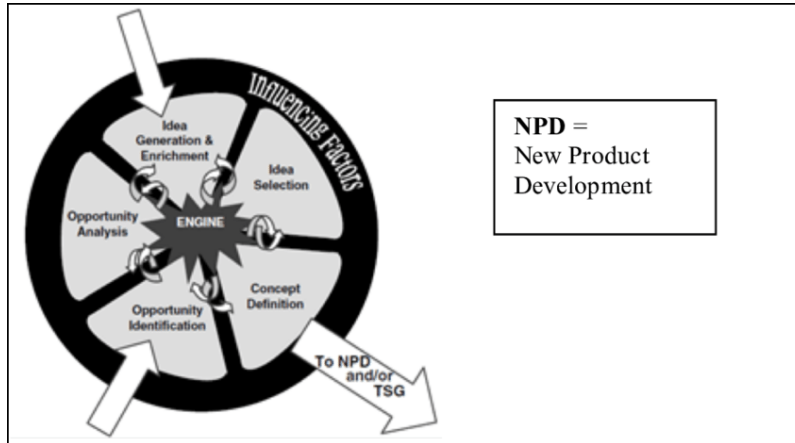
The large volume of FEI research, while delivering valuable knowledge, has resulted in a certain fuzziness. Researchers have used many different overlapping terms, while several independent themes appear due to the numerous studies limited to focusing only on specific activities within FEI (Eling & Herstatt, 2017). In a literature review to structure and identify FEI research trends and opportunities Eling (& Herstatt, 2017) identified eight distinguished research themes: Within those identified were general FEI methods and tools, and team/individual behaviour and decision making in the FEI .

Corporate Entrepreneurship and Intrapreneurship

The concept of Intrapreneurship emerged when Burgelman (1983) proposed two distinct processes regarding entrepreneurial activities within organisations (Calisto & Sarkar, 2017):

1. Induced strategic behaviour: An outcome of strategy and considered the official path for innovation.
2. Autonomous strategic behaviour: Occurs when employees pursue opportunities that exceed those extending from top management

The employees described in the second process were later termed intrapreneurs. As more recently defined by Calisto (& Sarkar, 2017) intrapreneurs are "employees who pro-actively engage in actions outside their usual job description with the intention to innovate some aspect of the organisations products or processes".

Not to be confused with intrapreneurship, "corporate entrepreneurship" is a term that describes a strategy utilised by management to foster more innovation initiatives from their employees (Burgelman, 1983).

Organisations that exhibit corporate entrepreneurship are viewed as dynamic, flexible and prepared to take new opportunities (Kuratko, Covin, et al., 2014). Intrapreneurship plays an important role and as Steven Brandt of Stanford has said "Ideas come from people. Innovation is a capability of the many" (Kuratko, Covin, et al., 2014).

Creativity, Knowledge and Innovation

A study by Eling (& Herstatt, 2017) revealed, over the last 10 years, a research theme has emerged in FEI literature, shifting focus from controlling and structuring FEI, to how FEI teams and individuals do and should behave and make decisions. Creativity, knowledge and innovation share integral relationships and

Research Design

as stated by Anderson (et al., 2014), are integral parts of essentially the same process. Burkus argues that "creativity is the starting point for all innovation" where creativity is defined as "the process of developing ideas that are both novel and useful". The role of creativity is particularly important in FEI as novel ideas are needed for the innovation process to begin, and for ideas to be enriched.

The connection between knowledge and new ideas is fundamental to innovation as acknowledged by Gregor (& Hevner, 2015) "Innovation is about knowledge – creating new possibilities through combining new knowledge sets." Employees however need to be trained and educated before they can have an impact on the innovation process. Knowledge by itself does not generate any value. Highly innovative organisations maintain a learning environment by keeping knowledge and skills of employees up to
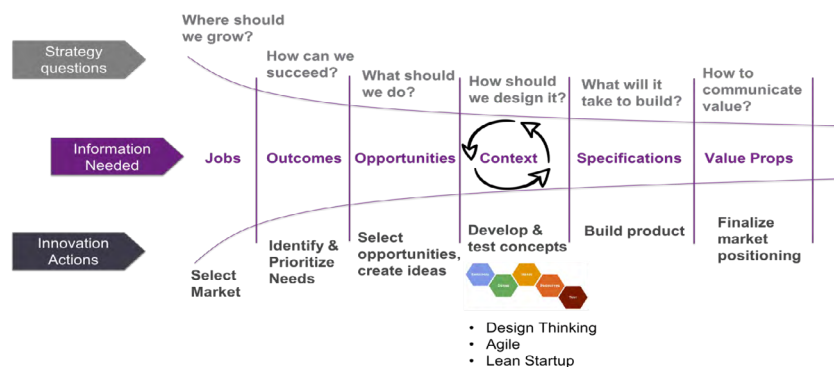

Figure 2: Variation of Front end innovation

date (Johnsson, 2017). Training or education is "directly related to identifying innovation opportunities". (Bozeman, 2000).

Innovation Enablement

Current research puts an increased focus on soft skills such as creativity, problem solving, collaborative critical thinking, contextual learning, searching, synthesizing information and self-direction. Much research has aimed to identify the dimensions deductive to entrepreneurial behaviour. An extensive literature review was conducted by Johnsson (2017) to identify innovation enablers for innovation teams within organisations. The study aimed to identify factors that enabled innovation team to innovation work from organisational, team and individual perspectives. 20 innovation enablers were identified and revealed a complex picture in which enablers overlap and intervene with each other (Johnsson, 2017).

Summary

Corporate innovation has become a necessity for the future success of many companies and a critical element to realizing wider economic and societal goals. With companies relying on their innovation strategies to deliver business value, it is critical for them to return business value. FEI is the first touch-point for realizing innovations through opportunity discovery, ideation, evaluation etc. A research theme has emerged in FEI looking at how individuals and teams behave and make decisions. Another topic from literature, overlapping with FEI, is intrapreneurship and corporate entrepreneurship. Individual creativity and knowledge provide a necessary foundation for innovation to begin, however alone knowledge adds no value unless acted upon. This requires innovation enablement. Building on the findings and identified gaps, the research question:

"How can the creative activities and decisions of individuals and teams throughout the front end of innovation (FEI) be best facilitated or controlled?".

The following section will outline the research design used to answer this research question.

Research Design

Introduction

Based on the knowledge gaps identified in the literature review, the purpose of this research was to address the research question: How can the creative activities and decisions of individuals and teams throughout the front end of innovation (FEI) be best facilitated or controlled? This section will outline the design of the study conducted and explain the methods for data collection. This includes qualitative and quantitative data collection methods using interviews and surveys.

Participants

Participants were selected based on the context of organisations with over 1000 employees and on their involvement with innovation projects at work.

Participants were selected based on the following criteria:

- 18years old or over
- Employed by an organisation with over 1000 employees
- Currently involved with corporate entrepreneurship project OR has been in the last 12 months.
- Responsible for the idea, or involved when project was mostly only an idea.

Data Collection - Qualitative Methods.

Among the various methods for collecting research data they can generally be categorized into qualitative, quantitative and mixed methods. For this study qualitative research methods will be used. Qualitative research is described as "the non-numerical examination and interpretation of observations, for the purpose of discovering underlying meanings and patterns of relationships." (Patten et al., 1997). Qualitative data collects information that seeks to describe a topic more than measure it.

Semi-structured interviews

Think of impressions, opinions, and views. As outlined by Wilson (2014), "a semi structured interview combines predefined questions with the open-ended exploration of an unstructured interview". This method was chosen based on the approaches outline by Wilson (2014) which states semi-structured interviews are best used to gather information about facts, attitudes and opinions, tasks and task flows. Following the methods outlined by Wilson (2014), the approach will follow an interview guide (see appendix) that includes the following components:

- An introduction to the interview purpose and topic
- A list of questions about the topic
- A list of neutral prompts (non-leading and non-directive)
- Thank you and closing comments

Summary

This research aimed at understanding how to best facilitate creative activities and decision making throughout the FEI process. To help in a companies innovation strategy of achieve robust growth and sustained profitability through innovation. This section outlined the research design methods and tools used for data collection. It was presented what different methods and tools were used for this purpose. Qualitative data collection method selected was semi-structure interviews with participants working on corporate innovation projects.
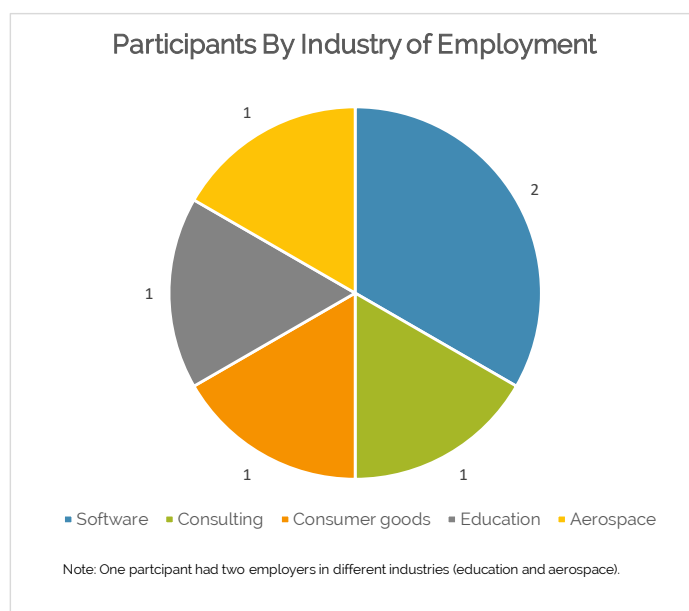
Analysis and Findings

Analysis

Introduction

This section covers how the data collection was conducted, describes the data analysis process, the analysis methods used and presents the findings from the analysis. These findings will be further elaborated on in the discussion. Using data collected through semi-structured interviews with 6 participants, a qualitative analysis was performed using content analysis and coding, from which the main themes were identified.

Participants

The interviews included 5 participants located across Australia and Germany, working across 4 different organisations. Participants represented junior, middle and senior positions and the participant levels of education included undergraduate, masters and doctorate. Sectors of employment of participants included software, consulting, consumer goods, aerospace and education. Participants were sourced from the personal and professional networks of the researcher based on the participant criteria outlined above in the research design. All of the participants, except for one, was currently engaged in an innovation venture that they began at work.

Participants By Industry of Employment

Software ■ Consulting ■ Consumer goods ■ Education ■ Aerospace

Note: One partcipant had two employers in different industries (education and aerospace).

Semi-structured Interviews: Qualitative Research

A total of 5 Interviews were performed in accordance with the interview guide (see appendix) and lasted from 45 to 90 minutes. The topic questions were followed as a guide and probing questions were asked throughout the interviews to dig deeper on certain topics.

All interviews were conducted virtually using an online video conferencing software "Jitsi". Interviews were recorded and then transcribed using an video to text transcription tool called "Otter.ai". Video transcriptions were all manually reviewed and any incorrect transcriptions were corrected. All video, audio and transcription files were then exported and deleted from the online services.

The qualitative analysis of the interview data followed a series of steps including data preparation (correcting and cleaning), coding the transcriptions, and then identifying the categories and themes that emerged from the coding process.

Thematic Analysis

The qualitative interview data was analyzed using thematic analysis. Thematic analysis is used as a process to "build a comprehensive, contextualized and integrated understanding or theoretical model of what has been found, with an argument drawn from the empirical evidence based across the data" (Luiz Moutinho & Mladen Sokele, 2017). Coding was the form of thematic analysis used and through a process of organizing segments, the interview data was gathered into themes. (Luiz Moutinho & Mladen Sokele, 2017).

Coding

The coding was performed iteratively starting with codes to label and describe the text and working towards higher levels of abstraction by identifying themes, The code and theme definitions were based on that of Seal (2016, pp. 444–458), "a code is a descriptor of a data segment that assigns meaning, whereas a theme is a theoretical construct that explains similarities or variations across codes" (Seal, 2016, pp. 444–458).

The coding was performed using software tool Atlas.ti. The first coding cycle involved reading the interview transcripts line by line and coding data segments relevant to the research question. Codes were created to label or describe the data segments and to give them meaning relative to the FEI process. After the first round of coding, 189 codes had been created.

The codes and interview transcripts were then iteratively reviewed, redefined and clustered into categories. Based on the categories, patterns were then identified and categories were combined to create the themes. Four significant themes that emerged were then identified and named to produce the final themes. The final themes discussed in the following findings section.

Findings

Introduction

The findings section will describe the themes that were identified and how they are connected, drawing on the data analyzed. The themes that emerged, and will be addressed in this section are:
Influence of organisation structures & processes on decision making and creative activities, Discovery and insight from new information or new experiences, Getting the right people and connections, and Individual Behaviors and Motivations. When referring to interview participants in the following sections, they will be referred to as P"number" (example: P5) to preserve their anonymity.

Main Themes and Code Categories

Theme: Influence of existing organisation structures & processes
       Leadership
       Resource Management (time, money)
       Teams
       Workplace culture
       Employee Growth / Talent Management
       Rewards and recognition frameworks

Theme: Discovery and insights from new information and new experiences
       Trying New Things
       Distancing from "normal work"
       Workplace culture
       Resource Allocation
       Company values and vision

Theme: Getting the right people and connections.
    Team Skills
    Diverse & Cross-functional Teams
    Fluidity and dynamic teams
    Intrinsic motivations
    Mentors and Experts - Connection to methods and tools and advice.
    Org Structures

Theme: Motivations and Individual Behaviours
    Workplace Culture
    Inspired by creative problem solving and challenges
    Personal and Professional Growth
    Personal values and identity

Influence of existing organisation structures & processes

Through the data analysis, the theme emerged that a significant influence on creative activities and decision making was linked to the existing organisation structures and processes. The data showed that corporate innovation was often facilitated through internal initiatives included high performance programs (HPP), idea campaigns and accelerator programs. Innovation initiatives were used for two main reasons. Firstly, as a structured way to provide employees the resources and support required to explore new ideas. P4 when describing his role leading corporate innovation initiatives said:

P4 - "We drive innovative ideas end to end and support our employees to really make something meaningful"

Secondly, these initiative are used for talent management to accelerate the growth of employees through professional development and expanding employee networks. This was most explicitly stated in the quotes:

P2 -"The whole idea of HPP [High performance program] is future leaders. It's a part of being the next crop to rise to management roles... this is where the idea side is really good to create those connections and move within the business".

P4 - "That's why we are teaching these methods, if they apply these methods on a regular basis, we already won a lot...they will excel and take this knowledge and apply it"

P3 - "By bringing them into this and involving them in the process, they start to get a view and acquire skills that are ultimately pushing their career progression forward."

When analyzing the data to see how employees feel about the existing processes there was mixed views, some interviewees expressed enthusiasm, particularly with respect to the workplace culture aspect:

P2 - "[Accepted participants] are announced through the business, its a big zoom call with 100 people, its like this big fanfare, its very cool".

Others were not so enthusiastic about existing structures and saw some as ineffective, painful and risky.

P5 -"this additional funnel thing was always a pain...even people who run this process hated it...people think they have control over VUCA [Volatility, Uncertainty, Complexity and Ambiguity], which is stupid and dangerous".

Significant challenges were identified around leaderships involvement in the innovation process. Particularly when looking at delivering a solution and taking if beyond the FEI, leadership support was seen as a necessary element when delivering a solution.

P4 - "One of the biggest issues I see is finding the right sponsorship and finding sponsorship at all."

P5 - "this energy you need to invest to convince internal people...I would rather invest energy and time trying to convince customers."

P5 introduced a different approach when facing these frustrations and has looked elsewhere for resources, partnering with the company ecosystem to resource projects.

P5 - "Many people will still think they need to convince everybody in the line organizations, and this is really a waste of energy and resources".

P5 - Look for an outside partner, because then it cannot be destroyed by political or management discussions of people.

P5 -"The fluid approach is better...Get funding from customers, executives, the employees...People find our initiative and they join us"

How these activities and decision making processes are handled by the company show a link to workplace cultures. This link is related to poorly executed innovation processes that can result in a resistance to change and toxic cultures. Engaging with stakeholders and involving them in the process was stated as being more effective to achieve buy in from stakeholders.

P3 - "If you make a change in a dark room ...then try and push it out to the business, then yeah, absolutely [people say] 'You haven't consulted me, we're on the front line, the people in suits don't know what they're talking about'"

P3 - How do you address the whole system and get them all involved in the design process for something?

Getting the right people and connections

It emerged from the interviews that how people come together to work on innovation projects largely depends on organisational structures. These structures influence how effectively teams can deliver new projects outside of the standard operations.

P4 - "Most corporates are not designed to support this kind of innovation processes. So we have the higher hierarchies which cater to specific needs but we haven't got the right setup to dynamically staff projects and drive projects."

Interviewees all expressed the importance of bringing together the right people and bringing in the right connections. Bringing together diverse teams with appropriate skills was identified as being important but also presented evidence that it is difficult to achieve.

P5 - "Innovation starts with the people and the connection of, and the combination of them."

P3 - "Often we see teams that aren't skilled to deliver a certain product".

P4 - "One of the most important aspects is the right team to really take this to the next level. So without the right team, you're more or less lost."

P4 - "The team doesn't even know that they are not the right team, that they are missing some appropriate skill sets."

This difficulty in bringing together the right people is often perceived as being linked to the existing organisation structures.

P3 - "Our structure isn't working, we've got all these functional accountabilities stopping those people from getting together."

P5 - "They didn't have free capacity anymore to really invest the time...that sometimes happens in corporate enterprises,"

P4 - "we should really go more into the path of changing organizational structures in a way that we can

dynamically work on ideas, which we want to work on"

In terms of the creative activities, the biggest issue was bringing together the right people, at the right time for the right activities. With organisational structures and functional responsibilities its difficult to connect the right people and to have the right time needed to effectively execute on innovation projects.

Amongst the activities mentioned in the interviews, communication or pitching were mentioned by all participants. This was also an area that the data suggests is challenging for teams.

> *P4 - "I feel that teams really need a lot of coaching and guidance in this area. The quality of senior management, communications or pitches is not really good...they're not able to do proper storytelling and really communicate their ideas in an easy and consumable way."*

> *P2- "we go out for presentation skills for two days and then we to present to the exec."*

Discovery and insights from new information or new experiences
Many insights and ideas were linked to an individual being exposed to a new experience or to new information. All of the interviewees who had driven their own idea, mentioned experiences outside of their traditional work as significant in inducing insights. These included having a conversation, research round tables, reading articles, international trips, cultural experiences, workshops, watching a video, among others. This connection of discovery and insight through distancing from day to day work and thinking differently was highlighted well by P3.

> *P3 - "Designing an experience that fosters their creativity, and what doesn't foster their creativity is taking them back to everything that they do in their day to day at the office."*

> *P3 - "It's just creating really different environments"*

Involving stakeholders was identified as critical activity in decision making, opportunity analysis and idea evaluation. As new information emerged the ideas were frequently iterated. Participants implied that activities which are typically adaptive, dynamic and semi-structured were most effective. This was reasoned because they can adapt to suit the needs and goals of activities as they evolve.

> *P3 - "These are semi-structured, like they're really loose, because you might need to pivot based on a certain insight."*

> *P3 also mentions that the semi-structured approach also shapes how activities are facilitated and suggests that a workshop with slides is too structured and because it too closely resembles normal office life.*

> *P3 - "It's part of the reason it's great not to have slides. Just kind of draw everything up as you go. There's not a recipe to it. There are a bunch of tools."*

The facilitation of activities is done in interactive and creative ways to elicit a mental disconnect between normal work and the current environment and to encourage openness to new ideas.

> *P3 - "we are taken on a Safari...this is all about challenging the way we work right...you've got a guy dressed up, your facilitators dressed up"*

Motivations and Individual Behaviour
Employee motivations was a frequently occuring theme in relation to participation in innovation projects. The section will cover two main elements, motivations of employees and motivations of management and the company. The data showed that intrinsically motivated employees were better suited and more attractive to these activities, but that the workplace culture also plays a role based on how innovation is positioned to employees.

> *P2 - "Very rewarding thing to imagine, to see an idea that you've had to keep going."*

> *P3 - "Usually pretty high performing employees..I think that's the kind of stuff that motivates them"*

P3 - "Comfort zone.. monotonous task, no room for creativity, no room for creative problem solving, anything like that just doesn't match."

P5 - "Experts who want to do great stuff and fun new stuff, want to explore things. These are exactly the right people to engage."

Employees were also motivated by the personal and professional development opportunity. The theme emerged that motivated employees were also sometime motivated by a connection to the company values. P2 reflects that after a cultural trip their connection with the brand is strengthened and motivates them.

P2 - "The other big thing was kind of feeling the brands as well. We get told all the time that we're standing on the shoulders of giants because we have brands that go back 300 years. It's just incredible to really feel that"

P2 - "People just care about it. And it's so cool to be able to represent that."

For management, rewards and recognition frameworks were seen as heavily influencing how management behaves and therefore what is prioritized in the company. This caused innovation projects to be pushed aside for functional responsibilities that employees are measured on and links to the previous theme of bringing the right people to innovation projects. This has an influence on the way thats teams work and can be linked to siloed working.

P3 - "Leaders are measured by a KPI which measures team performance. So to give all their resources to another team, it's not in their best interest. And ultimately, people are kind of sticking to these reward recognition, reward structures that are in place."

P3 - "I talked about siloed working and how that can be stemmed from reward and recognition to leaders"

Summary

The main findings from the study were coded into 4 themes: Influence of existing organisation structures & processes, Getting the right people and connections, Discovery and insights from new information or new experiences, and Motivations and Individual Behaviours. The findings describe the connections between these themes. It was discovered that organisational structures play a significant role in shaping activities and decisions throughout the FEI process. Structures influence how effectively people can come together and can limit the resources available to work on innovation projects. This can create challenges that teams then lack the skills they need to deliver their concepts. Workplace culture is impacted by all of these elements and sets the tone for individual motivations and behaviour. Examples showed that activities around induced discovery and experiences designed to distance employee thinking from day to day office life can be particularly effective in the FEI process to help bring insights to employees.

Discussion

Discussion

Introduction
The research focused on the research question raised in the initial literature review, "How can creative activities and decisions of individuals and teams throughout the front end of innovation (FEI) be best facilitated or controlled?". Building on the findings presented, this section will interpret and discuss the results, while also interpreting the connection of the findings to relevant literature. The research conducted in this qualitative study used interviews to capture a variety of perspectives addressing the research question. Through thorough analysis and thematic coding of the research data, four major themes were discovered: influence of existing organisation structures & processes, Getting the right people and connections, Discovery and insights from new information or new experiences, and Motivations and Individual Behaviours.

Influence of existing organisation structures & processes
Although much has been done to address the conflicting interests between corporate innovation and standard operations that play out within an organisation, this can still play a significant positive or negative role on FEI. As companies have explored new ways of working in flatter and more agile ways, the research shows that there is still a lot of opportunity for improvement. An ideal organisational structure will empower employee innovation and improve employee autonomy.

This is not a new topic and reflects the views put forwards by Clayton M. Christensen in his book The innovators Dilemma. He outlines why once successful companies lose their advantages and explains that while companies are generally good at change involving sustaining technologies, they generally fail when a change involves disruptive technologies (Lewis, 2004). Companies become really good at doing what they succeeded in, but loose the ability and agility to win new opportunities because they're are busy with the "main thing".

In order to best facilitate creative activities and decision makingi in FEI.
This theme is strongly influences all aspects of FEI within the context of corporate innovation.
Through facilitating activities and decision making in creative ways, a disconnect from day to day work can elicit insights and frame thinking in new ways to overcome some of the challenges presented by existing organisation structures.

Getting the right people and connections
The right people and the right connections are critical elements for the success of innovation projects. How teams form is strongly influenced by organisation structures and, research showed that attracting the right people is a challenge for many projects teams. While an activity or a decision could be facilitated "perfectly", if the right people are not involved in an activity or decision, the outcomes are likely to be less effective. Engaging people links to the theme of intrinsic motivations and the study showed that intrinsically motivated employees are more likely and better suited for involvement in innovation projects. Bringing together teams has been challenging as many employees are busy with standard operations and reflects the innovators dilemma.

Discovery and insights from new information or new experiences
It emerged from the study that many opportunities and ideas were the results of exposure to a new experience or new information. This was supported by the initial literature review as stated by Gregor (& Hevner, 2015) "Innovation is about knowledge – creating new possibilities through combining new knowledge sets." Many of the experiences that produced insights were through chance such as a conversation or from a moment in a film. Other insights were more structurally extracted through creatively

facilitated workshops and innovation programs.

As companies look to double down on innovation and transform their organisations, the people must also transform. The power to induce insights through discovery is significant in the fact that it enables employees to spread new ideas and new ways of thinking.

Many of the challenges teams experienced were linked to engaging with stakeholders. This included challenges attracting the right team members, building the right connections and accessing the right decision makers. It was clear that through discovery people can use storytelling to work through changing stakeholder perspectives. To illicit new ways of approaching problems, distancing employees mentally from day-to-day work was seen as significantly contributing to the likelihood of inducing new ways of thinkings and the discovery of insights.

Motivations and Individual Behaviour

The motivations end behaviour of employees are an important theme, because on a heuristic level, this contributes largely to the results organisations and behaviour their employees. The employee motivations can on one hand be extremely productive for innovation. When inspired and motivated people come together it is common knowledge that significant things can be accomplished. However on the other side, when employee motivations are conflicting within an organisation then challenges arise. One of the most frequently raised topics throughout the interviews was the importance of teams, but that there is challenges to get the right people together on an innovation project in a corporate environment. This can be again linked to the innovators dilemma. Research shows that people are often unable to get together on innovation projects because they are drawn back to their responsibilities.

This get more complex when you look at the motivations and behaviour or management and senior leadership. On one hand they know that its important to innovate, however they are measured short-term on standard topics and frequently fall back to devote their attention away from innovation.

Recommendations

Recommendations

Through the research study conducted, a number of opportunities have emerged within the context of corporate innovation and how to best facilitate creative and decision making activities during the FEI process.

Firstly, existing organisational structures and processed have shown to have a significant effect on FEI innovation activities. It should be considered how the design of new solutions will integrate with, and adapt to existing organisation systems.

Bringing together the right people and making the right connections is important to building a teams capabilities to actually deliver on innovation projects. It must be considered that often teams struggle to develop the right team mix and struggle to attract the right connections and resources. Consider how facilitating activities and decisions can support the engagement and connections to the right people.

New insights and identifying opportunities is a necessary element of the FEI process, and fundamental for innovation. It was identified that many individuals idea's stemmed from an insight that occurred through a new experience or exposure to new information. Through the design of experiences and environments, discovery and insights can be induced through guidance. By designing experiences that distance employees mentally from day-to-day work, you can more effectively enable different ways of thinking.

The motivations of employees naturally directs employee behaviour and ultimately these motivations determine all of the activities of individuals within a company. It is important to consider stakeholder motivations when designing for a corporate innovation context. Employees engaged in corporate innovation are typically motivated by creative problem solving, a connection to the company values, being involved with something impact, or are looking to grow personally and professionally. Many managers are still measured, and therefore motivated, by KPI's, This pulls them away from innovation projects back to standard work. Consider how to manage these motivations and behaviours when designing with these stakeholders in mind.

Design Proposal

Design Proposal

Introduction
Innovation is becoming increasingly important to the competitive advantage of organisations. As technology continues to develop at a rapid pace, many companies now look to innovation to secure their futures. While companies recognize the importance of innovation, few have been able to sustainably realize a return on their innovation efforts.

Design Intent
The purpose of this project is to enable facilitators to deliver experiences that connect people and elicit discovery in Corporate Innovation Initiatives for Emerging employee talent.

Context
Research was conducted within the context of corporate innovation projects focusing on corporate entrepreneurship. It was evident through the research that the effect of existing organisation structure scan be significant on the effectiveness of FEI activities. Therefore, with the goal of adapting to existing organisation structures, the context of corporate innovation initiatives is proposed as the context for future development.

Justification
As a result of organisation structures many workplaces have the challenge that it is difficult to bring together the right people for innovation projects. There is also the challenge of transforming thinking, to develop a workplace culture that supports innovative people and enables dynamic and diverse teams.

From the research it was evident that many companies have invested in innovation initiatives, but reach roadblocks when it comes to creating serious changes in how organisation structures adapt and how employees behave long-term. Many employees get pulled back in to day-to-day thinking and resources are allocated to standard operations. While intensions are generally good, the lack of support for innovation felt by employees can results in negative cultural traits. On the contrary, employees who are motivated by innovation projects and feel supported can become change champions that drive a culture of innovation that transforms companies.

By enabling employees to illicit discovery through experience, you provide them with a powerful communication tool. Simple showing a presentation, while effective for some scenarios, is not comparable to the influence that guided discovery can have in changing thinking. This was evident in the research and the emergence of ideas was linked to experiences and new information. Enabling facilitators with the ability to design impactful experiences, allows for more effective outcome based facilitation of creative and decision making activities, and changing thinking to support a sustainable innovation culture.

Key Design Criteria
The design criteria outlined here aim to provide a guideline that ensure the solution suits the context, user and problem.

Function
Provide a platform that enables the delivery of new experiences.

The design of a experience design platform must provide the benefits of making

Technology
Overall design must focus on distancing from day-to-day work and this includes work related devices.

Accessibility
The design of the overall solution must be accessible completely for differently-abled people.

Limitations
The design of product for a corporate innovation environment comes with some limitations to address. When looking at innovation topics its important to consider the legal limitation regarding IP, protecting data privacy, and regulatory obligations of companies

Direction and Ideas
An interactive experience design platform for designing experiences and environments for inducing insights and elicit discovery. Empowers facilitators to deliver creative experience easily to their team or workplace to encourage new ways of thinking and interacting with people and information.

Appendix

References

Ahn, S.-Y., & Kim, S.-H. (2017). What Makes Firms Innovative? The Role of Social Capital in Corporate Innovation. Sustainability, 9(9), 1564. https://doi.org/10.3390/su9091564

Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and Creativity in Organizations. Journal of Management, 40(5), 1297–1333. https://doi.org/10.1177/0149206314527128

Bagno, R. B., Salerno, M. S., & da Silva, D. O. (2017). Models with graphical representation for innovation management: a literature review. R&D Management, 47(4), 637–653. https://doi.org/10.1111/radm.12254

Burgelman, R. A. (1983). Corporate Entrepreneurship and Strategic Management: Insights from a Process Study. Management Science, 29(12), 1349–1364. https://doi.org/10.1287/mnsc.29.12.1349

Calisto, M. de L., & Sarkar, S. (2017). Organizations as biomes of entrepreneurial life: Towards a clarification of the corporate entrepreneurship process. Journal of Business Research, 70(1), 44–54. https://doi.org/10.1016/j.jbusres.2016.07.007

Cooper, R. G., & Kleinschmidt, E. J. (1987). New Products: What Separates Winners from Losers? Journal of Product Innovation Management, 4(3), 169–184. https://doi.org/10.1111/1540-5885.430169

Eling, K., & Herstatt, C. (2017). Managing the Front End of Innovation-Less Fuzzy, Yet Still Not Fully Understood. Journal of Product Innovation Management, 34(6), 864–874. https://doi.org/10.1111/jpim.12415

Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. African Journal of Emergency Medicine, 7(3), 93–99. https://doi.org/10.1016/j.afjem.2017.08.001

Gregor, S., & Hevner, A. R. (2015). The Front End of Innovation: Perspectives on Creativity, Knowledge and Design. New Horizons in Design Science: Broadening the Research Agenda, 249–263. https://doi.org/10.1007/978-3-319-18714-3_16

Holmquist, M., & Johansson, A. (2019). Employee-Driven Innovation: An Intervention Using Action Research. Technology Innovation Management Review, 9(5), 44–53. https://doi.org/10.22215/timreview/1240

Johnsson, M. (2017). Innovation Enablers for Innovation Teams - A Review. Journal of Innovation Management, 5(3), 75. https://doi.org/10.24840/2183-0606_005.003_0006

Koetzier, W., & Alon, A. (2019). Why "Low Risk" Innovation Is Costly Overcoming the Perils of Renovation and Invention. http://www.innovacion.cl/wp-content/uploads/2013/05/Accenture-Why-Low-Risk-Innovation-Costly.pdf

Kuratko, D. F. (2009). The entrepreneurial imperative of the 21st century. Business Horizons, 52(5), 421–428. https://doi.org/10.1016/j.bushor.2009.04.006

Kuratko, D. F., Covin, J. G., & Hornsby, J. S. (2014). Why implementing corporate innovation is so difficult. Business Horizons, 57(5), 647–655. https://doi.org/10.1016/j.bushor.2014.05.007

Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. Business Horizons, 57(1), 37–47. https://doi.org/10.1016/j.bushor.2013.08.009

Lewis, D. (2004). The Innovator's Dilemma: Disruptive Change and Academic Libraries. & Management, 18(2), 68–74. https://scholarworks.iupui.edu/bitstream/handle/1805/173/Lewis%20Innov%20 Dilemma.pdf?sequence=2&isAllowed=y

Luiz Moutinho, & Mladen Sokele. (2017). Innovative research methodologies in management. Volume I, Philosophy, measurement and modelling. Palgrave Macmillan.

Middel, C. (2018). THE CHALLENGE OF CORPORATE ENTREPRENEURSHIP. Accountancy SA, 28–30. Morris, M. H., Kuratko, D. F., & Covin, J. G. (2011). Corporate Entrepreneurship & Innovation. In Google Books. Cengage Learning. https://books.google.com.au/ books?id=azgXBAAAQBAJ&lpg=PP1&ots=6uZQjJOy7_&lr&pg=PR4#v=onepage&q&f=false O'sullivan, D., & Dooley, L. (2009). Applying innovation. Sage.

Seal, A. (2016). Thematic analysis. Researching social life (pp. 444–458). Sage Publishers.

van den Ende, J., Frederiksen, L., & Prencipe, A. (2014). The Front End of Innovation: Organizing Search for Ideas. Journal of Product Innovation Management, 32(4), 482–487. https://doi.org/10.1111/jpim.12213

Wilson, C. (2014). Interview techniques for UX practitioners : a user-centered design method. Morgan Kaufmann.

Semi-Structured Interview Guide

1.0 Introduction (3 mins)
- Brief participant.
- Introduce myself.
- Explain goals of interview.
- Review interview methods used, use of data, identifying information and confidentiality.

2.0 Structured Topics (20 mins)

Background
    Q: What is your background and your role in the organisation?

Opportunity Discovery & Analysis
    Q: How did the ideas or opportunities arise for the new offerings you have worked with?
    Q: Could you describe how the decisions were made to start pursuing these ideas?

Creative Activities
    Q: What are the primary outputs of your work when creating something new at work?
    Q: Describe the creative activities and outputs when exploring if an opportunity or initial idea is worth pursuing?
    Q. Describe the creative activities and outputs in generating ideas and enriching ideas?
    Q. Describe the creative activities and outputs in defining and communicating concepts?
    Probe: What are the secondary outputs of your works? (Artifacts that are used to support primary outputs)

Tools
    Q: What tools, software and hardware do you use when creating something new at work?
    Q: What are the benefits you experience from using these tools?
    Q: What are the drawbacks or limitations in your experience using tools ?

Benefits and frustrations of existing solutions
    Q: Tell me about the most frustrating and challenging things about creating something new at work?
    Probe: Could you explain a bit more about what you meant by ....?
    Q: Tell me about the best things about creating something new at work?
    Probe: Describe

3.0 General questions and open dialog (7 Mins)

4.0 Closing comments (2 mins)
- Thank participant.
- Request completion of any paper work.
- Survey follow up

--- End of interview----

Interview Helpers

Probes & Neutral Prompts

"Tell me about...", "Could you explain a bit more what you meant by...?" , "How do you feel about? ", "Can you describe?"
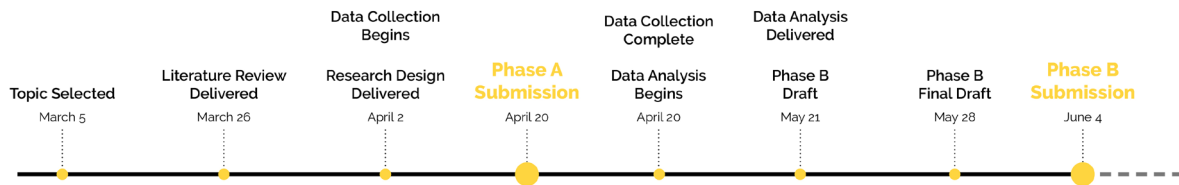
Research question

How can creative activities and decisions of individuals and teams throughout the front end of innovation (FEI) be best facilitated or controlled?

- Creative Activities & Decisions during opportunity phases
- Creative Activities & Decisions during idea phases

Project Management

Project Timeline
Key Milestones

Topic Selected
March 5

Literature Review
Delivered
March 26

Data Collection
Begins

Research Design
Delivered
April 2

**Phase A
Submission**
April 20

Data Collection
Complete

Data Analysis
Begins
April 20

Data Analysis
Delivered

Phase B
Draft
May 21

Phase B
Final Draft
May 28

**Phase B
Submission**
June 4

Interview Codes and Quotations

Code names

Workplace Culture

Opportunity Discovery

People

Communication

Methods and Techniques

Innovation Managment

Senior Managment

Challenges

Teams

Decision Making

Discover

Personal Development

Experience Design

Problem with org structure

Workshops

Talent Management

Motivations

Facilitating Creating Activities and Decision Making

Intrinsic Motivation

Supported by mentors and experts

Employee Insights

Work Outputs

Solution Delivery

Dynamic Cross-Funtional Teams

Professional development

Research

Problem Identification

Conversation

Sponsorship

Idea Process

Try new stuff

Ideas

Learn

Induced discovery

Feel supported by time and attention gathered.

Feeling of support

Empowering employees

Inspiration

Problem Symptoms

Functional accountabilities stopping people from getting together and working together.

Insight

Self-Driven Employee Project Staffing

Storytelling

Spreading Ideas

End Users
Employee Problems
Pitching
Iterate
Opportunity Analysis
Motivated by personal and professional development
Toxic Cultures
Discovery Journey
Thinking differently
Changing peoples thinking
Mental distancing from normal office life thinking
Moment of discovery
Concept Selection
Partnerships
Creativity
Pain Points
Killing ideas
Often teams do not have the right skills
Company allocates resources for supporting different ways of
working
Social Identity Theory
Resistance to change
Workplace Changes
Networks
Building personal network
Stuck in Normal Work
Ideation
Success
Innovative Spaces
Pathways
connection to company values
change champions
Benefits
Including stakeholders
Employee Experience
Visual Thinking
Hold significant in the business culture
References company strategy and support
Insight came from research
Caring about the brand
Innovators Dilemna
Referencing of method/process
Personal Benefit
Project management
Innovation used to grow employees
Motivated by being part of something bigger

Method of opportunity identification

Frustrated with convincing management to support new projects.

Siloed Working

Feeling valued

Personal values

Using Props

Adapting activities as you go

Data-driven decision making

Slide packs dont engage people

Using sensory stimulation to help guide discovery

Sensory Experiences

Diversity of people

Design Process

Collaborative innovation

Root cause analysis lacking in businesses

Relationship

Recognition in the business

Community

Researched using surveys

Made it easier

Digitalisation

Reoccuring Ideas

Technology

Evaluation

Employment Background

Academic Background

important

Ideas and inspiration arose from new information or a new experience

Bringing together the right mix of people

Sharing your experiences

Discovery comes from contact with end users

Different cultures require different approaches

Inspired by challenge

Change network

Social people

Attracting Motivated People

Involved

Has influence

Get an input

Egos and cultural or structural power differences.

Discovery as a vehicle to influence

Emersion

Involving people in the process and decision making,

Heuristics and Cognitive Biases

Rewards and Recognition

Workplace culture can be linked to actual structure. Too much command limits autonomy and decision making.

Counter-productive behaviour

Organisation priotities

Organisation Structure and incentive framework conflicts new project interests

Metrics

Working Environment

Using contrast to make a point

Limitations can make it more difficult to get insights out

Participant factors to consider in workshop design

No recipe

Semi-structured workshops

Plan activities based around the problem

Planning workshops from a workshop pack

Prediction

Resource managment

Use a digital twin to model organisational changes and aid decision making

Organisation Mapping

Digital Twin

Engaging with the message

Creating a really different environment

Information needed to be discovered to help make decision on teh outcome

Visual Scribbing

Guide workshops with no stimulus

Challenging the norm

Leaving stuff outside workshop to remove connection from normal thinking

Use large creative spaces to facilitate workshops

Diversity is important for creative solutions

Uses workshops for change and also to get outcomes.

Outcomes

Redefined the problem

System thinking

Limitations

Making an impact

Pushed out of projects

Reflects on companies view point aswell

Sharing Knowledge

Felt proud

Validating artifacts

Survey Research

Digital Content

Employee Advantage
Intrapreneurship
Flexibility
Experiment
Evolve

document	quotation	codes	comment
Interview 3 - Billy	and it's something that you kind of you plan as, you know, the problem, if you know what I mean.	Planning workshops from a workshop pack, Plan activities based around the problem	
Interview 3 - Billy	, I've got a whole workshop pack on it.	Workshops, Methods and Techniques, Empowering employees	Has a workshop pack on delivering this type of workshop
Interview 2 - Mads	, just they really back to you when it's something that when they find is really valuable, but two is something that's easier to roll out,	Feeling of support, Reflects on companies view point aswell	Feels the company really support idea that are valuable and also easy to roll out.
Interview 3 - Billy	, Well, our structure isn't working. But we've got all these functional accountabilities, that are stopping those people from getting together and working together. So maybe we put them in the same team.	People, Stuck in Normal Work, Functional accountabilities stopping people from getting together and working together., Problem with org structure, Teams, Dynamic Cross-Funtional Teams	Functional accountabilities stopping people from getting together and working together.
Interview 3 - Billy	. And rather than using slide packs that don't engage people	Slide packs dont engage people	
Interview 5 - Norbert [PP]_otter.ai.docx	. I'm not doing that too much anymore for me to watch in the moment so that many people will still think they need to convince everybody in the line organizations, and this is really a waste of energy and resources.	Challenges, Problem with org structure, Sponsorship, Senior Managment, Frustrated with convincing management to support new projects., Innovation Managment	Doesn't bother convincing line organisations anymore.
Interview 2 - Mads	a girl who was using her boot stock, which we get sent, you know, just to swap things sell things and it's just like free stock that we can use. She was using that and using like a calculator, make sure that she was generating seven times the amount back from what she was giving away. That has now been built into our new CRM.	Employee Insights, Employee Problems, Opportunity Discovery	One employee was solving her own problem. And now has become a part of the company norm.
Interview 5 - Norbert [PP]_otter.ai.docx	Again, finding some people. Very often, we have maybe some funding of public funds, doing public-funded projects to stuff projects very often. I've also staff my project fluidly so I have been people's manager for quite a while, but then you are bothering to with organizational things which are hindering you to work really on the content and concentrating more to find the right people for virtual teams and I work a hundred per cent now in virtual teams	Dynamic Cross-Funtional Teams, Teams	
Interview 3 - Billy	And because you, people naturally do what they need to do to get ahead. And so that's a barrier that I pretty much always see	Motivations, Workplace Culture, People, Organisation priotities	
Interview 5 - Norbert [PP]_otter.ai.docx	And I would refer to the design science research paradigm design science research, which is also very common and very famous in Australia.	Referencing of method/process	
Interview 4 - Niraj	And in general, we are really much focusing on the topic of corporate Innovation and establishing also a new innovation culture	Workplace Culture	

Interview 3 - Billy	And it actually tells you before you spend the money, how much money you're going to save from doing something like that.	Data-driven decision making, Senior Managment, Resource managment, Prediction, Project management, Decision Making	
Interview 3 - Billy	And it turned out the bad leaders were completely toxic	Insight came from research, Insight, Senior Managment, Toxic Cultures	
Interview 2 - Mads	And it was just the opportunity to get in front of people like that was incredible with the opportunity to see like our major office in London. For the few of us that do want to work overseas, the relationships that we were able to create were really important. And just to get time in front of, you know, the head of Gin for Diago is an unbelievable opportunity.	People, Building personal network, Personal Development	Appreciates the opportunity to build her network and have time with important people.
Interview 2 - Mads	And it's so cool to be able to represent that	Workplace Culture, Felt proud, connection to company values	
Interview 3 - Billy	And now you play this like game, its like a gambling game. And it is all about financial reward and punishment.	Social Identity Theory, Workshops	
Interview 3 - Billy	And say, our culture is so ingrained and hard to change that we can't just say, oh, we're gonna act like grown-ups now, it doesn't work that way.	Workplace Culture, People, Challenges	
Interview 3 - Billy	And so every little annoying thing that you can improve on like, Fuck yeah, like you're gonna be stoked about it. And then that's around when you are doing some of the IT change and stuff.	Employee Problems, Benefits, Employee Experience	Employees like that their work have become less annoying. and friction has been removed.
Interview 3 - Billy	And so how do you kick off a change network? And you know, what do you offer them? And it's usually like, it's an additional responsibility or something,	Change network, Spreading Ideas	
Interview 3 - Billy	And so I show them this it was a meta-analysis on actually how people influence. And it was like and so talks about three approaches. One is rational approaches. The other is conversion, so we're talking about, you know, using institutional power and punishment, things like that. And the other ones persuasive power, which is using more human skills. So things like ingratiation, so coming alongside and acting like you're one of them and writing things from their perspective and stuff like that. And naturally, what this shows is that persuasion is the best form of influence. So the more social ones, because they're more legitimate, rational, is in the middle, and all the ones where you are like using, you know, institutional power coercion, that I put this, I put this data up in front of them, because we're trying to convince them to change where they write these reports. Put it up in front of them, and they're like, No, that can't be right. Because, you know, this, this and this, and I was like, No, it is right, because I just showed you a really rational thing. That's a meta analysis, but thousands of studies I showed you that it's completely rational	Induced discovery, Experience Design, Storytelling, Emersion, Discovery Journey, Moment of discovery	Brought upon realization through acting out the scenario with the participants.

Interview 3 - Billy	And so like one was, there's this thing called social identity theory, which is basically, it talks about how groups are formed. And then how groups interact with each other. So this is where all the group dynamic stuff I've done through my academia came from, and what the research shows is you can change someone's group identity. So the group identity talks about you can define as Gogi an individual, you can define this one as the key rap. So you can define as a Queenslander or an Australian, or, you know, if mars attacked by earthlings, like your identity is fluid, and it changes depending on the context and like research shows that you can change someone and it doesn't need to be meaningful. So you can change someone's identity or group identity on the flip of a coin. So we actually, and they've done it before with heads and tails, and so split people up heads and tails, but what we did was we put up these two really abstract pieces of art and that usually go 50-50 in terms of preference, we put it up in, well, who prefers this A and B. And we want to identify them to identify as by Picassos or whatever and like, gave them a group name and got them to fight. And now you play this like game, its like a gambling game.	People, Workshops, Teams, Social Identity Theory, Methods and Techniques	Explain an exercise to demonstrate identity fluidity. By having people form new groups based on different contexts. Then using that to then change the group interaction and dynamics.
Interview 4 - Niraj	And so that's one of the biggest issues I see is finding the right sponsorship and finding sponsorship at all.	Sponsorship, Challenges	
Interview 3 - Billy	And so we use a lot of different mediums. So you talk about storytelling and stuff like that. And rather than using slide packs that don't engage people, we do a lot of visual facilitation that help engage with the message	Visual Thinking, Facilitating Creating Activities and Decision Making, Communication, Spreading Ideas, Engaging with the message	
Interview 3 - Billy	And so we went in like, oh you actually really need a shaping culture program.	Redefined the problem, Problem Symptoms, Problem Identification	Redefined the brief
Interview 3 - Billy	And so you've got a guy dressed up, your facilitators dressed up and he's taking you through, showing you like videos of boardrooms, black and white with like men and like talking about how bullshit the way we usually deliver work i	Using contrast to make a point, Storytelling, Experience Design, Sensory Experiences, Using sensory stimulation to help guide discovery, Using Props	
Inteview 6 - Norbert2.docx	And that is the reason, that this is something. You know, you fall in this trap of a one-dimensional management thinking, right? We need to reduce our let's say the death of production, what we do by ourselves, we can push more on th	Decision Making, Senior Managment	Example: Automotive. \nRisk of one-dimensional thinking in management can jeopardize future success/innovation. Tesla and VW example.\n
Interview 4 - Niraj	And then a third aspect is of course, you need the right sponsorship. So if you don't have the right sponsorship, the right people who really believe in what you're trying to do, you're not gonna succeed, you need to be able to pitch it and to the right people and get their sponsorship for it.	Sponsorship, People, Pitching, Communication	Sponsorship is important for teams. They need to convincingly pitch to the right people and secure sponsorship and partners.

Interview	Quote	Codes	Notes
Interview 3 - Billy	And then another one that I did was all about how you influence and so that that was more about how you get all these silos appearing and stuff like that. Like it's so easy. So you have a structure that's put in place like, of course, the fact that you've got devs, BAs and change, and then, you know, IT, support, of course, they're gonna segment into groups. And the group relations are really, it's really important that you maintain them well, if you're going to keep that business model, because it's really easy to sour them. And I heard the saying today, you know, trust arrives on a tortoise and gallops away on the horse. And it's like, as soon as you break that trust between teams, they're fucked.	Siloed Working, Workplace Culture, Relationship	
Inteview 6 - Norbert2.docx	And then you have a round of executives who never talk with or seldomly talk with the customer regarding this topic, and they make decisions based on a PowerPoint, not talking to people but the PowerPoint, and the most odd thing is that you do major business decision without knowing the people who are realizing this	Senior Managment, Solution Delivery, Decision Making, People, Teams, important	Decision makers dont know the customers, or the people delivering solutions.
Interview 3 - Billy	And then, you know, you're sitting around these fireplaces with an iPad crackling and made up, you know, props made up	Using Props, Storytelling	
Interview 2 - Mads	And there's a lot of people who are really interested in it that were mentors three years ago that now a part of the exact that alack I wonder who's doing it this year and what their idea is	Senior Managment, Hold significant in the business culture, Feel supported by time and attention gathered., Workplace Culture, Networks, Supported by mentors and experts	Gathers attention from previous mentors now in more senior positions
Interview 3 - Billy	And this is all about challenging the way we work right.	Challenging the norm, Mental distancing from normal office life thinking, Thinking differently, Discover	
Interview 5 - Norbert [PP]_otter.ai.docx	And this unfortunately still happens in SAP but also happens in the industry. In bigger enterprises, that managers were not and people managers were was saying they know everything or a lot more than other people, but never talk even worse it that they never talk with the customer. So they make decisions based out of feeling right. They having based on their experiences, they're not stupid. I know what I'm saying. I'm saying is they are not up to date because they're not talking with actual customers, so they should not be allowed to make such investment decisions anymore.	Challenges, Decision Making, Concept Selection, Killing ideas, End Users, Employee Insights, Innovation Managment, Senior Managment, Problem with org structure	
Interview 4 - Niraj	And we really believe that the power here lies within the employees because the employees are actual end-users.	Intrapreneurship	

Interview	Quote	Codes	Notes
Interview 4 - Niraj	And we really believe that the power here lies within the employees because the employees are actual end-users. And they know what, what were processes, for example, are broken, where can we optimize processes? And things like that. So we need this source of knowledge from our employees, also to yeah, to come up with great ideas to help us run become more productive.	Employee Insights, Employee Advantage, Opportunity Discovery, End Users, Discovery comes from contact with end users	
Interview 3 - Billy	And what are the bits and pieces of information that they need to discover, and when I say discover, its more naturally generating and helping rather than told to them, so what's the information they need to discover throughout the day to help them make the decision on the outcome.	Moment of discovery, Information needed to be discovered to help make decision on teh outcome, Changing peoples thinking, Experience Design, Discovery Journey, Induced discovery, Decision Making, Thinking differently	
Interview 2 - Mads	And when I was on the trip, one of the major themes the whole way through was sustainability and how a lot of different breweries like Guinness are repurposing water.	Iterate, Ideas, Insight, Discover, Opportunity Discovery	Connected insights across 2 discovery experiences (Trip and Surveys) to iterate idea
Interview 5 - Norbert [PP]_otter.ai.docx	And yeah, so from there, we really developed this thing.	Solution Delivery, Decision Making	
Interview 3 - Billy	And you're actually working as a group with no stimulus on the board and facilitator who's guiding you through.	Guide workshops with no stimulus, Experience Design, Communication, Facilitating Creating Activities and Decision Making, Workshops	
Interview 2 - Mads	And, yes, so a mentor is an important part in it.	Communication, Pitching, Pathways, Sponsorship, Supported by mentors and experts	Mentions mentors as an important part of the project in connecting and attracting business stakeholders.
Interview 2 - Mads	announced through the business, there's like a big zoom with 100 people on it. And guess now instead, it's like this big fanfare it's very cool.	Feel supported by time and attention gathered., Workplace Culture, Feeling of support, Feeling valued	Announcement celebrated and feel very cool. Feeling of acheivement, positivity and support.
Interview 4 - Niraj	Another dimension may be that you've been you're working in a team in a very technology-driven team, and you're using a technology and you really have so many different use cases in your mind which are not leveraged. So you really want to really want to use your experience here and solving some bigger problems using a specific technology where you think this could really help.	Opportunity Discovery, Workplace Culture, Employee Insights, Inspiration, Technology	
Interview 3 - Billy	Another way past this is when you have a more agile methodology. So they have cross-functional teams that actually have all the requisite skills to deliver an outcome.	Methods and Techniques, Teams, Problem with org structure, Often teams do not have the right skills, Dynamic Cross-Funtional Teams	Agile working helps overcome some organisational reward and regocnition challenged. Bringing together cross function teams and changing the workplace culture.
Interview 3 - Billy	Because it's not like you can just fix it spotfire when the whole fucking thing's on fire. You know, put it all out and build it up from the ground up.	Root cause analysis lacking in businesses, Problem Identification, Problem Symptoms	You can just solve the small challenges in workplace cultures, you have to solve the greater challenge, put it all out and build it up.

Interview 3 - Billy	Because it's really hard to get, you know, a day from senior leaders, so we might ever get an hour. And in that case, it's much harder because you've got to try and get all these insights out.	Challenges, Senior Managment, Induced discovery, Limitations can make it more difficult to get insights out, Frustrated with convincing management to support new projects.	Getting senior leader time is difficult. Creates challenges to deliver to fullest potential.
Interview 3 - Billy	being involved in the design is motivating, right? Like you they would use You know, if something's gonna have a couple of million dollars pumped into trying to fix it, it's a problem for most people, and they get to put their views in terms of how it's solved. And, you know, ultimately, that's super sustainable for them because the product that gets built has them at the centre of it. And that's usually pretty motivating.	Motivations, Get an input, Has influence, Involved, Making an impact	
Interview 4 - Niraj	But again, successes take time. It's not that it's going to happen overnight. And it's for me, again, it's even successful if people learn to drive their ideas in a more sustainable, self sustainable way. That's why teaching these methods and then if they apply these methods on a regular basis, we already won a lot because that will go on to the next level. And they will excel and they will take this knowledge and apply it to the future ideas or whatever or they iterate on the older ideas so that's what I liked a lot of positive	Empowering employees, Workplace Culture	This it he comment and the
Interview 2 - Mads	But because they're taking you overseas, it has to go through the managing director and your name has to get kind of ticked off. You know, all of these things have to be cleared by legal and be cleared by finance and so your name is just showing up, showing up, showing up.	Feel supported by time and attention gathered., Professional development, Recognition in the business, Motivated by personal and professional development, Innovation used to grow employees, Talent Management	Name appears in front of many important people as a result of being in the program and also the administrative processes of executive approvals.
Interview 4 - Niraj	But first of all, we need to identify the problems.	Problem Identification, Opportunity Discovery, Discover	
Interview 4 - Niraj	But if you ask them to really come up with solutions, how to really solve the problems, some of them are really creative and come up with solutions to overcome these broken processes which actually then sometimes leads to new different initiatives to solve these problems.	Ideation, Ideas, Creativity	
Interview 3 - Billy	But if you just kind of make a change in a dark room or an executive board, and then try and push it out to the business, then yeah, absolutely what we get from a lot of our change champions and change agents and the like, is that, you know, you're doing this to me, not with me. It's not gonna work. I know what's best. You haven't consulted me, we're on the front line, the people in suits, and the executives don't know what the hell they're talking abou	Challenges, Resistance to change, Including stakeholders, Toxic Cultures	When try to implement change without involving effected parties, you can encounter resistance to change.
Interview 2 - Mads	But it was when he just kind of like broke my mind	Opportunity Discovery, Methods and Techniques, Personal Development, Induced discovery, Supported by mentors and experts	Moment of realisation when introduced to new information / framework.

Interview	Quote	Codes	Notes
Interview 3 - Billy	But it's also timing, you know, some of the thoughts we put in right is like, so is this an individual? Like, do you want an individual to come up with insights? Or do you want them to come up to it as a group, and it all comes down to the timing of the day. If we have a one-hour session, we'll probably do a lot more group activities rather than an individual ideation and share, we might do group collaboration to come to an outcome and then we'll kind of triangulate that amongst three groups		Create workshops based on how they think the insights that are needed, participants and time available.
Interview 2 - Mads	But it's like an in-state Conference just for Diageo employees as well as, you know, little video clips about something that you cared about from HPP or how your projects going just as updates for Yammer.	Sharing Knowledge, Communication, Learn, Workplace Culture, Sharing your experiences	After discovery trip. Presented at conference, had to make a few videos, and then updates on company yammer.
Interview 2 - Mads	But it's still a very rewarding thing to imagine to see an idea that you've had to keep going.	Success, Motivations, Motivated by being part of something bigger, Intrinsic Motivation	Like to imagine and see their idea keep going, even without them.
Interview 3 - Billy	But often I see it as really symptomatic.	Problem Symptoms, Opportunity Discovery, Problem Identification	Feels often of the opportunity arises from a symptom of a deeper root cause.
Interview 4 - Niraj	But the bigger topic is actually when we think about it, the bigger topic we should look into is our entire organizational structures, organizational structures of our company. Most corporates are not designed to support this kind of innovation processes. So we have the higher hierarchies which are designed to, to cater to a specific cause-specific needs	Problem with org structure	
Interview 2 - Mads	But when I was doing kind of surveys and insights into it, I realized that managers have no time.	Research, Employee Insights, Insight, Discover, Pain Points, Opportunity Discovery	Discovered an insight during survey research
Inteview 6 - Norbert2.docx	But you get a question already from the Office of Christian, How to, let's say evolve SAP into a fluid organization? Because obviously people realize, we are not fast enough. We are not close enough to customer to the market with this anymore.	Self-Driven Employee Project Staffing, Senior Managment, End Users, Problem with org structure, Innovators Dilemna, Innovation Managment	senior managment exploring future as a fluid organisation. Currently not close enough to customers, or fast enough.
Interview 5 - Norbert [PP]_otter.ai.docx	But you need also to let it go a little bit and be open for things which are maybe going in a way you would have not expected so we should really get a little bit of way of yourself, saying hey, relax and observe.	Opportunity Discovery	

Interview 5 - Norbert [PP]_otter.ai.docx	call prototypes, they call it artifacts, could be a process could be software could be any good concept. They call it artifacts. So you have a problem, I have a problem description, empirically. Then you go to design principles, you have an idea to talk together with some experts and practice people bought a potential solution and you derive design decisions. And then you build a prototype artifact. And this is something you can bring into the environment, you can test it, basically what we always do also with fluid org. So went from this, from this workshop, we went through different iterations until we got now the MVP or MVP2 in the moment for crisishelp.eu, which is already live, which is fluid org basically, is the MVP three. And it's already live	Idea Process, Iterate, Referencing of method/process, Decision Making	Using design science research principles as a framework for design decision making. Establishing design principles, testing solutions and making decisions comparing test results an design principles.
Interview 4 - Niraj	Challenges are bringing the right team together, that the first challenge is that the team doesn't even know that they are not the right team, that they are missing some appropriate skill sets. Where do we find the people who, where do we can we actually communicate our idea and find the right set of people who are interested to join our endeavour? And that's, that's a big topic.	Teams, Challenges, Often teams do not have the right skills	
Interview 4 - Niraj	Coming back to the topic teams are not complete. So we need to help them to find appropriate team members to be able to really communicate and create the right set of communications and storytelling at this time	Teams, Communication, Storytelling, Often teams do not have the right skills	
Interview 3 - Billy	d it's crazy the way you see it happen, like Yeah, the company just came from the toxic cultural side of toxic that, you know, we had people, withholding information and all that kind of stuff. And we were supposedly trying to help them	Toxic Cultures, Counter-productive behaviour	
Interview 3 - Billy	developing creative thing like communication. So be the But thoughts and all those bits and pieces to help push messages out to mass groups of people as well.	Work Outputs	
Interview 3 - Billy	digital twin. So we also have a software where you send out a bunch of surveys and stuff like that, and it actually creates a digital twin of your organization. So it maps out all your structures, your culture scores, your engagement surveys, your leadership scores, everything.	Digital Twin, Decision Making, Digitalisation, Researched using surveys, Data-driven decision making, Workplace Culture, Organisation Mapping, Use a digital twin to model organisational changes and aid decision making	
Interview 3 - Billy	diversity, for me is key to getting to creative solutions, you need that we know that different ways of thinking you're gonna yield different solutions, and you're gonna find the best solution.	Diversity of people, People, Teams, Diversity is important for creative solutions	Diversity is important for creative solutions. Because of the variety of perspective you will get.
Interview 3 - Billy	either A mural has a kind of Kahoot functionality in terms of you can do the votes and stuff like that.	Methods and Techniques	Tools for Voting and facilitation:\nMural\nKahoot

Interview 4 - Niraj	end-user	End Users	
Inteview 6 - Norbert2.docx	Europe very big DSAG is German SAP user group. And in the US, you have ASUG you may have heard that already American SAP user group and they are very strong, they are very powerful because they have workstreams for instance, in supply chain management and procurement and finance and what else, where they sit together in roundtables again, maybe in this regard its a little bit similar, What are the major things SAP should focus on right? Like integration? Now nowadays integration topic is very important, as customers realize. So this is a very generic let's say, give you a homework, right. It's meant our homework. It's not real groundbreaking, innovative. Yeah. It's just getting the things successfactor integrated, this one is here always, so and then you have this formal thing here, right? This is a typical portfolio management, where we try to stick to it still, but it's not really working anymore because things are getting more fluid more, more agile, more vuca.	Decision Making, Partnerships, Sponsorship, End Users, Innovation Managment, Opportunity Discovery	Company receives requests for incremental innovation from organisations representing user groups.
Interview 3 - Billy	find a lot more pieces of furniture in government. Because they are so highly unionized that you can't ask me to be a change agent. That's not part of my role. I'll get the union on your side.	Resistance to change, Workplace Culture, Workplace Changes	Government and Unions present challenges in change. Employee resistance.
Interview 4 - Niraj	First of all, the most important thing to understand is that we need time, we need time to actually really realize and build something. Ideas can't be... You can't develop something meaningful within a day or two days, it needs a lot of time.	Workplace Culture, Challenges, Functional accountabilities stopping people from getting together and working together.	
Interview 5 - Norbert [PP]_otter.ai.docx	for fluid org I think we have a good model that the IP is with the partner with CampusJaeger and we bring it basically we mature it together with CampusJaeger and we bring it in on the SAP price list so that we can also sell it to SAP customers. And we get also for our SAP sales guys we get when they when we are selling it the solution because a good quotation or good quote on the revenue is quite cool because the main engineering is done by the partners and we can participate bringing it on the pricelist of SAP. So the partners advantage that they can access our customer base, and we have that monitored we have new solution	Teams, People, Solution Delivery, Partnerships, Innovation Managment	New business model. Partnering with startups and corporate's. Startups engineers, large company brings to market.
Interview 3 - Billy	get an immediate improvement to how their work life is	Motivations, Employee Experience, Benefits, Workplace Changes, Employee Problems	People are enthusiastic when they experience immediate improvements to their work life
Interview 5 - Norbert [PP]_otter.ai.docx	Get funding from customers, get funding from the executives, you get funding from the employees, and we find our right people, people see where can I engage? How can I develop myself? How can I grow myself? and they find our initiative and they join us, you know, the initiative, and they found basically the kind of internal startup	People	

Interview 3 - Billy	Google Slides r	Methods and Techniques	Google slides\n
Interview 3 - Billy	Google software called jam board. And so you can virtually whiteboard all over the place.	Methods and Techniques	Jam Boards . By Google
Interview 4 - Niraj	got the right setup to dynamically staff projects and drive projects. So what I'm trying to say is that we should really go more into the path of changing organizational structures in a way that we can dynamically work on ideas, which we want to work on. And the old way of working is definitely that you are in a team and you end up to be in this team for the rest of your life. The new way of work is you work on topics you are interested to work with your skill set, but also this kind of topics and programs enhance your skill set and actually shape you as a person. And you gain new skills that why different programs and projects which you know,	Self-Driven Employee Project Staffing, Personal Development, Workplace Culture, Innovation Managment, Intrinsic Motivation, Learn, Teams, Try new stuff, Dynamic Cross-Funtional Teams	
Interview 5 - Norbert [PP]_otter.ai.docx	hardest thing also to really bring it to the software which can be professionally delivered,	Challenges, Solution Delivery	Challenge to bring solution in a professionally delivered manner (High Quality)
Interview 2 - Mads	he more people that come into it, the more people that start to reach out to you. So, for mine, anyone that cared about sustainability just started reaching out and saying, How can we be involved?	Spreading Ideas, Networks, Intrinsic Motivation, Teams, People, Self-Driven Employee Project Staffing	Getting interest from others who want to contribute.
Interview 3 - Billy	helping a department get funding for a project they want to initiate, to strategy, so strategy documents on the way forward to future. You know, workforce roadmaps and what are the things they need to consider moving forward? It can be plans and change planning. So that there's a lot of kind of discrete document outputs in terms of the deliverables we do.	Work Outputs	
Interview 3 - Billy	how do you address the whole system and get them all involved in the design process for something?	System thinking, Collaborative innovation, Design Process, Teams, Bringing together the right mix of people, Dynamic Cross-Funtional Teams	Looks to address the whole system and involve stakeholder into the process.
Interview 4 - Niraj	how we drive innovative, innovative ideas end to end and support our employees to really make something meaningful.	Workplace Culture, Project management	
Interview 4 - Niraj	I also loved about the experience garage that we at least myself, I really get to know a lot about different innovations from external as well, what's happening out there. And what are the big technology trends which are out there? So we talked about platform business are we talking about IoT whatever what impact do these trends have on our companies? And we look at startup trends,	Discover, Personal Benefit, Opportunity Discovery, Personal Development, Motivated by personal and professional development	

Interview 3 - Billy	I can actually have a value-based discussion with my leaders to say, hey, our integrity is damaged here. We need to not do this or you're not caring for me here. You need to do this. And so there's that kind of values, culture, mission statement piece.	Motivations, connection to company values, Personal values	
Interview 5 - Norbert [PP]_otter.ai.docx	I don't want to be in a people manager role anymore in a classical HR sense, because when people are intrinsic motivated, they just come to you we have a lot of people experts what we want to do great stuff and funny stuff, new stuff, want to explore things. And these are exactly the right people to engage. So we have many developers in SAP and out in our network and partners, so we engage with them. It's not a problem at all.	Teams, Intrinsic Motivation, Motivated by personal and professional development, Self-Driven Employee Project Staffing, Dynamic Cross-Funtional Teams	Prefers to work with virtual and fluid teams. Believes intrinsically motivated people are the right people to explore new things.
Interview 4 - Niraj	I feel in every employee there is a good wealth of knowledge and creativity which we really need to help them to, to kind of bring it on the road and also listen to them.	Personal Development, Empowering employees, Workplace Culture	
Interview 4 - Niraj	I feel that everything starts with some kind of inspiration, which somebody's got, it's kind of a can be an article could be a conversation. It could be a movie scene or something, something which inspired you got that	Discover, Opportunity Discovery, Conversation, Inspiration, Digital Content, Ideas and inspiration arose from new information or a new experience	
Interview 4 - Niraj	I feel that teams really need a lot of coaching and guidance in this area was the quality, the quality of real let's say, senior management, communications or pitches. The quality is not really good. Because the people always tend to be very much stuck in their thinking and their area but not they're not able to do proper storytelling and really communicate their ideas in an easy and consumable way.	Communication, Challenges, Pitching, Senior Managment	
Interview 2 - Mads	I guess the other big thing was kind of feeling the brands as well we get told all the time that we're standing on the shoulders of giants because we have brands that go back 300 years, you know, they outdate Australia. So it's just incredible to really feel that	Workplace Culture, Personal Development, Learn, Discover	
Interview 2 - Mads	I just did a lot of survey monkeys.	Researched using surveys	Researched using surveys
Interview 2 - Mads	I just kept talking to my mentor about having the most impact with the least amount of work in my speech with the least amount of work.	Conversation, Opportunity Discovery, Supported by mentors and experts	
Interview 4 - Niraj	I just love to help people, yeah, experiencing new stuff and evolving and trying to give them a good, let's say, let say give them a platform where they can learn and apply their knowledge and come up with stuff which is meaningful. So fostering creativity.	Learn, Workplace Culture, Personal Development, Creativity	Enjoys fostering creativity and providing a platform for people to learn and create.

Interview 2 - Mads	I like I've had a good relationship with the commercial director since I presented last year because he went to BBC, and visited. But he's now moved into commercial director. He was in a lower position last year, and he cares about sustainability. So it's just like, tick next to your name. You know, it's cool	Relationship, Building personal network, Motivated by personal and professional development	Built a relationship with business mentor. Gets to position herself infront of them.
Interview 4 - Niraj	I really feel that people are so thankful that that we are teaching it to them. And we're providing feedback with speaking, listening to what these people have to say. So that's, that's already key, from my perspective, to shape the corporate innovation culture.	Methods and Techniques, Workplace Culture, Personal Development	
Interview 3 - Billy	I talked about siloed working and how that can be stemmed from reward and recognition to leaders and all that kind of stuff.	Siloed Working, Senior Managment, Rewards and Recognition, Challenges	Siloed working can be stemmed from reward and recognition of lead
Interview 2 - Mads	I think I see it as a program to generate ideas and generate connection within the business more so than they see the ideas continuing. But we have seen, you know, different parts of ideas then going on to be bigger.	Feeling of support, References company strategy and support, Killing ideas, Workplace Culture	Feels the company values the connections formed and the ideas generation rather than ideas continuing. But some ideas do go to be part of bigger things.
Interview 2 - Mads	I think it's the check-ins. I think it's the time as well that's put into us.	Feeling of support, Personal Development, Feel supported by time and attention gathered., Workplace Culture, Supported by mentors and experts	Feels the time and attention they receive make her feel supported by the company.
Interview 2 - Mads	I think just perspective and care about the brands as well. And you know, it's really important to have a connection to these brands as salespeople because so much easier to be authentic and genuine.	Workplace Culture, Caring about the brand, People	Felt she got a closer connection the company. They care about customers and their brand, care about her and she cares about them,
Interview 4 - Niraj	I try to really enhance my ideas, bring them to the next level, put them in into a context, pitch them to the right people, change them slice and dice them, kind of like evolve them. And ongoingly try to add new stuff to it, which makes sense. So it's actually a continuous process of improving my idea and bringing it to the, all my ideas, and bringing them to the next level. In this case, the experienced garage is a result of what our ideas are a very iterative process and it changes all the time. So you have to reinvent yourself all the time.	Iterate, Ideas, Communication, Try new stuff, Pitching, Opportunity Discovery, Idea Process, Opportunity Analysis	
Interview 3 - Billy	I wouldn't be mentally challenged I'd be sitting in your comfort zone doing a monotonous task, no room for creativity, no room for creative problem solving, anything like that just doesn't match.	Inspired by challenge, Motivations, Intrinsic Motivation, Personal Development, Creativity	Inspired by room for creativity, problem solving, not monotonous.
Interview 2 - Mads	I'm kind of in the point that everyone should get to do something like this, who works at Diageo, whether you have to pay for it or not because you just care so much more	Empowering employees, Caring about the brand, Innovation used to grow employees	Felt the discovery experience was rewarding. She cares so much more.

Interview	Quote	Codes	Notes
Interview 2 - Mads	I'm not going to be able to do that but it's a much bigger idea and it's more about kind of changing customer perception	Limitations, Motivated by being part of something bigger, Functional accountabilities stopping people from getting together and working together.	Feels the projects is start of a bigger idea within the business.
Interview 5 - Norbert [PP]_otter.ai.docx	I'm responsible for innovation co-engineering and basically focusing on things which are not traditionally in the core of SAP products	Employment Background	
Interview 4 - Niraj	in order to find that we need to address it these to these great ideas or whatever, to the right people.	Pitching, Communication, Sponsorship, Spreading Ideas	
Interview 2 - Mads	is the Five I's	Methods and Techniques	Name of the method introduced
Interview 2 - Mads	it didn't end up being the idea that came to fruition,	Ideas, Iterate, Research, Ideation, Discover	
Interview 4 - Niraj	It means that, an idea at the beginning at the very early stage may seem not to really have a great potential and that, for us, most of the times is the reason to actually kill it at an early stage and not provide our employees with appropriate pathways to really go ahead and iterate on the idea so we lose a lot of our corporate culture, we'd motivate our employees and stuff like that.	Workplace Culture, Killing ideas, Innovation Managment	
Interview 5 - Norbert [PP]_otter.ai.docx	It's called actually, by the way, if you're interested, it's a new program in SAP, you have three different stages, how we bring startup solutions on the market. First, we can bring it to the App Center. So basically this kind of App Store from SAP, where trust is kind of a yellow pages of different partner solutions, which are certified or by hedge partners, who are the partners of the program, then you have endorsed solutions, and then you have solution extensions. And finally, you cannot, as a customer, you cannot distinguish between an SAP solution and a partner solution anymore.	Work Outputs, Solution Delivery, Pathways, Innovation Managment, Partnerships	Examples of go to market solutions for innovation partners at SAP
Interview 3 - Billy	it's designing an experience that and we call it with really cool experience design. So designing an experience that fosters their creativity, and what doesn't foster their creativity is taking them back to everything that they do in their day to day at the office.	Moment of discovery, Experience Design, Try new stuff, Stuck in Normal Work, Mental distancing from normal office life thinking, Changing peoples thinking	With the right mix of people, you need to then design an experience to foster creativity and bring them away from their day to day at the office.
Interview 3 - Billy	it's great not to have slides. Just kind of draw everything up as you go. Yeah, there's really not that ..there's no, there's not a recipe to it. There are a bunch of tools.	Adapting activities as you go, Slide packs dont engage people, Communication, Experience Design, Methods and Techniques	Benefit of no slides is you are more flexible and you can draw it up as you go.
Interview 2 - Mads	It's kind of like having, you know, an abbreviation next to your name like MD or something. It's like a little safety badge that when you're in it, you're in it.	Workplace Culture, Hold significant in the business culture, Talent Management, Motivated by personal and professional development	Sense of safety with this program against your name in the company.

Interview	Quote	Codes	Summary
Interview 3 - Billy	just creating really different environment, having a plan for a day or for a couple of hours, or whatever it is to guide them through the discovery portion.	Creating a really different environment, Thinking differently, Changing peoples thinking, Discovery Journey, Facilitating Creating Activities and Decision Making, Induced discovery	Creating a really different environment is Important.
Interview 2 - Mads	know that those massive markets are taking it really seriously then has more impact on our teams. Because they look to it and go well, in four years, that's what we're going to need to be doing. Um, that was really important.	Workplace Culture, Opportunity Discovery, Discover	Got a new perspective on the business and the impact she could have.
Interview 3 - Billy	like a lot of we do as workshop stuff, like we need whiteboards, like that's our bread and butter.	Methods and Techniques, Workshops, Facilitating Creating Activities and Decision Making	Whiteboards important to workshops
Interview 3 - Billy	linked with that you've got culture. So, you know, coming from the organization that I was just at, you have this really kind of, you hit them in different ways.	Workplace Culture, Try new stuff, Different cultures require different approaches	
Interview 3 - Billy	look up the visual scribing stuff, look up biklabo	Methods and Techniques, Visual Thinking	Biklabo used as visual scribing tool for Visual Thinking.
Interview 3 - Billy	Maybe the other side of it is more the engagement piece, right. And so how that slipped my mind. The engagement. It can change a fair bit. So it can be anything from you know, I've engaged with CEOs and executive directors and the likes to talk about how they leave their organization and what are the things that they value amongst their people. And what are their barriers to moving forward is usually they get us in when facing a significant business problem. Otherwise, you know, things are hunky dory. They wouldn't get us in But yeah, so it can be anything from executive coaching. And it can be engaging with senior leadership teams over on a couple of kind of leadership away days where we go away, whether it be, you know, somewhere in the state or, or the coast and we run workshops with them and talk about what are the behaviors that they need to instil in culture and all that kind of stuff. It can also be change management stuff. So a lot of it's kind of workshops, it can be one on one, it can be groups of people, and it's usually to get them to. And the goal is either to push a message or create a message or create a product. I don't want to say products, but create an output with them. So a lot of the stuff we do is co-design and	Work Outputs	
Interview 3 - Billy	Mural.	Methods and Techniques	
Interview 3 - Billy	my honors stuff was all focused on group dynamics, and in particular, how social groups play a role in terms of how power is exchanged between groups in terms of, in that case, it was reconciliatory action.	Academic Background	
Interview 2 - Mads	my mentor I meant to catch up with him once a month at a minimum. But you kind of just ongoing talking.	Conversation, Communication, Personal Development, Supported by mentors and experts, Talent Management	Speak with mentor monthly. But becomes more of an ongoing conversation with mentor.

Interview 2 - Mads	My mentor was pretty good at this. I'm sure it's a really common thing but like the Five I's of like the issue implementation	Methods and Techniques, People, Conversation, Supported by mentors and experts	Mentor introduced framework for innovation (Five I's)
Interview 3 - Billy	naturally motivated they usually really social people. So a lot of them kind of butterflies in the sense in the ones that everyone talk to is so like, by giving them this role like that it's they're naturally drawn to it, and making time for them to do it.	Spreading Ideas, Communication, Social people, Motivations, change champions	
Interview 2 - Mads	nd then here, people really do care about these projects and making it go.	Solution Delivery, Feeling of support, Empowering employees	Feels people care
Inteview 6 - Norbert2.docx	No, I basically I'm doing this with a bunch of people. We're helping organize it really on the topic perspective, I'm doing it. So I'm setting basically the theme or themes and you know, it says, there is a format which we invented, please myself and two or three people and some colleagues from SAP.	Research, Opportunity Discovery, Conversation, Learn, People, Discover, Method of opportunity identification	
Interview 3 - Billy	Now I'm working at PwC as a generally registered psychologist. And even though that's not the title of the day, value in completing my endorsement as a endorse organizational psychologist, which I'm a year off, but what we've kind of what I kind of I'm part of the team called people in organization. And de identified I just call it like the people advisory team is probably a better way to put it. And basically we are consultants. So we go into any business that has anything challenging in the people space, and we'll help them out. So it goes through a lot of the topics that I mentioned that I studied, so we're talking change management, workforce planning, strategic workforce planning, leadership, culture, organizational design, or redesign, off model design, and ways of working which is kind of fits into the culture and leadership piece. But yeah, that's the kind of stuff that I work in and each project is different Those are all projects that I can think of off the top of my head that I've worked across. Also public initiative. So evaluating government responses to various issues around social issues, like domestic and family violence and stuff like that and how they write policy to influence or change the workplace to	Employment Background	
Interview 3 - Billy	Now that we know all the things that create an experience you know, whether it be visual, auditory, all this stuff, you know, we know how all the senses play in an experience	Sensory Experiences, Experience Design, Using sensory stimulation to help guide discovery, Methods and Techniques	Using senses to help guide experiences.
Interview 5 - Norbert [PP]_otter.ai.docx	Of course, you need a little bit of fun experience as well, a little bit background. But you need also to let it go a little bit and be open for things which are maybe going in a way you would have not expected so we should really get a little bit of way of yourself, saying hey, relax and observe.	Opportunity Discovery, Workplace Culture, People	
Interview 4 - Niraj	often you hear the same ideas popping up all the time.	Reoccuring Ideas, Employee Insights, Employee Problems, Pain Points, Problem Symptoms	

Interview	Quote	Codes	Notes
Interview 2 - Mads	Oh, really depends on the idea.	Idea Process, Innovation Managment, Pathways	Suggest that the pathway is different for each idea
Interview 3 - Billy	one of my biggest beliefs is that, you know, people will see symptoms, and they look to cure symptoms rather than causes. And I think the stuff around root cause analysis is lacking in businesses.	Problem Symptoms	
Interview 4 - Niraj	one of the things I'm struggling with for a long time is	Opportunity Discovery	
Interview 4 - Niraj	one of the things I'm struggling with for a long time is that there are many different ideas which employees have. And then some of them are brilliant, some of them are pretty early stage. And within the within our corporate environment, we tend to actually kill those ideas, many ideas at a pretty early stage because we're very campaign driven. And we're kind of like really, really not fostering this sustainable innovation culture	Challenges, Innovation Managment	
Interview 2 - Mads	one thing that came back from a lot of people was	Insight, Opportunity Discovery, Insight came from research	
Interview 4 - Niraj	Or it could be something which caused the big pain to yourself for a while.	Opportunity Discovery, Pain Points, Inspiration, Employee Problems	
Interview 5 - Norbert [PP]_otter.ai.docx	ou know Christiansens the innovators dilemma? This innovators dilemma is basically when you are a big company, big organization and you stick always to your standard delivery, and you're missing out create market opportunities. So you're falling behind automatically, right? And thanks God, some people say when you want to do some innovations like fluid org, the better is you go outside with it. So you look for an outside partner, because then you can save it cannot be destroyed by political or management discussions of people.	Innovators Dilemna, People, Partnerships, Opportunity Discovery, Teams, Decision Making, Solution Delivery, Discover, Problem with org structure, Workplace Culture, Stuck in Normal Work	Innovators dilemma at company. Organisation is focused on the standard delivery, and missing out on creating market opportunities. Say partnering outside can save bureaucracy destroying innovations.
Interview 3 - Billy	private, it's usually pretty easy to sell people into because a lot of private people are really, really driven.	Motivations, Workplace Culture, Intrinsic Motivation	
Interview 2 - Mads	program really is all about retaining talent.	Workplace Culture, Motivations, Professional development, Innovation Managment, Talent Management	Mentions that is had had a positive effect on retaining talent.
Interview 4 - Niraj	provide our employees with appropriate pathways to really go ahead and iterate on the idea so we lose a lot of our corporate culture, we'd motivate our employees and stuff like that. S	Pathways, Iterate	
Interview 3 - Billy	pushing a message without actual direct engagement, face to face engagement, I should say. Oh, and also like, building in like, engaging with portals to build in guides on how to use them	Work Outputs	

Interview	Quote	Codes	Summary
Interview 3 - Billy	Qualtrics, survey monkey, Google Forms, Microsoft forms. I mean, the Google and Microsoft stuff just fits into that suite.	Survey Research, Research, Methods and Techniques	
Inteview 6 - Norbert2.docx	raditional thing and people love it because it as managers and operations guy love it because they think they have control and has a real outcome for the company, but it's wrong, because it's s my opinion and it's not only my opinions far too slow, and it's far too far away from the customer. So because this funneling takes a long time, in this time when it takes maybe a half a year or a year, until final decisions are made for developed something, the market already went over, right? Maybe the priorities has already changed. But you have funnels, you have a lot of ideas and you sunk it down more and more. And at the end, some people are sitting there and making decisions, budget decisions to develop certain things	Senior Managment, Innovation Managment, Decision Making	Traditional Innovation processes favored by management because they think they have control. Funnels take too long, and too far away from customers. Decision makers still dont see customers.
Interview 3 - Billy	Rather than doing a workshop to come to a solution, they do a lot of research and market research to come to a solution.	Innovative Spaces, Research, Company allocates resources for supporting different ways of working	Do research and market research to develop solutions
Interview 3 - Billy	root cause analysis is lacking in businesses.	Root cause analysis lacking in businesses	Feels rook cause analysis is lacking in businesses.
Interview 3 - Billy	smorgasbord or a menu of items.	Work Outputs	
Interview 5 - Norbert [PP]_otter.ai.docx	So and then we find out there are three or four key ingredients in this audience and they are from there which drove at this purpose-led, self-organization, networking and learning from data	Opportunity Discovery, Opportunity Analysis	4 key elements for future of work
Interview 4 - Niraj	So at the moment nevertheless, we are working very much through evaluation processes where we really work with specific teams or team members, we look into specific ideas from our employees, then evaluate whether they make sense or not. So that's the actual process at the moment. So we very much rely on subject matter experts, potential subject matter experts to really, to really, yeah, to really evaluate potential ideas.	Evaluation, Innovation Managment, Opportunity Analysis	
Interview 4 - Niraj	So for example, you would run you're in leadership position for controlling and the next leadership position would be within sales or will be within finance or whatever HR so you really step out of your comfort zone. But you really, that's the way we foster innovation. Of course, you have to have an interest in these topics. I'm not saying the push into something and you just do it. But you also have to develop yourself within the projects and gain new skill sets that will keep us more productive, that will keep us more innovative. And that's the way so we have to put the people back into the centre of everything we do.	Personal Development, Try new stuff, Workplace Culture	

Interview 2 - Mads	so for the commercial director, they know those five people, and they'll remember those five people. And that's an awesome thing to have. So they'll come up to you at like state conferences and things for a chat because they have something ready to talk to you about	Recognition in the business, Hold significant in the business culture, Senior Managment, Feel supported by time and attention gathered.	Important people recognise them as important
Interview 3 - Billy	So helping set up projects set up PMO (project management office), set up governance models, all those types of bits and pieces	Work Outputs, Project management	
Interview 3 - Billy	So I did honors in psychology, and psychological sciences	Academic Background	
Interview 2 - Mads	So I knew my issue was sustainability, but it was just finding like the information and then making the insight to kind of get to the idea. And that took me about three and a half, four months before I even got to this stage	Opportunity Discovery, Discover, Idea Process, Opportunity Analysis	Spent 3-4 months in discovering insight on the topic
Interview 5 - Norbert [PP]_otter.ai.docx	So I would lie if I would say there's a structured process.	Innovation Managment	
Interview 2 - Mads	So innovation works really closely with them so I was able to get in with them straight away and but as well as working with supply, which was really important to know if my project would have any impact on kind of pricing of bottles and caps	Discover, Research, Made it easier, Networks, Collaborative innovation	Employee network helped to accelerate project. Helped to align with stakeholders more quickly and early in the idea.
Interview 2 - Mads	So it kind of gave me a really good idea of where we need to be and what's important to the business.	Ideas, Idea Process, Employee Insights, Iterate, Insight	Connected information to understand the stakeholders involved. Business and Customers.
Interview 2 - Mads	So it was in my head that I was just going back and forth with my direct line manager on a lot of different ideas.	Ideas, Ideation, Opportunity Discovery, Inspiration	Started just as idea in head to start
Interview 2 - Mads	So it's called the high-performance program. We do it every year. So five people get picked, and it's in its fourth year. So how the program runs, is five people have picked based on their results from the previous financial year as well as an idea that they have kind of a concept. So then those five people Get to go on a trip over to one of our distilleries or our offices, things like that for a couple of weeks, and learn about the business there and then bring those learnings back and present it small conferences that we have statewide things, as well as working on their project with a mentor.	Employee Insights, Inspiration, Learn, Ideas, Opportunity Discovery, Talent Management, Supported by mentors and experts, Company allocates resources for supporting different ways of working	Part of corporate high performance program. Includes a trip internationally to learn, discover and have fun. Must come back present findings and work on their own idea as a project.
Interview 2 - Mads	So it's getting that like one on one kind of face to face time with some big dogs in the business.	Professional development, Senior Managment, Feel supported by time and attention gathered., Conversation, Building personal network, Personal Benefit, Talent Management	Pretty cool to get to speak with important people in the business

Interview 2 - Mads	So it's kind of like a PR stunt as well, to get people gee'd up and go "we did all these incredible things. You can do it too. You've just got to work your ass off for four more months." It worked on me.	Intrinsic Motivation, Success, Empowering employees, Personal Development, Communication, Inspiration, Storytelling	Was inspired by the stories of others.
Interview 2 - Mads	So it's really nice to know what's happening kind of state to state	Community	
Interview 3 - Billy	So like, usually when we get themselves generating something that they need, or a product, the necessary kind of design process of that product or change or whatever they're looking to put in place hasn't necessarily gone in. And so they're usually trying to, you know, cure a symptom. When we're involved in the design process, we use a lot of the user-centricity stuff. And so we will engage with broad stakeholder groups and really diverse stakeholder groups, from all the different perspectives of the business, whether you're talking customer, employee, leader, all those different interactive parts and get their views on what a symptom is, and what's the causes, and what are the ways to fix it	Diversity of people, Problem Symptoms, Problem Identification, People, Including stakeholders, Ideation, Research	People usually try to solve symptoms. They take the approach to solve the root cause and involve stakeholder to find the causes and find ways to fix it.
Interview 4 - Niraj	So most people are stuck in their operational activities and their work life. So how do we get time to work on new ideas? So that's another topic, which would just show blocker, showstopper sometimes.	Workplace Culture, Stuck in Normal Work, Functional accountabilities stopping people from getting together and working together.	
Interview 3 - Billy	So one of the ones that always comes up is a metrics. And, so usually to do something like whatever you're trying to do, it needs some type of leadership input. And so some of the things we see is like are all breaking down silo'd behaviours and doing more cross-functional collaboration and all that kind of stuff. And it's like, Yeah, but you've got your leaders measured by a KPI which measures team performance. So by the fact that they give all their resources to another team, it's not in their best interest. And ultimately, people are kind of sticking to these structures or reward recognition, reward structures that are in place.	Senior Managment, Organisation Structure and incentive framework conflicts new project interests, Metrics, Challenges, Problem with org structure	
Interview 4 - Niraj	So that's the actual process at the moment. So we very much rely on subject matter experts, potential subject matter experts to really, to really, yeah, to really evaluate potential ideas.	Innovation Managment, Killing ideas, Supported by mentors and experts, Evaluation, Opportunity Analysis	
Interview 4 - Niraj	So that's what we're gonna work on to make this a more, let's say, sustainable approach. I'm a strong believer in the that we have to, we need self-sustainable teams to really drive and continue to work on specific ideas and iterate on them	Self-Driven Employee Project Staffing	

Interview	Quote	Codes	Notes
Interview 3 - Billy	So there's BIKLABO. But you'll find, because that's a really simplistic way of visual scribing so that anyone can do it. Some of the guys we get into like proper cartoonists , if you look at that.	Visual Scribbing, Visual Thinking, Facilitating Creating Activities and Decision Making, Creativity, Communication, Try new stuff, Thinking differently, Methods and Techniques	Use visual scribes to facilitate conversations
Interview 3 - Billy	So there's kind of all these group compositions, timing and the right activity to elicit the best result from that group. And from that context.	Workshops, Experience Design, Participant factors to consider in workshop design	Workshops designed based on group composition, timings, right activities to get best results from that group in that context.
Interview 4 - Niraj	So they could go for example go to our maker space. And they could experiment with technology, just because that way it's a different angle to look at it, to experiment with technology, and understand the potential in order to ideate and come up with solutions which may have a business impact for for for SAP	Innovative Spaces	
Interview 4 - Niraj	So they know the painful process. Some of the employees really just work with it and work with workarounds and stuff like that.	Workplace Culture, Employee Insights, Employee Problems, Pain Points	
Interview 2 - Mads	So they take it really seriously and we are really lucky	Workplace Culture, Senior Managment, Empowering employees	Feels that the company takes her program seriously.
Interview 3 - Billy	So they're not someone standing up with a slide packs.	Mental distancing from normal office life thinking, Moment of discovery, Communication, Experience Design	Passionate about not using slide pack. Slide decks representing "corporate normality".
Interview 3 - Billy	So we do a lot of like, we'll have a big open playing room. And we have little whiteboards that we can actually move around and create different little breakout spaces.	Use large creative spaces to facilitate workshops, Innovative Spaces, Creativity	
Interview 3 - Billy	So we talk about motivators, the most valuable and powerful ones are the intrinsic motivators. So what drives people from the inside. And so, you know, what we find drives all of that is your working environment. So, how you're valued your culture, how the company's at ease along with your own personal values	Intrinsic Motivation, Personal values, Working Environment, Workplace Culture, Feeling valued, connection to company values	
Interview 4 - Niraj	So when you do all these campaigns and whatever and workshops	Workshops, Innovation Managment, Idea Process, Methods and Techniques, Design Process	
Interview 3 - Billy	So yeah, so the PwC offices always have a space in Melbourne, in Sydney, they've got half a floor dedicated to this space. And the other half is called the experience center and they're dedicated to like going out and doing research and figuring out It's wrong.	Innovative Spaces, Opportunity Discovery, Problem Identification, Company allocates resources for supporting different ways of working	Dedicated spaces for research and understanding the problems.

Interview 3 - Billy	So you know, if you have too many layers, and you've got too much command and control in your organization, and so you can't actually have that much autonomy in terms of decisions because you've got too many managers managing people and they've always got someone to report to so it's really hard to get autonomy and decision making. And so usually flatter structures is a benefit, that kind of stuff.	Problem with org structure, Self-Driven Employee Project Staffing, Decision Making, Workplace culture can be linked to actual structure. Too much command limits autonomy and decision making.	Workplace culture can be linked to actual structure. Too much command limits autonomy and decision making.
Interview 3 - Billy	so you walk in, and we actually leave all out stuff at the door. And so they have no connection to our normal ways of thinking.	Leaving stuff outside workshop to remove connection from normal thinking, Mental distancing from normal office life thinking, Technology	
Interview 2 - Mads	So, I mean, it looks brilliant for us globally.	Workplace Culture	Innovation program looks good for the rest of the business.
Interview 2 - Mads	So, yeah, so it's kind of it's great that you can pitch these ideas and see them then evolve and I think if you wanted to stay on them, then you'd have to have a close connection within the business. And really hold on to it because you can just get these ideas kind of people have more power and they're in the right place. And they're sitting across from someone in Sydney that they can just go right. Let's turn this around. And you can be kind of pushed to the side	Workplace Culture, Pushed out of projects, Functional accountabilities stopping people from getting together and working together.	Feels that sometimes as ideas get to people with more power in the business, the creator can be pushed aside.
Interview 3 - Billy	social identity theory,	Methods and Techniques, Referencing of method/process, Social Identity Theory	
Interview 3 - Billy	sometimes the challenge there is having to get that team to work together in an effective way, because most people are used to working in functional areas.	Challenges, Changing peoples thinking, Resistance to change, Dynamic Cross-Funtional Teams	People can be used to the norm so new ways of working can be challenging.
Interview 2 - Mads	Sydney they mate but they're based there so we'll just catch up on zoom.		Connects with other HPP team on Zoom meetings.
Interview 3 - Billy	Team make up, so often we see teams that aren't skilled to deliver a certain product.	Workplace Culture, Problem with org structure, Teams, Challenges, Often teams do not have the right skills	Teams often lack the skills to deliver
Interview 3 - Billy	That's why we try and hamstring it by involving the people who are changing in the decision making process. Then they're more likely to adopt and change because they helped generate it.	Including stakeholders, Decision Making, Involving people in the process and decision making,	When people are invovled, more likely to have adoption of change because they feel sense of ownership and commitment.
Interview 3 - Billy	That's, you don't need much to make a group. But when you do, it can be really meaningful.	Social Identity Theory	
Interview 3 - Billy	the cheaper option that a lot more of us are starting to use	Methods and Techniques	Considers price / ability to access
Interview 5 - Norbert [PP]_otter.ai.docx	The fluid approach is better.	Sponsorship, Innovation Managment	Fluid approach is better than going up the line organisations to get resources

Interview 5 - Norbert [PP]_otter.ai.docx	The fluid approach is better. So we have an idea, we put it on a fluid org and we get funding because our idea is great. Get funding from customers, get funding from the executives, you get funding from the employees, and we find our right people, people see where can I engage? How can I develop myself? How can I grow myself? and they find our initiative and they join us, you know, the initiative, and they found basically the kind of internal startup. This the future and totally, totally convinced and with not doing that we'll die as a company, because you cannot be such agile in such an organization. So, we would expect applying this average and it's a productivity chain and creative and creativity change of roughly 50% without hiring new people. So, nothing falls behind, we can still deliver our products, the same quality. What I'm saying is we can put 50% on top of the current capacity. Just people love their job more, we can be really great and do crazy stuff. They are, let's say they are admiring anyway. So think about you're doing your hobby. When you're working, then you are more engaged. And you will you skip micromanagement, you skip micro tasks, you skip, let's say administrational bullshit, then you easily	Problem with org structure, People, Teams	Claim 50% increase in productivity of fluid organisations. Increased agility, motivation, and engagement of employees. Less administration and micro tasks.
Inteview 6 - Norbert2.docx	The means, and this is the danger also of digitization, that regard is said that you're sitting in front of some numbers, some people are predicting. Some people are predicting or giving you numbers. And it's also tough for management, right? So people are predicting costs and say when we build mobility services will cost us 1 million right? And we predict revenues create stream in the next three doughnuts done for three years is going to be tremendous. 10 million, right. But nobody, nobody sweater you we always say okay, we'll approve that later. But then when We will never do this, right? You can just lie. You just say bullshit. You say, oh, somebody said it will be 15 million. Right? Now let's be more on the conservative side. Let's put 10 million. And then people say, that's a great case, we approve it and never talk to people. We're going to build a solution. We never talk to the people who buy the solution. Have you need to know them? Like, this is the big ocean.	Decision Making, Digitalisation, Senior Managment, End Users, Concept Selection	Danger of digitization that decisions are made my disconnected decision-makers from numbers without speaking to the users
Interview 4 - Niraj	The other aspect is of course, that you cant do this on your own. So one of the most important aspects is that you have the right team to really drive this and take this to the next level. So without the right team, you're more or less lost, if you don't have the right team.	Teams, People	You need the right team to really progress
Interview 3 - Billy	The other thing that I didn't mention that we often do is comes into that executive coaching space and organizational change is your kind of psychometrics. So guiding leaders through results on our psychometrics or database results and going out will happily nudge these scores up to improve performance in those kinds of pieces or what are the implications of your scores in terms of how the people in your organization react to you as a leader? Or is the point [Unclear] as you look together to deliver whatever XYZ	Work Outputs	

Interview 3 - Billy	the people usually pulling into these situations don't have, you know, change and management skills, or a strategic view. But by bringing them into this and involving them in the process, they start to get a view and they start to acquire skills that are ultimately pushing them their career progression forward and moving them into more executive like if you think about it, as you kind of start in the world you're doing in the operational land and you're just delivering widgets, you know. And as you move up, you kind of become more tactical, you start being a little bit about strategy, but also about how you deliver. And then ultimately, when you get to the most senior levels, you're purely strategic, right? And so you're actually making all these players and so all the time when we the way we motivate them is through career development	Personal Development, Personal Benefit, Building personal network, Professional development, Intrinsic Motivation, Benefits, Talent Management	Motivate people through career development. Get new perspectives and skills that push them into senior levels. From ground level thinking towards strategic thinking like exective roles.
Interview 2 - Mads	the whole idea of HPP and what were called a lot within the businesses like future leaders. And it's a part of being like the next crop to kind of rise into like management roles or move into like brand roles. And this is where the HPP idea side is really good to create those connections and move within the business.	References company strategy and support, Professional development, Personal Development, Talent Management	Program is used a professional development to create future business leaders and connections
Interview 2 - Mads	then to see, kind of new concepts like our customer collaboration centre in London that predicts future trends not just for Diageo but for the entire drinks industry.	Workplace Culture, Opportunity Discovery, Discover, Communication, Inspiration, Spreading Ideas	Exposed to emerging horizons, new future ideas and new concepts of the company and industry trends. Seen in the companies customer center.
Interview 2 - Mads	There's also, you know, check-ins with our, like state manager, lead, there's a real community within the five that do the project. So we talk pretty much every single day. And by doing that we have a much better idea of what's happening in the field as a whole.	Community, Communication, Conversation, People	Feel sense of community with other "innovators"
Interview 3 - Billy	there's not a recipe to it. There are a bunch of tools.	Methods and Techniques, Workshops, Facilitating Creating Activities and Decision Making, Discovery Journey, No recipe	There is no recipe, just a bunch of tools to adopt where relevant.
Interview 2 - Mads	there's not been many ideas that have gone past the year, unfortunately.	Killing ideas, Success, Idea Process	Not many projects have continued beyond the program.
Interview 4 - Niraj	There, there was a reason why it popped up all the time because we never solved it in an appropriate way it was not solved in an appropriate way. Now that it finally, the stream actually came up, which solved it in a more sustainable and scalable way. Now, it's not popping up that much anymore, but you need to look at the, the reasons why these ideas pop up all the time. And then it could also be an indicator that it hasn't been solved yet.	Ideas, Pain Points, Reoccuring Ideas, Problem Symptoms	

Source	Quote	Codes	Note
Interview 3 - Billy	these are semi-structured activity like semi-structured days, like they're really loose, because you might need to pivot based on a certain insight that's given in a previous session. And so, which is part of the reason. It's part of the reason, it's great not to have slides. Just kind of draw everything up as you go. Yeah, there's really not that ..there's no, there's not a recipe to it. There are a bunch of tools.	Facilitating Creating Activities and Decision Making, Workshops, Semi-structured workshops	A semi-structured approach leaves room to pivot based on insights that arise.
Interview 3 - Billy	they had like these silos set up between offices where you had a really good opportunity for your	Opportunity Discovery, Problem Identification, Insight came from research, Insight, Solution Delivery	Linked the redefined problem to an opportunity for delivering the solution.
Interview 5 - Norbert [PP]_otter.ai.docx	They have into SAP tons of structured processes, how we do following and ideation and things like that. You can say, okay, it's a portfolio process, you have this funnel process. Typically, you collect a lot of, structurally you collect a lot of ideas, and then you come to a conclusion and somebody's deciding where to invest based on business cases, but these times I think are over because what we see we are working in communities, and we team up with the right people. And it all comes back to the right people. So I think you cannot innovate without connecting to the right people. So just having a decision on PowerPoint, on a business case is useless because you cannot execute because the team is not working who make this happen, right? Innovation starts with the people and the connection of and the combination of them, full stop.	Opportunity Discovery, Teams, Innovation Managment, People, Problem with org structure	Doesn't believe in innovation process of funnel processes. Rather believes that companies can best achieve innovation through letting things be more open.
Interview 2 - Mads	They typically have the connections you need to be able to put you in with the right people.		
Interview 3 - Billy	they were not getting the performance return that they expected and in fact, they were going downwards.	Opportunity Discovery, Problem Identification	Comany was not impressed by merger performance
Interview 3 - Billy	They're not going to make a great change champion, you might try and change them as a really good target because they change Gerald, and he's changed and like it's shows other people that I might actually work	change champions	
Inteview 6 - Norbert2.docx	this additional funnel thing was always a pain in the ass of many people, even people who run this process, hated it. But still, you continue this because people they think they have control over VUCA, which is the most stupid thing you can think of. And it's dangerous. Look at Volkswagen we are not in fortunately. Volkswagen is now six years, people say five or six years behind Tesla.	Innovation Managment, Concept Selection, Innovators Dilemna, Opportunity Discovery, Decision Making, Challenges	False sense of control using funnel methods. (Volatility, uncertainty, complexity and ambiguity). Can be a dangerous illusion.

Interview 3 - Billy	This approach is like, you're not teaching and you're like giving them the journey for them to discover, that is brilliant, man. That is brilliant. Participant 3 Yeah, I mean, we hate being told shit. We didn't like it when we were kids. Imagine being an adult and getting shit told to you, especially in my situation where I'm dealing with people who are execs and 50 years old and you know and have 30 years business experience like what the fuck does a 28-year-olds opinion matter?	Discovery as a vehicle to influence, Senior Managment, Egos and cultural or structural power differences., Induced discovery, Facilitating Creating Activities and Decision Making	Not telling people what to do or think, but guiding them on a journey to discover it. Helps to dodge egos and cultural and structural power differences.
Interview 5 - Norbert [PP]_otter.ai.docx	this energy you need to invest to convince internal People beside of convincing customers that I would rather invest energy and time trying to convince customers than always having this discussion with internal people for not contributing any way,	Senior Managment, Sponsorship, Concept Selection, Challenges	Gets frustrated spending a lot of energy to convince internal people instead of speaking with customers.
Interview 5 - Norbert [PP]_otter.ai.docx	three steps, first, have a high-level understanding of potential or problem, then you derive a high-level kind of design principles of a potential solution. And then you basically do design decisions based on that abstract design principle. And these design decisions need to be evaluated by users or people sense, does it positively influenced my technical social environment? And this is always and this is I have in mind	Idea Process	
Interview 3 - Billy	user-centricity, but there's also a lot of what I do as an employee,		User focus
Interview 3 - Billy	usually you do them in change, but also to get to outcome.	Outcomes, Workplace Changes, Workshops, Uses workshops for change and also to get outcomes.	Uses workshops when dealing with change but also in getting to an outcome.
Interview 2 - Mads	was really lucky that my mentor is very close to the Bundaberg brand team. Cuz Bondi is here, we don't go through and have levels of global to get things done.	Made it easier, Success, Networks, Conversation, Facilitating Creating Activities and Decision Making, Supported by mentors and experts	Close connection helped to get things done
Interview 3 - Billy	we are taken on a Safari.	Experience Design, Discover, Mental distancing from normal office life thinking, Opportunity Discovery, Storytelling, Communication, Try new stuff	Workshop is deisgned as a safari experience.
Interview 3 - Billy	We do like excursions.	Opportunity Discovery, Method of opportunity identification	
Interview 3 - Billy	we engage them in really different ways.	Try new stuff, Experience Design, Changing peoples thinking, Thinking differently	
Interview 4 - Niraj	we tend to actually kill those ideas, many ideas at a pretty early stage because we're very campaign driven.	Innovation Managment	
Interview 4 - Niraj	we want to help our employees, of course, first of all, to become creative to give them more, let's say, more possibilities to learn about innovative topics	Workplace Culture, Opportunity Discovery, Discover, Learn	

Source	Quote	Codes	Comment
Interview 2 - Mads	we would typically go out for presentation skills for two days. And then we go up to present to the exec.	Personal Development, Communication, Pitching, Senior Managment, Learn, Professional development, Talent Management	Presentation skills development for two days to prepare for executive presentations.
Interview 2 - Mads	We're really lucky that the company cares about people. And it was very people-oriented. It was something like an 80-20% split, 80% work 20% cultural.	People, Opportunity Discovery, Workplace Culture, Intrinsic Motivation	Felt the company cares about her
Interview 2 - Mads	we're really lucky that we have like a lot of support in the business	Feeling of support	
Interview 3 - Billy	We've got a team that literally just does this. This is thei	Workplace Culture, People, Company allocates resources for supporting different ways of working	
Interview 5 - Norbert [PP]_otter.ai.docx	Well, I mean, the most highest intense times was really when we really founded a kind of internal startup	Decision Making, Concept Selection, Solution Delivery	Regards most intense decisions around the concept selection and movement into a product development mode
Interview 5 - Norbert [PP]_otter.ai.docx	went out of this and found CampusJaeger, great CTO. That's Yannick Keller. And he is was already successful in building a platform. Come with a guy. He is growing like hell every year. 100% is hiring new people. I met him he was 15 people now is with close to 100 people. And for him, it's a common saying that he is the kind of headhunter platform for young talents on campus.	Teams, Partnerships, Dynamic Cross-Funtional Teams	Made the decision to partner with an external startup. Decision seems to be based on record of previous success.
Interview 3 - Billy	What we like the drastically changed a different way of doing it is, you know, you've got no slides.	Opportunity Discovery, Workshops, Communication, Moment of discovery, Employee Experience, Experience Design	No Slides approach to workshops changed the way of doing it.
Interview 3 - Billy	when you're running one of those workshops are flipping back to how you run them as you go,	Workshops, Facilitating Creating Activities and Decision Making, Discover, Experience Design, Adapting activities as you go	Workshop
Interview 3 - Billy	when you're trying to do a lot of this stuff, like, we got to remember, so comes back to some of this bias and heuristic stuff like behavior.	Heuristics and Cognitive Biases, Decision Making	Mentions its important remember people have heuristics and cognitive biases. Mental shortcuts we use to make decisions.
Interview 4 - Niraj	which bring process optimizations, productivity increase, or new tools, which kind of would help us to be more productive.	Work Outputs	
Interview 4 - Niraj	Which is like the internal stream from employee ideas, which come from employees, so the employees kind of like come up with some sort of problem. They want to solve this so that they develop a specific idea around that.	Opportunity Discovery	oppor
Interview 2 - Mads	Which is why innovation has invested in it, because there's a long term plan.	References company strategy and support, Feeling of support	
Interview 3 - Billy	whole range of guided tools within ServiceNow. So people could use the new products, they were pushing out to the business.	Communication, Work Outputs	

Interview 3 - Billy	workshop to elicit discover	Discovery Journey, Induced discovery	
Interview 3 - Billy	Yeah it perpetuates.	Toxic Cultures, Workplace Culture	Toxic culture can perpetuate
Interview 2 - Mads	Yeah, definitely. So I think for my project, obviously, you go into it with an idea and sustainability was that but hearing everyone everywhere we went, talk about how important it is to the UK market and to the European market it just pushed my idea further and made me realize that I was really onto something here. And so that was really important	Opportunity Discovery, Discover, Research, Decision Making, Validating artifacts, Employee Insights	Research and discovery experience was important for idea. Helped to confirm assumptions and enrich the idea.
Interview 2 - Mads	Yeah, it's just through emails.	Innovation Managment, Communication	Communication through emails
Interview 5 - Norbert [PP]_otter.ai.docx	Yeh his whole team moved basically, they didnt have free capacity anymore to really invest the time and getting his team accomplished with new environment in finance. That's kind of insane because it was very good to build this really outside and this maybe goes back to your research.	Problem with org structure, Challenges, Workplace Culture, Functional accountabilities stopping people from getting together and working together.	Team member had to leave project because of other work requirements.
Interview 3 - Billy	You find overtly aggressive cultures where people kind of call each other names in front of you, different teams call each other names in front of each other, or you get the real passive site where people you know, do stuff to subversively attack the other group and hinder their performance. So, culture comes into it.	Workplace Culture, Toxic Cultures, People, Challenges	
Interview 2 - Mads	you just feel incredibly proud was really, really important.	Caring about the brand, Workplace Culture	Felt incredibly proud of the brand. Cool to be able to represent that.
Interview 3 - Billy	You know, people are like, oh, shoot, I'm losing my old behavior, and I've got to adopt this new one, and they kind of go, they go through this grief cycle where they blame me and going like this fucker, it was better than we wouldn't have to do this. And, you know, this isn't gonna work and they deny it and all this kind of stuff. And, and so that's one of the big challenges with that.	Workplace Culture, Workplace Changes, Resistance to change	People can be resistant to change. They have habits and wont easily change behaviors
Interview 3 - Billy	you know, that that attracts motivated people, like you can't just pop someone into one of these into a change champion role, because they do need to be motivated	Attracting Motivated People, Professional development, change champions, Motivations	
Interview 2 - Mads	You're also on a lot of people's radar just from getting into the program.	Professional development, Feel supported by time and attention gathered., Talent Management	Values the exposure from the program within the company

Corporate Innovation

Justification Chapter

Jayesh Sandhu

Honours Project
2020

Design: Vue
Designer: Jayesh Sandhu

Research

The Problem
Despite most companies acknowledging the importance of innovation to their long term success, most struggle to return success on their innovation investments.

Consequences
- Damaged Culture
- Missed opportunities
- Wasted resources
- Lost competitive advantage

Gap / Opportunity
How can we best facilitate the creative and decision making activities throughout the front end of innovation?

Fuzzy Front-End
Ill-defined, random

Start of formal project
Clarity
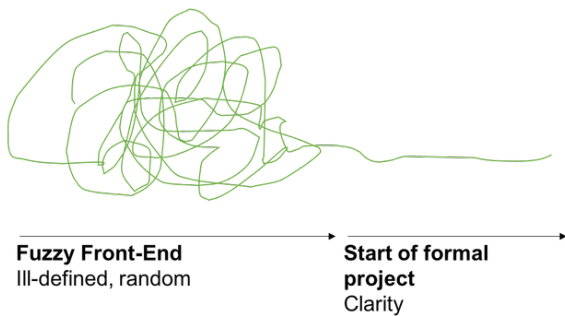
User and Context

Max Mueller, 34
Business Consultant
Max is always looking for new ideas to solve problems that can improve the business, or his own life.

Research, Inspiration and Concepts

Creative Workspaces

Corporate Collaboration

Immersive Experiences

Innovation Culture

Projection Technology

Adaptive Environments

Magic

MAKE
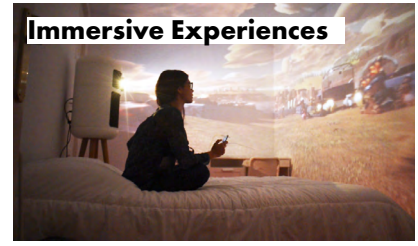
Concept Phase

Concept 1: Projector
Accessory Variation
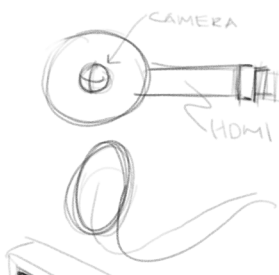
Concept 2: Installed
Projector Variation
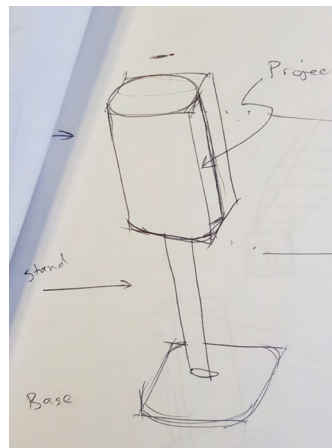
Concept 3: Portable
Projector Variation

Final Design

Vue

Practical Functions

Transport
The handle provides easy and ergonomic transport.

Storage
Easily stored on a desk or countertop for short term storage, or in a shelf or cupboard for longer term storage. The device can we recharge while in storage via the USB-C port.

Use

- Interactive Projector.
- Video and audio recording.
- Projections maps to any surface.
- 5 users recognized simultaneously.
- Sync multiple devices to increase your projector surface.
- Library of strategically aligned innovation activities.

Record
User research
Field studies
Interviews

Reflect, Create, Decide
Brainstorming
Creative Workshops
Managerial Decision Making

Present
Management
Executives
Customers
Users

Safety

Electric
- Electrical housings designed for tool only opening
- Electrical Grounding

Optical Radiation
- Auto-off Eye Detection
- Physical interface elements located on surfaces away from projector output

Heat
- Internal cooling

Required Safety Warnings
- Included in Instruction Manual

CAUTION	
⚠	Caution Hot surface. Contact with heatsinks may cause burns. Do not touch.

CAUTION	
⚠	**Risk Group 2** Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

ATTENTION	
⚠	Observe precautions for handling. ELECTROSTATIC SENSITIVE DEVICES.

Aesthetic Functions

Shape

- Rectangle: Order, Simple, Structured
- External edge fillets defines and separate the side edge and face of the product.
- Secondary inner lines on the front face separate the product functions between projector and speakers.

Colour

Grey
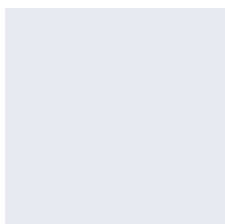
Clear
Unobtrusive
Simple
Peace of Mind
Clarity

Black
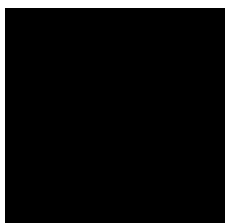
Strength
Elegance
Rebellion
Formality
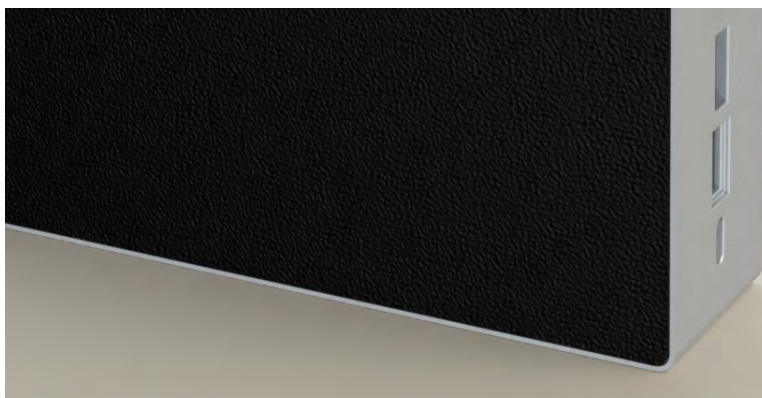
Green

Creative
Fresh
Energy
Positive

Material

Aluminium

Method: Casting
Colour: Natural
Finish: Bead Blasted

Steel

Method: Casting
Colour: Natural
Finish: Polished High Gloss

ABS

Method: Injection Molding
Colour: Black
Finish: Low Gloss Smooth

Polycarbonate
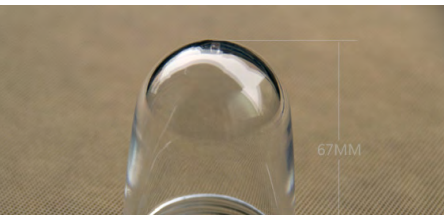
Method: Injection Molding
Colour: Clear
Finish: High Gloss Smooth

Polyester
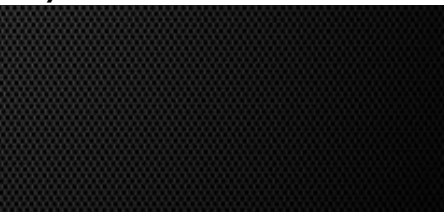
Method: Sourced
Colour: Black
Finish: -

Ergonomics

Handle design

Designed with consideration for:
- 99th Percentile Man
- 1st Percentile Woman

Handle Diameter: 9.1mm
Vertical clearance 38mm
Horizontal Clearance: 97mm

Reference: Measure of Man and Woman
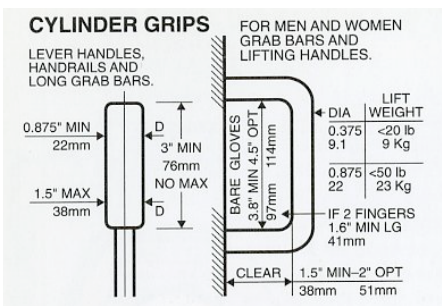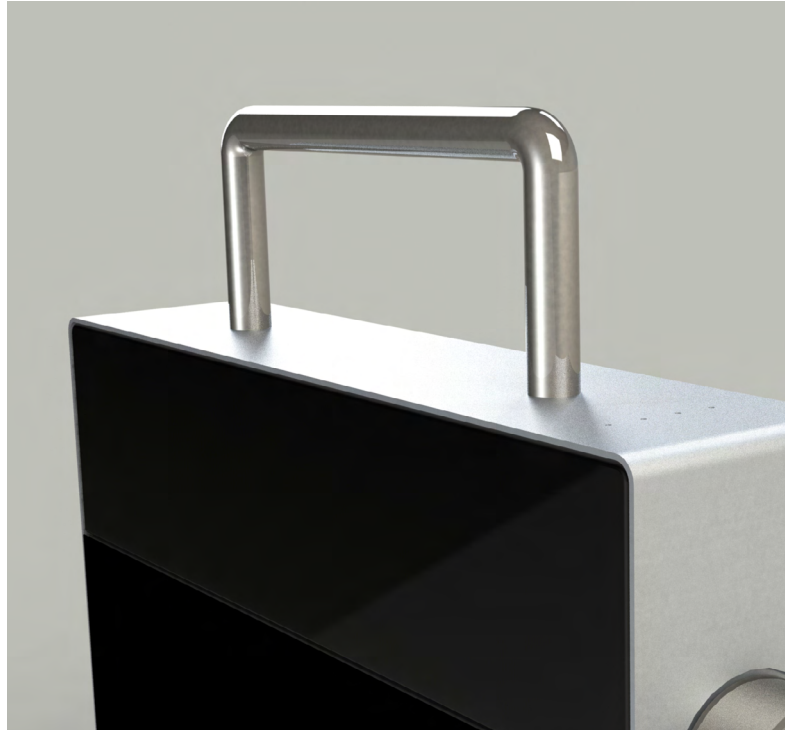
Control Knob

Designed with consideration for:
- 99th Percentile Man
- 1st Percentile Woman

Reference:
Measure of Man and Woman
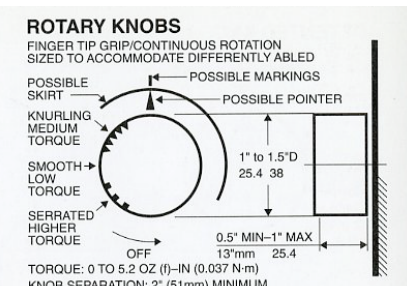
User Interaction Design Elements

Input Ports   Control Knob   LED Interaction   Handle
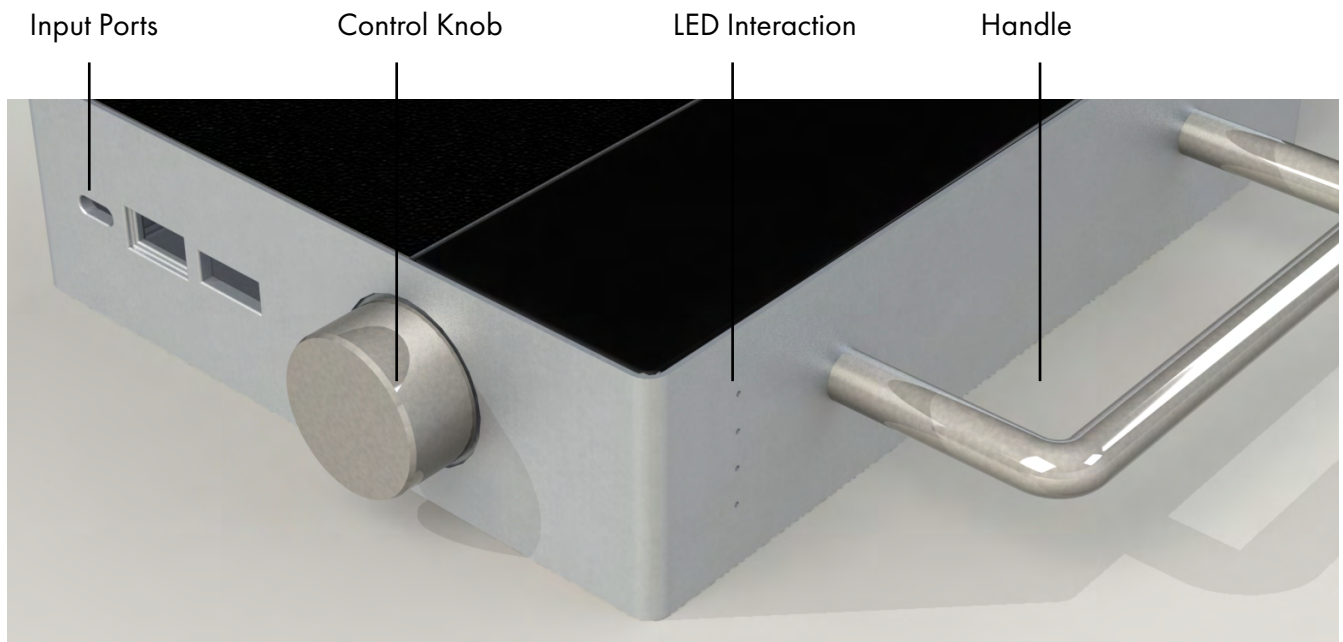
Product Language

LED Interaction

Legend

LED off   LED On   LED Flashing

Power
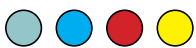
Turn On Sequence   On State   Off State

Battery

Battery Status

Full   75%   50%   25%   <10%

Charging State

Video and Audio Recording
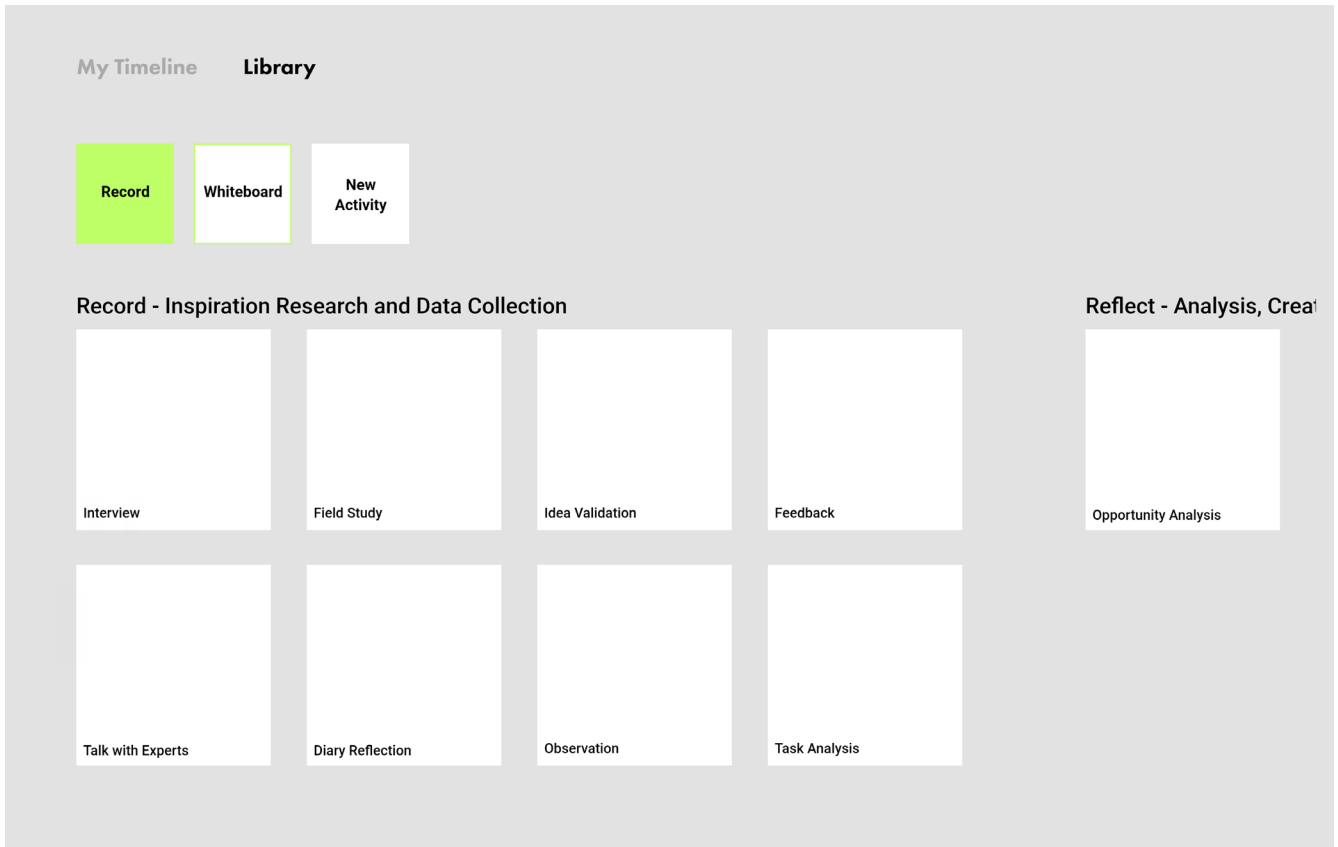
Recording State
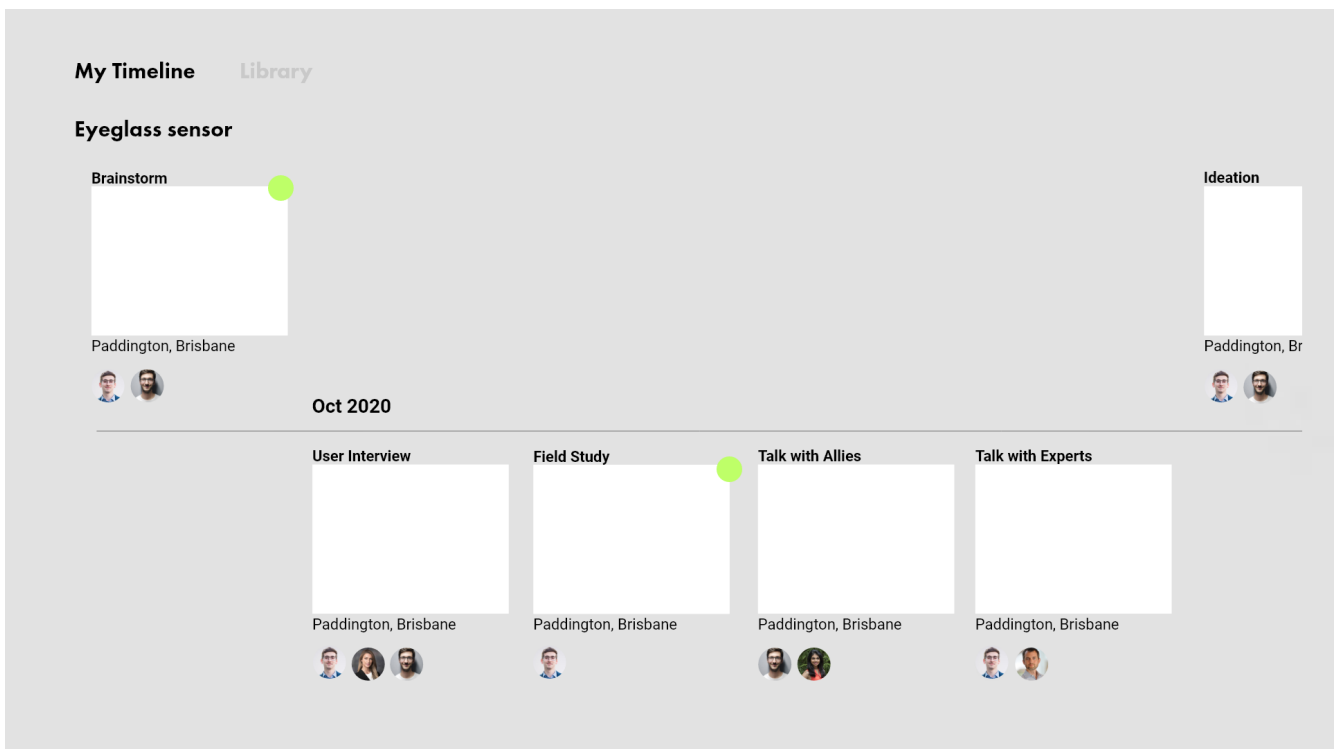
Projection UI

Activity Library

My Timeline   **Library**

| Record | Whiteboard | New Activity |

Record - Inspiration Research and Data Collection

Interview

Field Study

Idea Validation

Feedback

Talk with Experts

Diary Reflection

Observation

Task Analysis

Reflect - Analysis, Creat

Opportunity Analysis

User Activity Timeline

My Timeline   Library

Eyeglass sensor

Brainstorm

Paddington, Brisbane

Ideation

Paddington, Br

Oct 2020

User Interview

Paddington, Brisbane

Field Study

Paddington, Brisbane

Talk with Allies

Paddington, Brisbane

Talk with Experts

Paddington, Brisbane

Technology

Digital Laser Projector with Short throw Optics

Microphone Array
5 Microphone array

Battery
Lithium Polymer battery technology with 8000mAh

Speakers
Speakers places on the front panel provide 180 degree audio suitable to both use positions.

CPU

Camera
1080p HD Camera
180 degree capture

Parts List

Part Name	Qty	Details	Sub-Assembly	Manufacture	Data-sheet / Link	Cost
Outer Body Housing	1	Aluminium	Outer Housing	Custom	See Technical Doc	
Lens Protector	1	Polycarbonate	Outer Housing	Custom	See Technical Doc	
Handle	1	Steel	Outer Housing	Custom	See Technical Doc	
Microphone Array	1		Outer Housing	Sourced		
Camera	1	1080p. RGB and IR Camera	Outer Housing	Sourced		
4 LED Strip	1	LED Type: ws2818b	Outer Housing	Sourced		
Optics Engine	1	Digital Laser Projector Technology	Optics Assembly	Sourced		
Lens Array	1	Ultra-wide, Ultra short throw	Optics Assembly	Sourced		
Back Plate	1	Aluminium	Back Case	Custom	See Technical Doc	
Fan	1	35mm	Back Base	Sourced		
Li-Po Battery	1	Lithium-Polymer Battery	Back Case	Sourced		
Adhesive Strip	2	Adhesive securing battery	Back Case / Battery	Sourced		
Speaker Frame	1	ABS	Speaker Frame	Custom	See Technical Doc	
Speakers	2	50mm 5w Speaker driver	Speaker Frame	Sourced		
Audio Cloth	1	25cm x 20mm	Speaker Frame	Sourced		
M3 Screw	15	Speaker and Frame Mounting Back plate mounting	Speaker Frame	Sourced		
M3 Nut	10	Speaker and Frame Mounting	Speaker Frame	Sourced		
HDMI Input Port	1	PCB Mount	PCB	Sourced		
USB-C Input Port	1	PCB Mount	PCB	Sourced		
USB-A Input Port	1	PCB Mount	PCB	Sourced		
Amplifier	1	5W Amplifier	PCB	Sourced		
CPU	1		PCB	Sourced		
M 2.5 Screw	8	PCB Mount	PCB / Back Case	Sourced		
Control Knob	1		Post-Assembly	Sourced		
Charging Cable	1	USB C	-	Sourced		
Power Adapter	1	18v DC	-	Sourced		

Estimated Cost: 85 USD/Part

Costing

Custom Part Costing
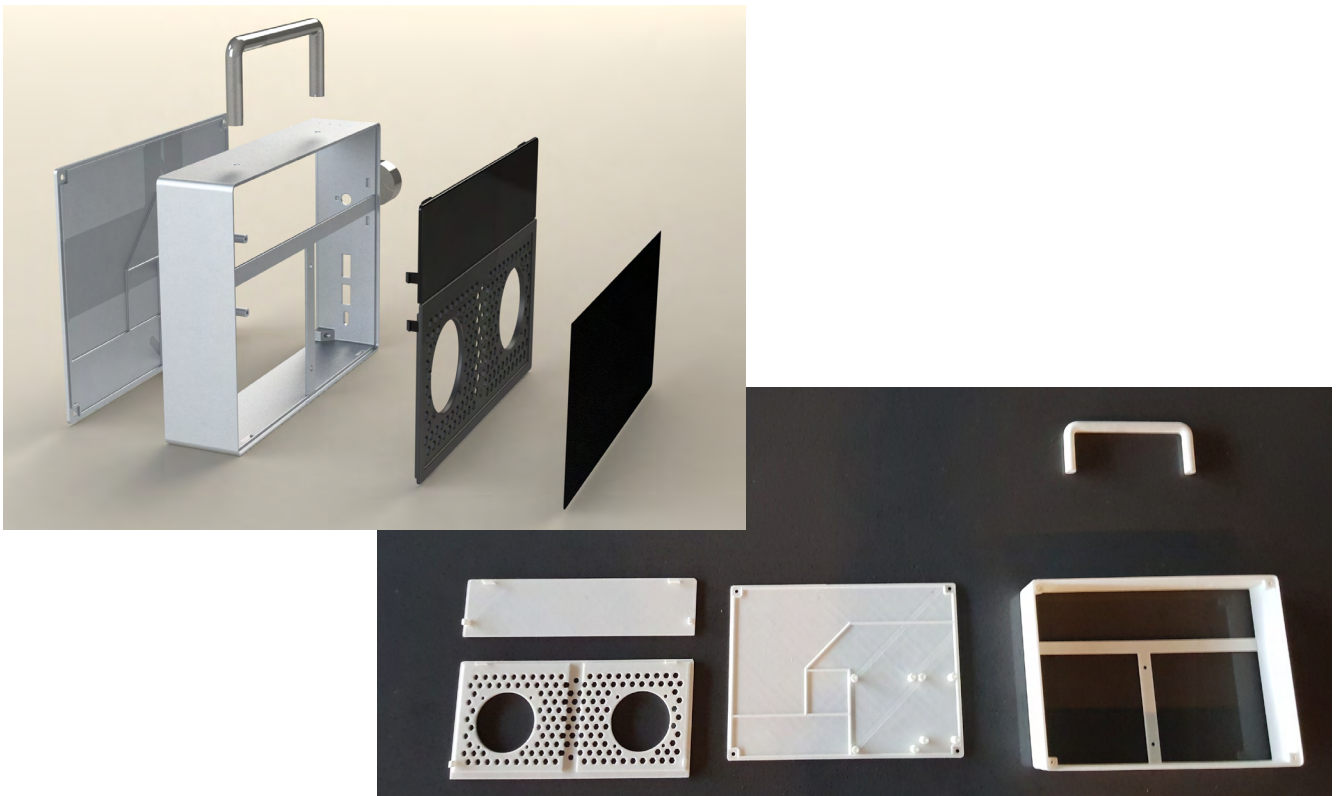
Costing Template: multibodytemplate_default(metric).sldctc

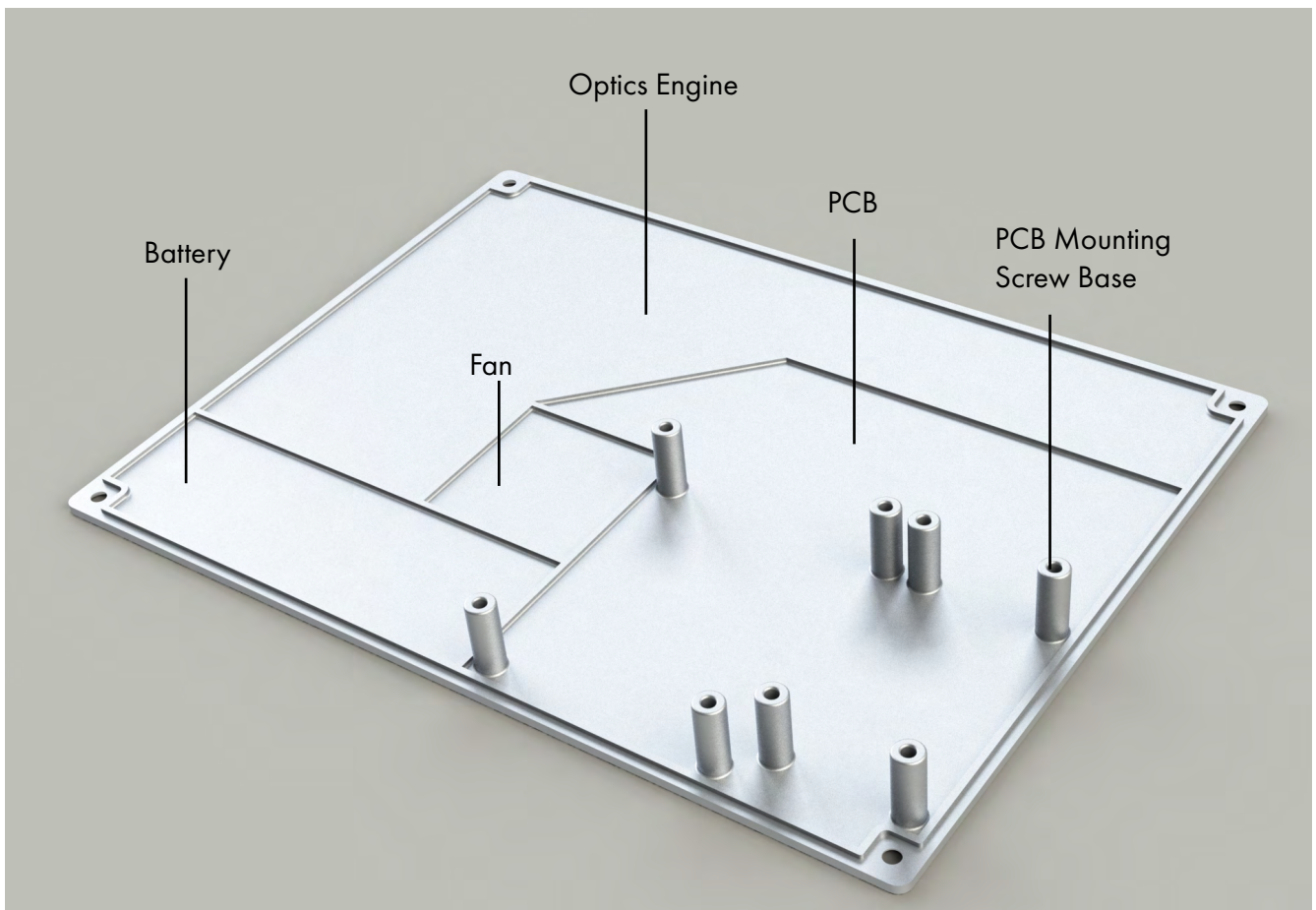| Part Name	Material	Method	Cost (USD/Part)
Outer Body	Aluminium	Casting	4.03
Back Plate	Aluminium	Casting	4.71
Handle	Steel	Casting	4.21
Speaker Frame	ABS	Plastic Injection Molding	3.46
Lens Cover	Polycarbonate	Plastic Injection Molding	3.40

Custom Part Cost: 19.81 USD/Part

Component Cost: 85 USD/Part

Total Cost: $104.81 USD/ Part

Assembly

Back Case
Component Placement

Optics Engine

Battery

Fan

PCB

PCB Mounting
Screw Base

Outer Housing

Back Plate
Screw Holes

Rotary Encoder Hole
and Anchor Point

LED Mount

Snap Hook
Grooves

Input Ports

Handle
Screw Holes

Speaker Frame

Outer Body | Technical Documentation

Part number: 1
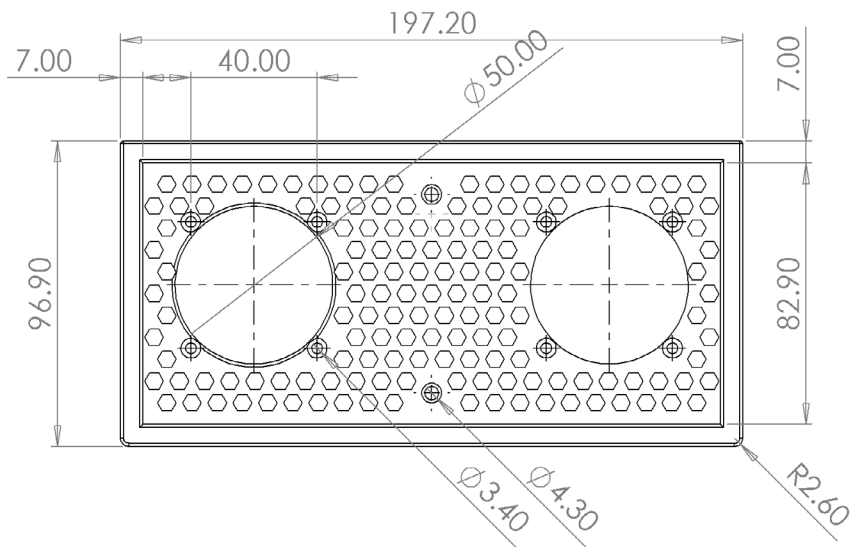Material: Aluminium
Method: Casting
Finish: Bead Blasting

200.00

Ø3.40

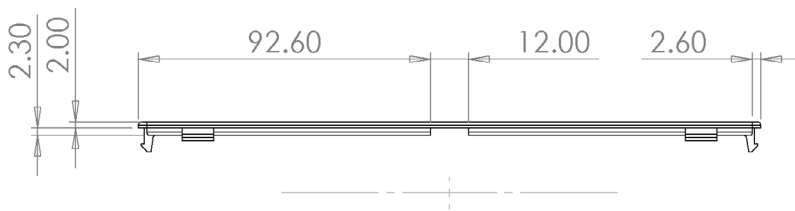Top View

7.00

1.00

1.50

7.00

45.00

43.30

Ø2.70

51.30

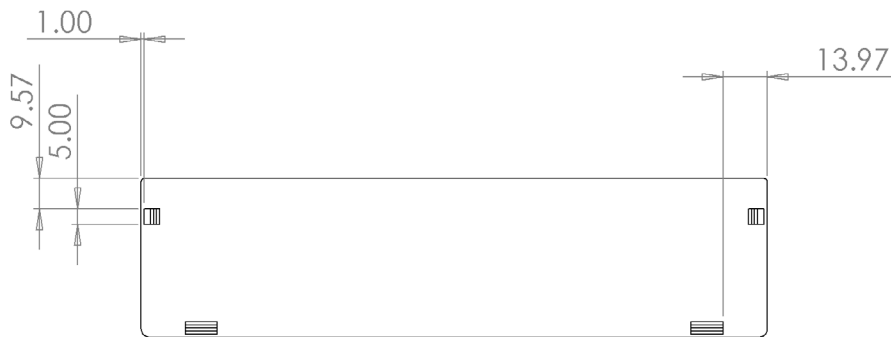150.00

10.00

Ø31.00

Ø3.41

16.90

92.00

10.00

Front View

Side View

Back Plate | Technical Documentation

Part number: 2
Material: Aluminium
Method: Casting
Finish: Bead Blasting
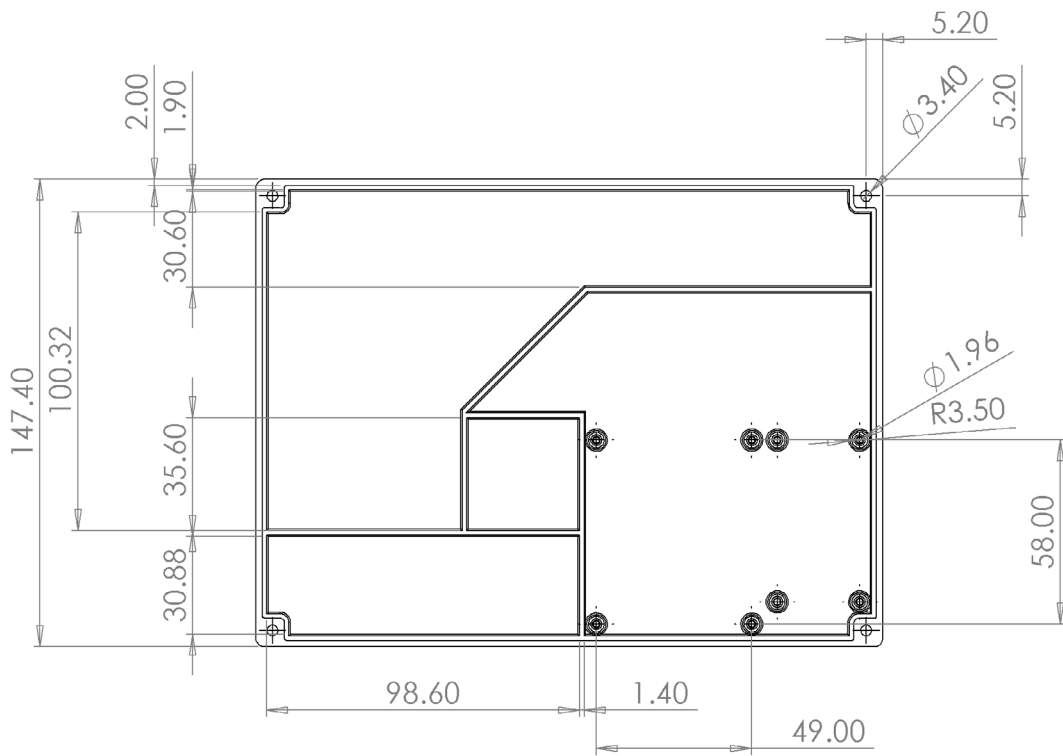
Top View
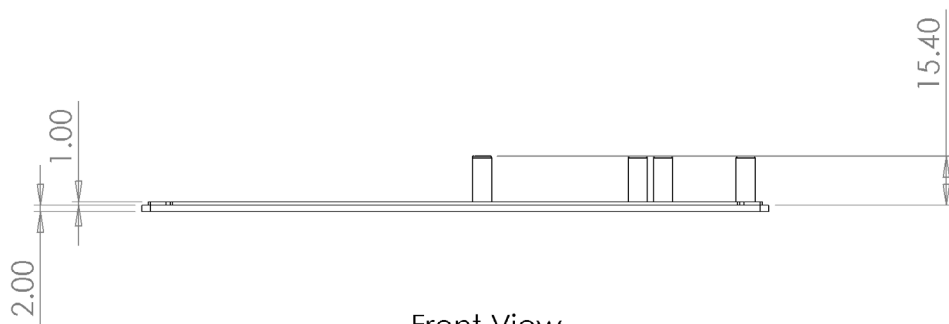
Front View

Material: ABS
Method: Plastic Injection Molding
Finish: Smooth, Low-Gloss

197.20

7.00

40.00

Ø 50.00

7.00

96.90

82.90

Ø 3.40

Ø 4.30

R2.60

Front View

2.30

2.00

92.60

12.00
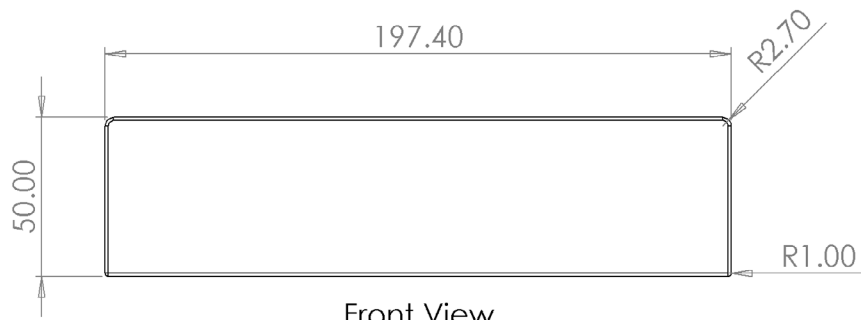
2.60

4.00

7.50

Bottom View

Side View

Lens Cover | Technical Documentation

Part number: 4
Material: Polycarbonate
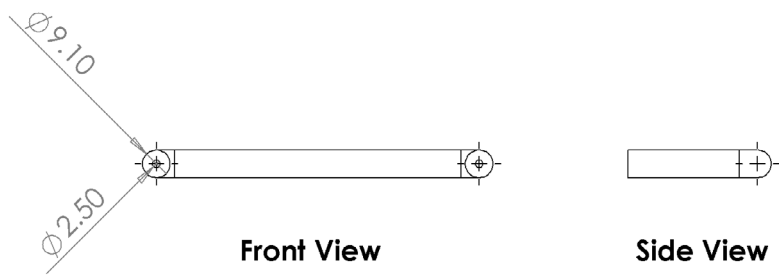Method: Plastic Injection Molding
Finish: Smooth, High Gloss

197.40

R2.70

50.00

R1.00

Front View

13.97

2.00

10.00

2.00

1.00

4.00

Bottom View

7.50

1.00

9.57

5.00

13.97

Back View
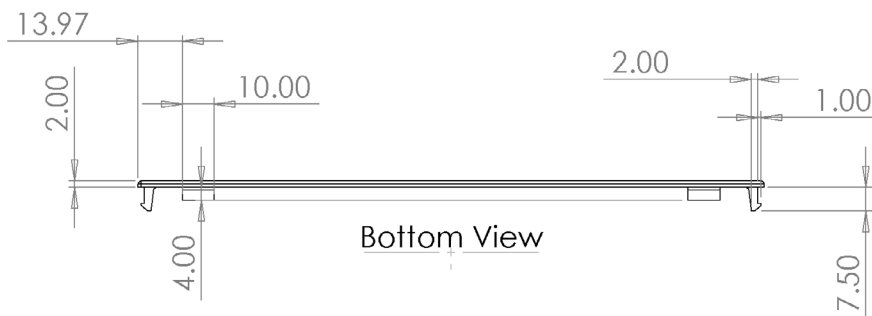
Handle | Technical Documentation

Part number: 5
Material: Steel
Method: Casting
Finish: High Gloss Polish

115.20
97.00
R10.55
38.00
R1.45
Ø9.10

Top View

Ø9.10
Ø2.50
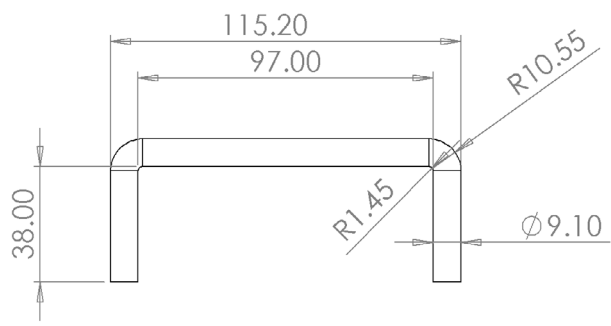
Front View

Side View

Required Next Steps

- Optics Engine and Lens Design
- Audio Design
- Heat Management
- Vibration Management

Acknowledgment

Thank you to Dr. Rafael Gomez and the tutors throughout this project. Thank you to the research participants. Avery special thank you to my peers, family, friends who supported me through this project.