

Organising Employee Driven Innovation

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Organising Employee-Driven Innovation in High-Tech Organisations

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Executive Summary

In today's knowledge-intensive economy, innovation has become essential for securing a competitive advantage, assisting firms in thriving, and ensuring their survival. Corporations have realised that experts are just some of the ones responsible for innovation. Employee involvement in developing innovation processes thus represents a significant cultural shift from established company practices. This realisation has led to the emergence of employee-driven innovation (EDI). There is academic work that studies different contributing factors to EDI. Management practices and leadership are crucial for implementing EDI initiatives by creating a supportive environment, encouraging innovation, and providing autonomy and guidance to employees. Recent work looks into creativity and employee work behaviour. There is also work around digital EDI, and some studies look into the organisation of EDI.

However, organisations still struggle with implementing EDI. This research aims to identify key factors and practices that effectively organise EDI within high-tech organisations. The qualitative and inductive study used semi-structured interviews to generate theory and draw general conclusions. The target population includes change managers, senior managers, and employees in high-tech organisations. Twelve people from different organisations in The Netherlands participated in the study. I recorded, transcribed and anonymised the video interviews. These anonymised documents were further used for coding to identify emergent themes.

The results provide valuable insights into the understanding, perception, and outcomes of EDI initiatives among participants. Initially, they showed limited awareness of EDI, but after being informed, they recognised its importance in leveraging the creative potential of all employees. The participants discussed examples of EDI initiatives, highlighting the use of digital platforms, collaborative sessions, competitions, and off-site activities to foster innovation. They acknowledged various benefits of EDI, such as cross-functional collaboration, diversity of thought, self-leadership, and persistence. However, their definition of success varied, with some focusing on idea integration while others emphasised factors like customer satisfaction or alignment with organisational priorities. Challenges associated with EDI were also identified, including organisational resistance, managing the number of ideas generated, and the lack of clear definitions for innovation and success.

This study fills a research gap by offering practical insights into organising and implementing EDI effectively. The findings emphasise the importance of creating an innovative environment, recruiting individuals with specific characteristics, and organising EDI activities that are engaging and connected to daily work experiences. The highlights include leadership advocacy, fostering a supportive culture, and recognising employee efforts. The study proposes a shift in the assumption that all employees are willing to innovate and suggests integrating EDI into daily work routines. Theoretical implications indicate introducing an idea selection phase in the EDI process. Practical implications include balancing business and creativity, providing incentives, managing time effectively, promoting collaboration, and establishing transparent criteria for idea selection. The study proposes an EDI intervention framework that serves as a roadmap for organisations, emphasising idea generation, selection, implementation, cultural enablement, and transparent processes. Overall, this study contributes to understanding EDI and provides recommendations for fostering a culture of innovation.

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Nomenclature

DL	Direct Leadership
EDI	Employee Driven Innovation
EL	Empowering Leadership
HR	Human Resources
HREC	Human Research and Ethics Committee
HRM	Human Resource Management
ICT	Information and Communication Technology
IEO	Individual Entrepreneurial Orientation
IWB	Innovative Work Behaviour
KPI	Key Performance Indicator
LMX	Leader-Member Exchange
PL	Participative Leadership
PO	Person-Organization
RD	Research and Development
TFL	Transformational Leadership
TU Delft	Delft University of Technology

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1 Introduction

1.1 Context of the study

Innovation has become crucial for unlocking competitive advantage and helping businesses to prosper and survive in today's knowledge-intensive economy (Bäckström and Lindberg, 2019). Though not an invention in and of itself, innovation results in something new and generates profits (Opland et al., 2022). Joseph Schumpeter introduced the term 'innovation' in the 1920s (Hansen and Wakonen, 1997), after which numerous definitions have emerged, elaborating on different aspects of the term. A definition in line with the Organization of Economic Cooperation and Development (OECD) (OECD, 2009) is the one defined by Crossan and Apaydin (2010). This definition includes internally developed and externally adopted innovations ('production or adoption'). It highlights the importance of developing and utilising ideas to create a significant economic and social impact. Therefore, while generating new ideas is essential, developing, refining, and implementing them effectively to achieve successful innovation (Bäckström and Bengtsson, 2019) is equally crucial. It is defined as follows:

"Innovation is production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new production methods; and establishment of new management systems. It is both a process and an outcome."
(Crossan and Apaydin, 2010, p. 1155)

Work duties associated with innovation have historically been organised through Research and Development (R&D) departments or specialised units comprising senior managers or industry specialists, suggesting a planned centralisation of innovation (Opland et al., 2022). Top managers are responsible for making decisions about innovations (Flocco et al., 2022). These closed units aim to create mass-market enterprises for products using the logic of technological push. However, with failure rates and costs rising constantly, R&D departments need a new strategy that embraces a market pull rather than a technology push logic to innovation (Tirabeni and Soderquist, 2019). Hence, innovation management has increasingly focused on creative efforts outside R&D departments and innovation-specific functions (Bäckström and Lindberg, 2019).

Previously, most company employees were largely left out of decisions regarding innovations (Flocco et al., 2022). Hence, employee participation in evolving innovation processes (Bäckström and Lindberg, 2019) marks a substantial cultural change from typical business norms. Individual-level characteristics, including motivation, skills, abilities, and competencies, are being managed since they significantly impact inter-organisational knowledge flows across stakeholders (Tirabeni and Soderquist, 2019). As we transition from an industrial society to one focused on knowledge and ideas, corporations recognise the need for collaboration and diverse perspectives to drive innovation forward (Opland et al., 2022). Practitioners and scholars are becoming more aware of the possibilities for innovation among ordinary employees or those without innovation-specific positions (Flocco et al., 2022). This move toward the democratisation of the innovation process (Bäckström and Lindberg, 2019) from development in closed environments and laboratories to co-creation and open collaboration leads to the emergence of employee-driven innovation (EDI) (Opland et al., 2022). Two important factors have favoured this trend. Firstly, as the environment becomes complicated, it is increasingly difficult for a single person to have all the knowledge and abilities necessary to innovate. Instead, these qual-

ities become scattered among all employees in the organisation (Flocco et al., 2022). Secondly, future employees increasingly aspire to reach their full work potential, challenge and develop their professional talents, and be treated seriously as organisational members (Kesting and Uhløi, 2010).

The EDI concept illustrates the substantial involvement of regular employees (Bäckström and Lindberg, 2019). The firm's employees' expertise, experience, ideas, creativity, and talents drive EDI (Høystrup, 2010). Employees are considered potential sources of radical innovation as well (Kesting and Uhløi 2010; Flocco et al. 2022). It is generally a bottom-up approach (Høystrup, 2010), and it can occur haphazardly, informally, and without prior planning. Social interaction and exchange frequently spark the daily critical and reflective experiences and work practices that underpin EDI (Kesting and Uhløi, 2010). However, formal and scheduled activities can also institutionalise it (Flocco et al., 2022).

When it comes to organising EDI, it is crucial to consider both management and leadership practices. They are distinct yet interconnected concepts. In the context of this research, management refers to the set of practices and processes that leaders facilitate to achieve organisational goals and objectives. On one hand, management practices refer to the specific activities, methods, and techniques utilized by managers to plan, organize, coordinate, and control resources and activities within an organisation to achieve predetermined goals and objectives. On the other hand, leadership practices refer to the specific actions, behaviors, and strategies employed by individuals in leadership roles to effectively guide and influence others towards achieving common goals (Wajdi, 2017).

1.2 Research Problem

Employee roles, tools, and culture are three interrelated components that collectively form the foundations of EDI (Amundsen et al., 2014). A distinguishing trait of EDI is the high level of employee involvement (Høystrup, 2010). Organising EDI can be difficult for managers since there are various ways to manage this employee involvement (Bäckström and Bengtsson, 2019). Furthermore, EDI pursues employee autonomy and managerial control when managing employee participation. Trying to achieve two opposing goals simultaneously can make organising these events quite challenging (Flocco et al., 2022). Thus, management and leadership must make informed decisions to effectively organise and implement EDI initiatives (Flocco et al., 2022).

EDI processes have two phases, an idea generation phase and an idea implementation phase (Kesting and Uhløi, 2010). It is important to distinguish which parts need structure and which can be flexible, as routine and creativity are both necessary. Idea generation requires flexibility, while idea implementation requires control and routines, so management and leadership practices must prioritise different skills accordingly (Flocco et al., 2022). Employees require free space to be creative (Ahmed, 1998), but management needs protocols and routines to implement those ideas effectively. This fundamental difference in approaches from idea generation to implementation is essential for organisations to balance. Achieving a balance between allowing creative freedom and imposing necessary constraints is crucial in fostering innovation (Amabile, 1988). Ultimately, each organisation must determine the appropriate level of control based on the context (Kesting and Uhløi, 2010) of their EDI processes (Saether, 2019). However, there seems to be a lack of research to guide the organisation of EDI (Flocco et al., 2022).

Fan et al. (2021) have highlighted that research on fostering innovation within high-tech companies has steadily gained traction. EDI is highly relevant for such organisations as they operate in a dynamic and rapidly changing environment that requires continuous innovation to stay competitive. In such an environment, relying solely on top-down innovation approaches may not be sufficient, and organisations need to tap into the creative potential of their employees to generate new ideas, solve problems, and improve processes. Kesting and Ulhøi (2010) indicated the need to understand *how* to create an environment of idea generation through higher management support. Although Mulligan et al. (2021) looked at how strong bonds between staff members and their managers promote more creative activity, their work did not describe *how* management and leaders could actively take steps to establish these bonds. Similarly, Huang et al. (2023) have also not discussed *how* such dynamic environments can be created for employees. Despite EDI's growing interest and importance, organisations still struggle to implement it effectively. More research is needed to guide *how* management and leadership can effectively organise and implement EDI.

1.3 Research Question

This research aims to identify key factors and practices that effectively organise employee-driven innovation (EDI) within high-tech organisations. To connect theory to action and help with implementing EDI, the main research question that emerges is:

RQ: How can high-tech organisations effectively organise Employee-Driven Innovation (EDI) initiatives?

Sub-research Questions

These sub-research questions can guide the research towards a deeper understanding of leadership and management practices that lead to the success of EDI initiatives. By addressing these questions, the research can provide valuable insights into how EDI initiatives can be designed, implemented, and managed to maximise their impact on organisational outcomes.

SQ1: How is the success of EDI initiatives defined in high-tech organisations?

This descriptive sub-research question helps conceptualise EDI. It is relevant because the definition of success can vary among organisations and affect how they approach and measure the effectiveness of their EDI initiatives.

SQ2: What challenges are high-tech organisations facing when implementing EDI?

Similarly, this descriptive question is relevant because implementing EDI can be complex and challenging, especially in high-tech organisations operating in fast-paced and dynamic environments. Understanding these challenges is crucial for managers and leaders seeking to implement EDI in their organisations successfully.

SQ3: How do high-tech organizations implement EDI initiatives?

This sub-research question can provide insights into the strategies and approaches used in im-

plementing EDI. It can give practical examples of high-tech organisations executing EDI initiatives.

SQ4: How do leadership and management practices within high-tech organisations contribute to fostering EDI?

Studying the relationship between leadership and management practices and EDI in high-tech organisations is relevant because it provides insights into how organisations can create a supportive and empowering environment for innovation, enhance employee engagement and motivation, overcome barriers to innovation, and develop effective leadership strategies.

1.4 Connection to Management of Technology

My research on effectively organising EDI initiatives within high-tech organisations aligns closely with the core objectives of the Management of Technology program. The program focuses on effectively leveraging technology to design products and services that enhance customer satisfaction, corporate productivity, profitability, and competitiveness. My findings and recommendations will contribute to this objective by providing insights into harnessing EDI and making informed decisions. Thus, my thesis directly aligns with the program's goal of strategically managing technology within organisations.

1.5 Report Structure

The introduction of the thesis provides an overview of the research objectives and questions while highlighting the research gap. The second chapter reviews the existing literature on EDI research, focusing on management and leadership techniques that aid in fostering EDI. Chapter three outlines the research methodology, data collection, and analysis methods. The fourth chapter summarises the research findings, including some noteworthy discoveries. Lastly, Chapter Five analyses the study's findings with the literature, limitations, and practical and theoretical applicability of the results.

2 Literature Review

This section explores the current literature on EDI and organises it into three main areas: EDI itself, management practices for EDI, and leadership practices for EDI. To understand EDI, the examination begins with exploring employee work behaviour as the initial step. Subsequently, the definition of EDI is provided, along with various EDI initiatives. The successful implementation of EDI and the challenges organisations face are then described. Moving forward, management practices that support EDI are examined, offering detailed insights into Human Resource Management (HRM) and organising for EDI. Lastly, EDI leadership practices are studied, focusing on organizational culture and effective employee management.

2.1 Employee Driven Innovation

2.1.1 Employee Work Behaviour

Innovation and creativity are two intertwined ideas; one cannot exist without the other ([Chaubey and Sahoo, 2022](#)). Definitions of creativity and innovation differ according to the analysis level used. This research examines innovation within organisations and considers creativity as an individual attribute. Innovation is examined at the organisational level, focusing on how the organisation fosters and implements innovative practices. On the other hand, creativity is viewed as an individual-level attribute, emphasising the role of individual employees in generating new and novel ideas. The primary definition of organisational innovativeness involves implementing a new idea, behaviour, or process previously unknown or unfamiliar to the organisation ([Ritala et al., 2020](#)). Whereas creativity is generating unique and valuable ideas by an individual or a small group ([Amabile, 1988](#)).

Table 1: List of employee skills critical to innovation ([Tirabeni and Soderquist, 2019](#))

Skill Type	Exploration Activities	Exploitation Activities	Ambidextrous Activities
Professional	combining and expanding knowledge	knowledge concentration	knowledge brokerage and multi-tasking
Methodical	coping with complexity in the context of variety enhancement	simplification and variety narrowing	dialectic and synthesis thinking
Social	cooperation in interactive relationships	keeping control of work processes	tolerance to ambiguity and mediation capabilities
Personal	self-reflection as a personal routine	authority in the implementation of personal action	capability to combine alternative logics and control emotional ambivalence

Creativity and ambidexterity are essential to the innovation process, each contributing distinct yet complementary aspects. Creativity is the foundation for innovation, driven by generating new ideas through individual creativity ([Amabile 1988](#); [Laruccia 2009](#)). Organisations aspiring to foster innovation must prioritise understanding the factors contributing to individual creativity. These factors are crucial for developing effective management practices ([Amabile, 1988](#)). Scholars have investigated individual-level constructs such as Innovative Work Behaviour (IWB) to enhance their understanding of organisational creativity and innovation.

IWB encompasses actions that promote generating and applying innovative and valuable ideas, methods, products, or techniques within work settings (de Jong and Hartog 2007; Živile Stankevičiute et al. 2020). Companies are actively interested in encouraging employees to cultivate and implement creative ideas, as they significantly influence performance and value creation (Uppathampracha and Liu 2022; Živile Stankevičiute et al. 2020).

In addition to creativity, scholars have explored the concept of ambidexterity in management research. Ambidexterity refers to an organisation's capacity to effectively balance and integrate exploration, which involves pursuing new and innovative ideas, with exploitation, focused on optimising existing resources and processes (O'Reilly and Tushman, 2013). In the EDI context, ambidexterity is particularly relevant, enabling organisations to simultaneously foster employee-generated ideas and exploration while leveraging and exploiting existing knowledge and resources. Scholars have employed a competency taxonomy encompassing exploration, exploitation, and ambidexterity to identify and develop crucial abilities and behaviours among employees. They deem these skills as critical for innovation (Tirabeni and Soderquist, 2019).

The skills outlined in Table 1 provide insights into employees' specific activities to drive innovation. However, the literature indicates three key factors as pivotal in motivating and directing employees towards these activities, particularly in EDI. These factors include autonomy, self-leadership and entrepreneurial mindset, and intrinsic motivation. Hence, when organisations actively support and nurture these factors while embracing creativity and ambidexterity at an organisational level, they create an environment that encourages employees to generate and explore new ideas while effectively utilising existing knowledge and resources.

Autonomy: Employee autonomy is related to EDI as it empowers individuals to take ownership, make decisions, and actively contribute to innovation. The importance of this concept lies in the fact that it enables individuals to act independently in their work. It is critical to both the means and ends of the employees' work. Two types of autonomy exist, namely strategic autonomy and operational autonomy. The former refers to the freedom to set one's agenda. In contrast, the latter involves the freedom to approach a given problem as determined by the individual self once the organisation has set it. Operational autonomy fosters a sense of individuality and encourages entrepreneurship, whereas strategic autonomy is more aligned with the organisation's objectives. Organisations must provide autonomy to their employees to promote a sense of responsibility and ownership in their work (Ahmed, 1998). Fan et al. (2021), in their work, also look at the relationship between autonomy and IWB of employees.

Self-Leadership and Entrepreneurial Mindset: Echebiri (2020) discusses the concept of self-leadership, which refers to cognitive and behavioural strategies that individuals use to achieve their goals. These strategies include behaviour-focused techniques, natural reward strategies, and constructive thought pattern strategies. They found that the need for autonomy has a positive relationship with self-leadership, which has a positive association with EDI (Echebiri, 2020). This relationship aligns with Ritala et al. (2021) and Reibenspiess et al. (2022), who also explained the importance of an entrepreneurial mindset to be innovative in high-tech organisations. Ritala et al. (2021) suggest that individual entrepreneurial orientation (IEO) plays a crucial role in the success of an organisation's digital strategy and transformation. Hence, organisations should consider IEO an integral factor when hiring and promoting employees. Individuals who possess an entrepreneurial mindset show traits of being innovative, risk-taking, and proactive (Ritala et al., 2021). Such employees who leverage solutions

and overcome their fears and biases can bring significant positive changes to the organisational environment (Laruccia, 2009). According to Reibenspiess et al. (2022), intrapreneurs work in different departments and have the same passion and determination as entrepreneurs. They hence create innovations within the limitations of their organisation's financial, technical, and human resources.

Motivation: The motivation of employees is another critical concept that drives innovation at organisations (Ritala et al., 2020). Intrinsic motivation, based on interest and enjoyment in a task and does not require external rewards, is associated with persistence, positive affect, novelty, and higher work performance and commitment. This type of motivation is crucial for creativity and will likely lead to higher levels of IWB. Identified motivation, an extrinsic form of motivation, is associated with behaviours that align with personal goals and identities. It is also likely associated with IWB due to its emphasis on meaningful work (Ritala et al. 2020; Saether 2019).

2.1.2 Defining EDI

These notions of IWB, employee autonomy, self-leadership and motivation focus on creating a workforce that could potentially contribute to innovation. However, just having these traits and skills does not guarantee the active involvement of employees in driving the innovation process. There is also a need for management and leadership to provide opportunities and create an environment for innovation. The concept of EDI addresses this need for managing employee participation. The term EDI can have varied meanings across different organisations (Teglborg-Lefèvre 2010; Flocco et al. 2022), and it is hence context-dependent (Kesting and Ulhøi 2010; Saether 2019). Scholars have used the definition by Kesting and Ulhøi (2010) while conducting research in the domain of EDI (Tirabeni and Soderquist 2019; Bäckström and Lindberg 2019; Flocco et al. 2022; Opland et al. 2022). This definition of EDI is:

"Employee-driven innovation (EDI) refers to the generation and implementation of significant new ideas, products, and processes originating from a single employee or the joint efforts of two or more employees who are not assigned to this task. Thus, EDI indicates that innovations can emerge from 'ordinary' employees, from shop-floor workers and professionals to middle managers across the boundaries of existing departments and professions." (Kesting and Ulhøi, 2010, p. 66)

Flocco et al. (2022) have stated three characteristics of EDI, in line with the work by Høystrup (2010), which are as follows:

1. It necessitates the creation and application of significant innovations.
2. Even though new information, routine reconstruction, and organisational innovation frequently prevail, they can incorporate content (i.e. product, process, and paradigm innovations).
3. It focuses on 'ordinary employees' at all levels of the organisation.

In line with the definition by Kesting and Ulhøi (2010), EDI has two distinct phases: idea generation and implementation. During the idea generation phase, employees must take the initiative and be innovative agents. This phase is highly dependent on time and resource availability. One critical aspect of this phase is that the idea reaches an appropriate starting point

for making a management decision (Kesting and Ulhøi, 2010). The EDI process then proceeds to the idea implementation phase. The whole process can be designed in various ways. Flocco et al. (2022) have summarised the following three forms that EDI can take, based on the work by Høyrup (2010):

- a *bottom-up process* refers to the emergence of innovation from employees' daily cultural practices, including those not originally intended for that purpose.
- a hybrid approach to innovation that *combines both bottom-up and top-down processes*, where management seeks to formalise and support promising innovation processes initiated by employees.
- a *top-down process* is when management initiates and leads the innovation process while inviting employees to participate.

There are two different perspectives regarding the literature on organising and structuring EDI. One is the adoption of flexible structures, and the other is making systematic arrangements. Autonomy and freedom are often highlighted in the EDI literature as crucial for encouraging employees' innovation and participation, with a particular focus on bottom-up approaches rather than top-down ones. Echebiri (2020) and Flocco et al. (2022) support this approach. Giving employees autonomy in their job can foster feelings of competence and self-determination. As employees need space and opportunity to think creatively and try new things (Martins and Terblanche, 2003), adopting organic structures that prioritise flexibility and openness (Ahmed, 1998) might foster innovation. Organic structures hence prioritise a collaborative and relaxed method (Ahmed, 1998).

Nevertheless, some researchers have pointed out that unregulated employee participation in innovation may have negative consequences for the organisation. They argue that a framework or structure is needed to implement employees' ideas effectively (Kesting and Ulhøi 2010; Flocco et al. 2022). Teglberg-Lefèvre (2010) has identified reasons for implementing structured approaches to EDI. Structured methods refer to a combination of tools, techniques, rules, procedures, actors, discourse types, representations, and organisational visions (Amabile, 1988). Establishing a structured approach to EDI allows management to communicate clearly to all employees. Furthermore, implementing structured processes in EDI contributes to transparency. Lastly, such methods hold the potential for avoiding starting from scratch every time by providing a foundation for employee innovators to build upon (Teglberg-Lefèvre, 2010). It is up to organisations to understand and decide the design and implementation of EDI within their specific contexts.

2.1.3 EDI initiatives

According to Gressgård et al. (2014), effective EDI initiatives require a well-designed system for creating and managing internal knowledge. As EDI is an emerging field of study, there has yet to be an exhaustive list of EDI practices organisations can implement (Tirabeni and Soderquist, 2019). However, there are some standard EDI practices which include:

Dogfooding: It is a prevalent practice, referring to the idea that businesses should "eat their own dog food" or use their products first internally before selling them to clients. It is a typical strategy for fostering internal involvement (Tirabeni and Soderquist, 2019).

Time Allocation: These programs enable employees to set aside time to work on a novel idea. It primarily encourages concept invention and very early concept testing (Tirabeni and Soderquist, 2019).

Hackathons: A hackathon seeks to produce a working prototype, product, or solution before the event's conclusion. These are in-house competitions that typically run for 24 to 48 hours. They aim to encourage innovative ideas for products, services, and procedures (Tirabeni and Soderquist, 2019). Businesses, universities, and other institutions organise hackathons that revolve around a specific theme or subject (Komssi et al., 2015).

Internal Digital Platform: To enhance idea management within the company, web-based applications are often used (Tirabeni and Soderquist 2019; Bäckström and Lindberg 2019). The advantages of digital ideation platforms have been emphasised in terms of cost savings for idea sharing and increased effectiveness in uncovering ideas that were once "hidden" in the company (Bäckström and Lindberg, 2019).

2.1.4 Successful implementation of EDI initiatives

Measuring the success of EDI initiatives is challenging because the literature does not provide concrete universal metrics. According to Amundsen et al. (2014), for successful implementation of EDI practices, the top management must believe these practices are crucial for building innovation capacity. Opland et al. (2022) similarly highlighted how the success of employee-driven digital innovation would consequently depend significantly on an organisation's approach to technology advancement. These findings underscore that an organisation's own strategy and objectives significantly influence how success is measured. Ellström (2010) discuss the significance of perspective when defining success by suggesting that what might be a 'failure' from a management perspective may be a 'success' from an employee perspective. The work by Teglborg-Lefèvre (2010) takes a different approach by focusing on the individual employee-innovator. According to the author, an employee's ability to form alliances and persuade relevant stakeholders is crucial to the success of their innovative idea. In their work, Gressgård et al. (2014) have studied the use of Information and Communication Technology (ICT) tools for the 'successful' implementation of EDI. However, their work doesn't highlight any concrete metrics that can measure the success of EDI. Evaluating the effects of EDI practices is hence a significant management challenge (Amundsen et al., 2014).

2.1.5 Challenges with EDI

According to Tirabeni and Soderquist (2019), organisations face other challenges in implementing EDI practices. The study by Aaltonen and Hytti (2014) has shown the following barriers to EDI:

Lack of knowledge and skills: EDI requires employees to have certain skills and knowledge to participate effectively in the innovation process. These skills include problem-solving, creativity, communication, and collaboration (Table 1), as well as knowledge of the organisation's operations, customers, and industry trends (Kesting and Ulhøi, 2010). The workforce hence needs to be prepared with such skills to foster EDI.

Fear of failure or making mistakes: Losing the fear of looking ridiculous is necessary to develop the ability to be creative (Laruccia, 2009). Employees may hesitate to propose new ideas

or take risks if they fear negative career or job security consequences. Willingness to accept failure is crucial for enhancing organisational learning and innovation capabilities (Amundsen et al., 2014). The fear of failure or making mistakes can pose a significant challenge to developing a culture of innovation.

Organisational culture and management practices discouraging innovation: Success of a company in innovation cannot solely be based on its external behaviour and actions; rather, it is largely influenced by the culture and mindset of employees at all levels within the organisation (Sørensen and Wandahl, 2012). Auernhammer and Hall (2014) have also emphasised the importance of organisational culture in promoting knowledge creation, creativity, and innovation. Cultivating an organisation's culture and mindset for innovation can be complex and multifaceted.

Limited opportunities for collaboration and knowledge sharing : Collaboration and knowledge sharing are vital components of successful EDI initiatives. A culture for EDI may suffer if employees work isolated or there are limited opportunities for cross-functional collaboration (Amundsen et al., 2014).

Hierarchical structures and communication barriers: To encourage and maintain innovation, it is paramount to understand how to engage employees and create a positive organisational identity. Employees evolve corporate practices while also adapting to their particular situations. This advancement is possible because their organisations appreciate the benefits of innovation and allow employees to pursue it. In contrast, traditional organisations prioritise fixed and hierarchical relationships (Price et al., 2012), which may hinder EDI.

Lack of time and resources: As mentioned earlier, time and resource availability are critical factors for EDI (Kesting and Ulhøi 2010; Aaltonen and Hytti 2014). Due to limited budgets or competing priorities, organisations may face challenges in allocating enough time and resources to EDI initiatives. This challenge can cause employees to feel frustrated by the lack of support for their innovative ideas.

Resistance to change: According to Amundsen et al. (2014), enterprises that have successfully implemented EDI practices reported an important effect, which is an increased willingness to accept change among employees. However, they also found that working within an EDI paradigm affected not only the attitudes of employees but also those of leaders. To succeed in EDI, leaders had to change their approach to interacting with employees and shift towards the role of "coaches" or "conversation partners." Many leaders admitted that the difficult part of this shift was letting go of traditional control mechanisms. Hence, change management becomes crucial for ensuring a smoother transition into an EDI-conducive environment.

2.2 Management Practices supporting EDI

While individuals can influence organisational innovation, the organisation itself can also affect the individual's level of creativity, resulting in a reciprocal relationship between individuals and organisations. The successful implementation of organisational innovation requires integrating individual creativity into the process (Amabile, 1988). Making strategic routine-level choices, including those involving innovation, is a core managerial responsibility (Kesting and Ulhøi, 2010). To successfully implement EDI, it is important to have supportive management practices

in place (Miao and Ji, 2020). Top management in highly innovative firms is hence committed to innovation, providing financial and emotional support (Ahmed, 1998).

2.2.1 Human Resource Management and EDI

The relationship between HRM and the innovation level of an organisation has been widely acknowledged (Kesting and Ulhøi, 2010). Implementing HRM practices is greatly influenced by the choices and preferences of the top management of organisations. More specifically, their attitudes towards EDI and readiness to provide resources to support it play a crucial role in determining the success of such practices (Miao and Ji, 2020). Research in the area of HRM also underscores the importance of employee development through training, empowerment, and involving them in decision-making and innovation processes, ultimately enhancing the innovation performance of the firm (Miao and Ji, 2020). Management's values and views are mirrored in the types of individuals they choose to recruit (Ahmed 1998; Martins and Terblanche 2003). Hence, the recruitment of a passionate workforce with the mindset of contributing to EDI is vital.

Scholars believe that person-organisation (PO) fit involves employees feeling that their needs and values align with those of the organisation they work for (Saether, 2019). Studies show that positive work attitudes resulting from PO fit can lead to greater productivity, better team and organisational fit, increased innovation, and career advancement opportunities for employees. Additionally, such employees may engage in extra-role organisational citizenship behaviours (Pahos et al., 2021), such as those related to EDI (Echebiri and Amundsen, 2021).

2.2.2 Organizing EDI

In high-tech organisations, environments are created to nurture intrapreneurs, who actively engage in anticipatory and agentic activities, including EDI, to generate fresh ideas for the organization (Reibenspiess et al., 2022). Martins and Terblanche (2003) further explain that organisations promoting innovation and creativity often have an innovation strategy, change-supporting policies, flexible organizational structures with decentralized and shared decision-making, and technology that leverages people's expertise and accessibility to facilities. However, managers must understand that employees need a clear understanding of their involvement in organizational activities, and not all employees may have the same level of interest in participating beyond their job responsibilities (Kesting and Ulhøi, 2010). Effective project management involves a manager who serves as a positive role model, aligns employee skills and interests, provides guidance without micromanaging, and secures adequate resources such as equipment and facilities (Ahmed, 1998). The following are some management practices that help organise EDI:

- **Time and Space allocation:** Employees need adequate time to think creatively (Aaltonen and Hytti, 2014), promoting a sense of challenge and urgency and avoiding managerial resistance to new ideas.
- **Support for collaboration and risk-taking:** Support systems that encourage employees to take collaborate and take risks (Auernhammer and Hall, 2014), experiment, and come up with ideas are required (Martins and Terblanche 2003; Amundsen et al. 2014).
- **Equitable reward systems:** In addition, equitable reward systems (Saether, 2019), evaluation mechanisms, and work pressure can be carefully managed by such project managers (Amabile, 1988).

- **Motivating employees through incentives:** Furthermore, motivating employees to generate new ideas and participate in decision-making processes through additional effort can be effectively achieved through incentives ([Kesting and Ulhøi, 2010](#)).

2.3 Leadership Practices supporting EDI

Different studies have different interpretations of leadership, and no definitive definition exists. However, most definitions of leadership contain fundamental elements such as ‘group,’ ‘influence,’ and ‘goal.’ In line with the view of leadership suggested by [de Jong and Hartog \(2007\)](#), it involves influencing others in a way that helps them achieve a desired outcome. While some consider leadership a part of management, others see them as overlapping roles, and some view them as distinct processes. Leadership seeks to bring about change, whereas management is more interested in establishing predictability and order ([de Jong and Hartog, 2007](#)).

2.3.1 Organisational Culture

According to [Aaltonen and Hytti \(2014\)](#), innovative processes are not the result of individual efforts but rather emerge from ongoing interactions between a company, its management, and its workforce. For organisations to consistently exhibit exemplary innovation, they need a culture and climate that nurtures and acknowledges innovation at all levels, as highlighted by [Ahmed \(1998\)](#). This culture is formed by deeply ingrained attitudes and shared ideas within the organisation, as explained by [Martins and Terblanche \(2003\)](#). Moreover, the literature emphasises a strong connection between EDI and innovation culture. When an organisation fosters and supports innovation through its culture, employees are more likely to be engaged and motivated to contribute to the innovation process ([Martins and Terblanche, 2003](#)). Leadership plays a crucial role in creating this psychological environment, as indicated by ([Martins and Terblanche 2003](#); [Auernhammer and Hall 2014](#); [Mulligan et al. 2021](#); [Uppathampracha and Liu 2022](#)).

[Ahmed \(1998\)](#) has elaborated that to establish a culture of innovation that is both successful and sustainable, leadership must undertake two fundamental tasks. The first task involves leaders being acutely attuned to their organisational environment and mindful of their influence on those around them. This sensitivity allows leaders to provide a crucial human perspective on their challenges. The second critical factor for leaders is their capacity to manage ambiguity ([Kesting and Ulhøi, 2010](#)). Innovation inevitably involves ambiguity, and organisations and individuals who cannot tolerate ambiguity in their work environment and relationships are likely to produce only routine actions. Thus, leaders who can accept and manage ambiguity are better equipped to navigate the complexities of innovation and foster a more tolerant culture of ambiguity ([Ahmed, 1998](#)).

When coupled with leadership support and commitment, empowerment enables individuals to assume responsibility for innovation. When individuals feel empowered and are part of a strong culture that influences their actions and conduct, they are more likely to have the energy and enthusiasm to achieve innovative goals consistently ([Ahmed, 1998](#)). In their work, [Paula et al. \(2023\)](#) showed the leadership’s role in influencing new behaviours by suggesting that they take on the part of "cognisers," which can foster shared mental models that directly affect organisations’ work practices and routines. Leadership thus impacts employees’ motivation to achieve innovation goals and objectives ([Santoso et al., 2019](#)).

Maintaining high levels of identified work motivation may lead to IWB, across all contexts, by helping employees persist in complex behaviours that are not necessarily intrinsically motivating (Saether, 2019). Furthermore, how the company handles mistakes impacts the creativity of employees. Therefore, it is crucial to have a tolerance for errors. Employees with a cognitive orientation toward innovation perform at their best in environments that encourage risk-taking, operational autonomy, and the ability to vary from the norm (Tierney et al., 1999). It is hence important to teach people that differing opinions are acceptable as they provide opportunities to identify discrepancies, conflicts, and dilemmas and promote honesty (Martins and Terblanche, 2003). Thus, Auernhammer and Hall (2014) suggest an environment that encourages risk-taking and experimentation, rewards innovative behaviour, and values employee input. Such an environment promotes creativity (Amabile 1988; Amundsen et al. 2014).

2.3.2 Leading Employees

Leadership strategies for EDI

Recent research highlights the crucial role of leadership support in successfully implementing EDIs, particularly in allocating resources to support and motivate employees to engage in innovation (Miao and Ji, 2020). However, to allocate these resources and make effective decisions regarding innovation, decision-makers require relevant and tailored information, such as (Kesting and Ulhøi, 2010):

- A comprehensive understanding of the organisation's current activities and their level of success.
- In-depth knowledge of the organisation's overarching strategy, objectives, and plans.
- Awareness of the external environment in which the organisation operates, along with potential future trends related to markets, technology, regulations, and other factors.

This shows the contextual nature of EDI that needs to be understood by leadership within organisations (Saether, 2019). Depending on their specific context, leaders need the ability to adjust and influence the organisational settings in a manner that effectively encourages creativity among employees (de Jong and Hartog, 2007). Creative self-efficacy refers to an individual's belief in their capacity to successfully engage in creative tasks and generate innovative ideas. It is a self-perception of one's ability to produce original and valuable outcomes through creative thinking and problem-solving. The following strategies provide managerial support and encourage creative self-efficacy in the workforce (Gong et al., 2009):

- Managers act as creative role models and verbally persuade staff members about their capability for innovation.
- Managers personally demonstrate and train staff in creativity-related abilities.
- Managers provide practical opportunities for employees to apply and practice creative skills.
- Managers improve workers' observational and active mastery.
- Managers alleviate employee fear and anxiety related to creative efforts through support and encouragement.

Leadership Styles and EDI

Leaders and managers are increasingly recognised for their importance in encouraging employees to create and implement innovative concepts (Shah et al., 2020). Supervisors must be mindful that their leadership style allows their staff to be inventive. Despite acknowledging leadership's theoretical importance and potential influence on EDI, there remains a dearth of comprehensive knowledge regarding how distinct leadership styles may facilitate or impede the development and success of EDI initiatives (Echebiri and Amundsen, 2021).

The leader-member exchange (LMX) hypothesis has been studied in the available literature on the connection between leader behaviour and individual innovation (Becker et al., 2021). The social exchange interactions between leaders and employees are the main emphasis of LMX theory (de Jong and Hartog, 2007). The leader's behaviour will impact the leader and subordinate relationship (Echebiri and Amundsen, 2021). It suggests that outcomes like subordinate satisfaction, supervisor satisfaction, performance, commitment, role conflict, role clarity, and turnover intentions are affected by the relationship between a leader and follower (de Jong and Hartog, 2007).

Participative Leadership: This type of leadership style has also been studied in the connection of leader behaviour and individual innovation (Becker et al., 2021). Various decision-making processes are used in participative leadership to establish the degree to which followers can influence the leader's choices and have the freedom to create and complete their assignments. Different approaches to participatory leadership are possible, such as delegation, cooperative decision-making, and consultation (de Jong and Hartog, 2007).

Transformational Leadership: Transformational leadership (TFL) is believed to foster innovation (Becker et al., 2021). Gong et al. (2009) have also highlighted the link between transformational leadership and employee creativity. As transformational leaders encourage followers to think differently about challenges and support them in reaching their full potential, this will likely boost their creativity. As evidenced by the behavioural components charisma (i.e., idealised influence and inspirational motivation), individual consideration, and intellectual stimulation, transformational leaders articulate desirable goals and visions, raise followers' performance expectations, and increase intrinsic motivation (Becker et al., 2021).

Plural Leadership: In their work, Flocco et al. (2021) have attempted to understand how plural leadership (PL) emerges and evolves in the context of EDI. Recent studies have shown a positive impact of plural leadership on individual innovativeness. They discuss formal and informal leadership as it emerges in EDI, arguing that PL can be essential to implementing EDI. It is possible to find both organised and informal divisions of leadership responsibilities in EDI. Depending on the circumstance, individuals share various roles to different degrees. Because of knowledge, workload, personality, and the requirements of each process phase, leadership in EDI is described as a dynamic process that changes. When a formal leader is present in a team during an EDI endeavour, they take the initiative before gradually passing it on to other team members. When employees work in a team without a formal leader, however, leadership is shared from the beginning (Flocco et al., 2021).

Direct and Empowering Leadership: Echebiri and Amundsen (2021) look at how empowering leadership (EL) and direct leadership (DL) influence EDI. A leader who empowers others

encourages initiative, self-reliance, optimistic thinking, and problem-solving. EL links to several advantages, including the boost of opportunistic thinking and self-control in employees, as well as the development of follower self-leadership skills. "A leader's behaviour that provides followers with specific guidance regarding goals, the means of achieving goals, and performance standards" is the definition of DL. Because an empowering leader would share power with their followers through actions like giving them autonomy and responsibility, EL has the potential to result in a high-quality relationship. On the other hand, because rewards and punishments govern employees' behaviours, a command-and-control leadership approach like DL can produce a low-quality relationship (Echebiri and Amundsen, 2021). However, their study was limited to just these two styles, and they remarked that leadership styles and their influence on EDI could change with sectors and organisational settings.

2.4 Conclusion

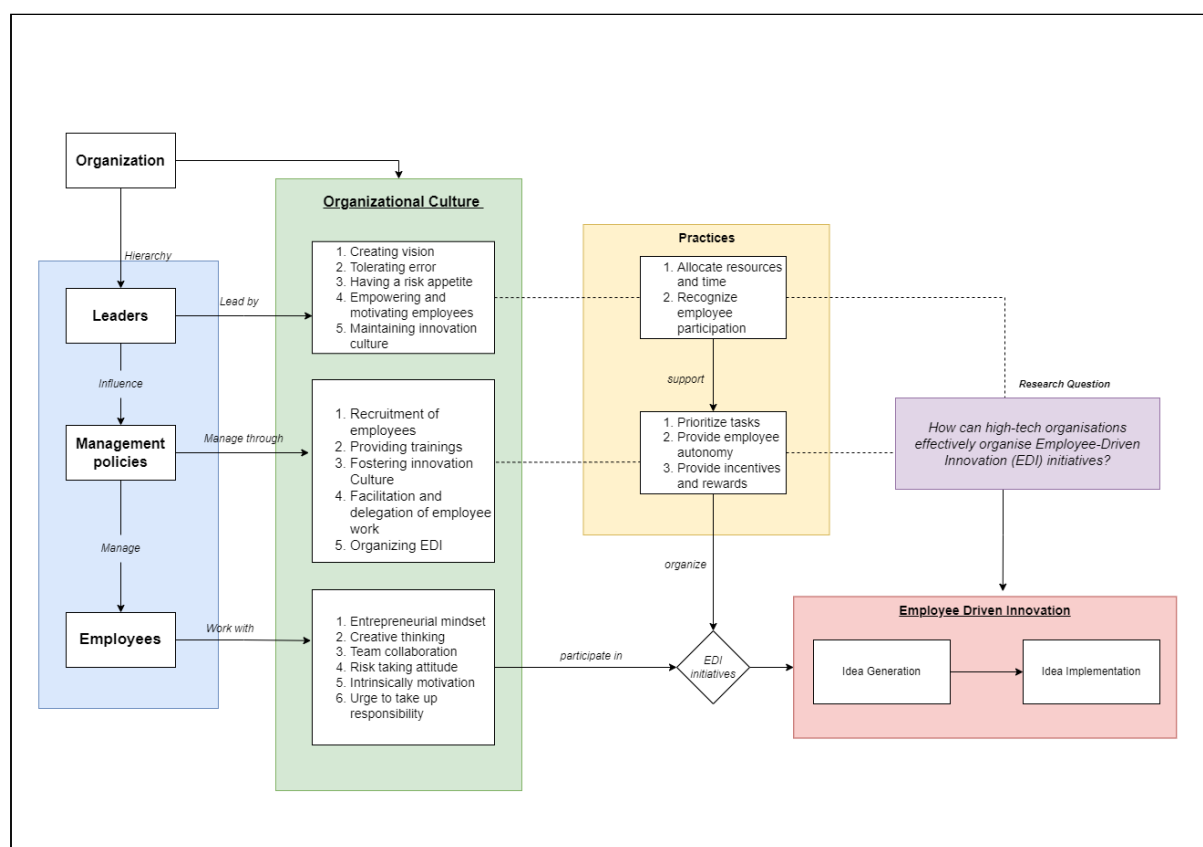


Figure 1: Author's summary of the literature study

Figure 1 summarises the literature study and shows the gap the research question addresses. In conclusion, EDI is a practice that recognises the importance of maximising each employee's contribution to innovation in the ever-changing business world. It emphasises the role of individual creativity and IWB in generating new ideas and implementing them as innovations. Organisational culture is critical in promoting EDI, and creating an environment that nurtures and encourages IWB among employees is essential. EDI is closely linked to employee autonomy, as it empowers individuals to take ownership and make decisions in the innovation process. Autonomy, self-leadership, and motivation drive employee engagement and participation in EDI. Additionally, a taxonomy of competencies, including exploration, exploitation,

and ambidexterity skills, is crucial in identifying, developing, and fostering employee capabilities for innovation.

The definition of EDI emphasises that employees at all levels of the organisation generate and implement significant new ideas, products, and processes. It can take different forms, including bottom-up, hybrid, and top-down approaches. The organisational structure and resources play a vital role in enabling or hindering EDI, with flexible and open structures promoting innovation, while structured approaches ensure the effective implementation of employee ideas. Organisations can implement dogfooding, time allocation for idea development, hackathons, and internal digital platforms to support EDI initiatives. These initiatives encourage employee involvement, idea generation, and collaboration, facilitating the flow of knowledge and fostering a culture of innovation.

Effective management and leadership practices are essential for supporting EDI within organisations. Management practices that support EDI involve creating an environment that fosters and encourages innovation from employees at all levels. These practices include providing the necessary resources, training, and support for employees to contribute to the innovation process and fostering a culture of openness to change and collaboration. HRM are crucial to employee development through training, empowerment, and involvement in decision-making and innovation processes. Organising EDI requires effective project management, equitable reward systems, and support systems that encourage collaboration, risk-taking, and idea generation.

Leadership practices significantly support EDI by creating an organisational culture that values innovation, fosters cooperation and collaboration, and tolerates failure. Leaders need to be attuned to their corporate environment and manage ambiguity effectively to navigate the complexities of innovation. Leadership support, commitment, and empowerment enable individuals to assume responsibility for innovation. Effective innovation decision-making requires leaders to comprehensively understand the organisation's current activities, overarching strategy, and external environment. It is crucial to manage employees in a way that empowers them, provides support, and rewards innovative behaviour. Different leadership styles, such as transformational, empowering, and plural, can positively influence employee creativity and innovativeness.

3 Methodology

The research design for this study follows an exploratory qualitative approach, focusing on the key factors and strategies for effectively organising EDI initiatives within high-tech organisations. The research question guides the study towards understanding specific phenomena related to EDI initiatives and drawing general conclusions. Semi-structured interviews will be conducted to gather data, and an inductive approach will be used to generate theory. The research aims to have practical significance by providing insights and generalisations based on the actions and experiences of employees and managers. The section will further discuss the ethics procedure, data collection methods, and analysis process.

3.1 Research Design

3.1.1 Target Population

According to the definition used by [Mohrman and Von Glinow \(1990\)](#), high-tech firms are known for employing a highly skilled workforce in advanced technologies and investing a significant percentage of their budget in research and development. These companies operate in an industry where new technologies quickly make existing ones obsolete, leading to a constant need for innovation and adaptation. Despite the challenges posed by rapid technological advancements, high-tech industries have the potential for extremely rapid growth due to the application of new technologies. Overall, high-tech organisations operate in fast-paced, competitive environments, constantly seeking new and innovative ways to stay ahead of the curve.

The target population for this research is the human population in high-tech organisations that have implemented EDI initiatives. The population includes change managers, senior managers, and employees involved in innovation projects. Figure 2 pictorially depicts the target population.

Senior Management: Setting the organisation's overarching direction and strategy is their responsibility. They are essential in forming the organisational culture and setting the tone for creativity and innovation. In addition, they have a more comprehensive view of the opportunities and problems that the business is facing, including aligning EDI projects with strategic goals and objectives. They hence give insights about leadership practices within organisations.

Change Management: They include human resource managers and innovation managers, as they are both involved in driving organisational change ([Dodgson et al. 2014](#); [Koster and Benda 2020](#)). They play a crucial role in designing and implementing EDI initiatives and monitoring their impact on organisational outcomes. They are responsible for recruiting and training employees participating in EDI initiatives and facilitating communication and collaboration between departments and teams. They hence give insights about management practices within organisations.

Employees: They are the ones who participate in EDI initiatives and can hence provide valuable insights into the actual implementation of these initiatives and their impact on their daily work. They have firsthand experience of the challenges and opportunities of implementing EDI initiatives and the leadership and management practices necessary to support them. Therefore, their perspectives can provide a rich and nuanced understanding of the topic under study.

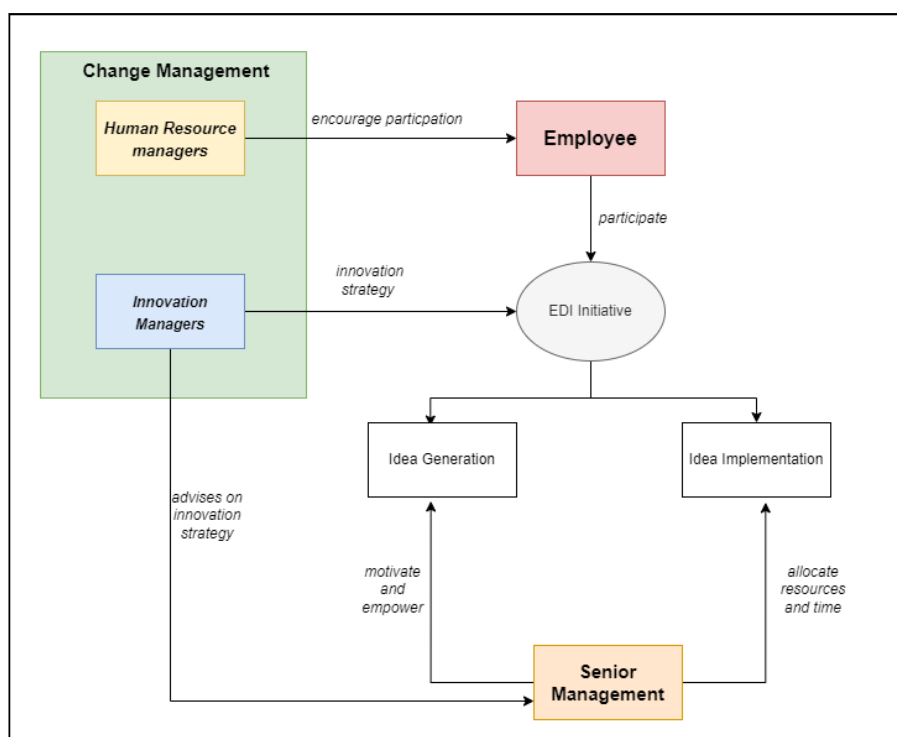


Figure 2: Target Population

3.1.2 Sampling Strategy

Selecting a sample for research on EDI requires careful consideration of several factors, including the research objectives, the scope of this study, and the characteristics of the population of interest. I have conducted sampling for this research, which involves searching a diverse range of high-tech organisations implementing EDI initiatives. I have utilised purposive sampling to filter out organisations and select a sample of employees representing this target population. The following points describe the parameters for the same.

Industry sector: The innovation potential and culture of an organisation can vary significantly depending on its industry sector. Technology-based companies may have more opportunities for innovation due to the nature of their products and services, while highly regulated industries may have more constraints on innovation. Hence, I have focused on high-tech organisations in the engineering industry for this research.

Size of the organisation: Depending on the organisation's size, innovation efforts may vary in scope, resources, and complexity. For this research, I have focused on large organisations. Large organisations typically have more resources and capacity for innovation initiatives, including EDI initiatives. Hence, there may be a greater likelihood of finding examples of successful EDI initiatives to study within these organisations. Hence, I have chosen to approach employees from companies that are market leaders. Such companies typically have higher revenue, complex organisational structures and strong brand reputation.

Innovation culture: The organisations with a more established culture of innovation, where innovation is already a core value and part of their business strategy, have been selected for the study. I contacted participants whose company's official website mentioned "innovation" in their mission statement, pillars, or vision.

Geographical location: Innovation culture and practices can vary across different regions and countries, and it's important to consider the potential impact of these factors on employee-driven innovation. For this research, the selected region is the Netherlands.

Accessibility and willingness to participate: The organisations I have chosen to include in my sample are accessible and willing to participate in my research.

3.1.3 Ethics Approval

The Human Research and Ethics Committee (HREC) of TU Delft approved the research, and all participants willingly participated. The TU Delft data steward verified the data management plan for the study. I conducted the entire research online using video calls over MS Teams, actively keeping the collection of experimental data separate from personal data collection.

3.1.4 Participants

As this is qualitative research, the sample size is not determined by statistical calculations but rather by the principle of data saturation, which is the point at which collecting more data no longer leads to new insights or themes (Guest et al., 2006). I used my social, personal, and professional networks to find participants for this study. I reached out to 120 potential candidates. Keeping to the 300-character restriction present on the online social network LinkedIn, I used the following message to reach out to people.

I am a student at TU Delft and am looking for participants to contribute to my research on Employee Driven Innovation. I would love to take your interview for my research, as that would give me great insights. Please let me know if that is possible. Looking forward to a positive response! :)

I had a response rate of 10%. Upon receiving the participant's contact details, the emails mentioned in Appendix B were sent to the participant, along with an MS Teams meeting link. When participants accepted the meeting invite, I sent the email mentioned in Appendix C along with a consent form. This consent form, displayed in Appendix D, had received approval from HREC. Table 2 presents an overview of the participants who participated in this research.

3.2 Data collection method

Conducting interviews with respondents to get data on a topic of interest is a common technique in business research. Open-ended questions have been asked at the beginning of the interview to acquire a general understanding of the issue and create some initial impressions (Bougie, 2019). As I evaluated the interviewees' comments and made notes of any potentially important concerns pertinent to the situation, other questions that were increasingly more targeted were asked based on the answers to this general topic. I employed the funnelling approach, as described by Bougie (2019), to transition from broad to narrow themes.

The interview protocol for each member of the target population has been mentioned in Appendix A. Each question also has an indicated research sub-question which that question intends to gather perspective on. HR and innovation managers are two distinct roles with different responsibilities, even though they are both involved in managing organisational change. It is

hence vital to ask some separate interview questions to HR and innovation managers to understand how each role can contribute to fostering a culture of innovation in the organisation.

Table 2: Participant Information

Participant ID	Job Role	Industry
L1	Senior Leader	Health Technology and Electronics
L2	Senior Leader	Information Technology
L3	Senior Leader	Semiconductor
L4	Senior Leader	Semiconductor
L5	Senior Leader	Information Technology
IM1	Innovation Manager	Health Technology and Electronics
IM2	Innovation Manager	Health Technology and Electronics
HRM1	Human Resource Manager	Transportation Mobility
E1	Other Employee	Marine, Energy, Food and Water
E2	Other Employee	Engineering Construction
E3	Other Employee	Semiconductor
E4	Other Employee	Information Technology

3.3 Data analysis method

After each interview, I anonymised the transcript. I performed a thematic analysis on these anonymised transcripts. The thematic analysis involves identifying important themes that describe a phenomenon. This process entails carefully reading and re-reading the data to identify emerging themes that become the categories for analysis. It is essentially a form of pattern recognition within the data (Fereday and Muir-Cochrane, 2006). Figure 3 illustrates the process of thematic analysis. I used direct quotations from the main themes of the findings to illustrate individual results and provide supporting arguments for the literature. Appendix E provides summaries of all the interviews.

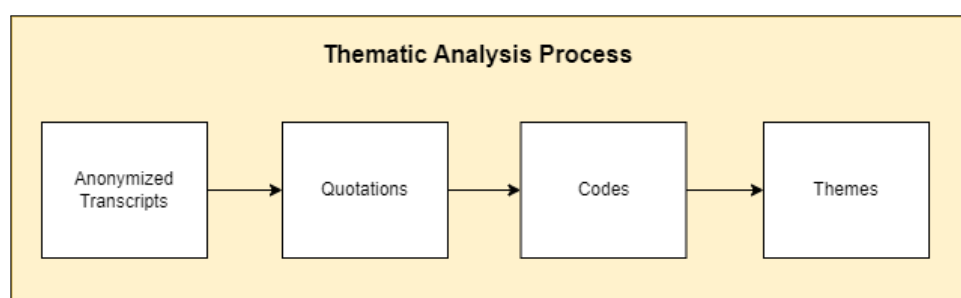


Figure 3: Data Analysis Process (Fereday and Muir-Cochrane, 2006)

During the coding process, I identified significant moments in the data and assigned codes to represent them. This step was taken before any interpretation, ensuring that the codes accurately capture the complexity of the qualitative data. Encoding the data in this way helps to organise it and makes it easier to identify and develop themes (Fereday and Muir-Cochrane, 2006). I analysed each sentence mentioned by the participants in the 12 transcripts and quoted sentences that provided insight into sub-research questions and concepts. At the end of the

process, I identified 512 quotations from the transcripts, each with one or more linked codes.

I created all the codes as I went through the transcripts. An example of how codes got assigned is as follows. The following quotations show the code: "challenges with EDI: side job".

"Often ideas are side tasks, so you come you're not being paid to only ideate" - L1

I first flagged this transcript with this specific code, and subsequently, whenever someone else mentioned those exact words or words that conveyed the same concept, it was assigned the same code.

"it's on top of the job" - E1

During the coding stage, I grouped the concepts into 16 overarching categories and 164 sub-codes. This codes list is in Appendix F. Since most participants were unfamiliar with EDI, they did not refer to the information directly. As the researcher and author of this thesis, I inferred the presence of quotations in each sub-code. While writing the results, I identified various themes from the conversations and established links between them. I also used direct quotes to provide a holistic view of the participants' opinions. I used their participant ID from Table 2 to refer to the participants.

3.4 Conclusion

In conclusion, the methodology section provides a comprehensive overview of the research design and procedures employed in this exploratory study on EDI initiatives. By conducting qualitative interviews with change managers, senior managers, and employees involved in innovation projects, the study aims to draw general conclusions and generate practical insights. The emphasis on ethics approval, sampling strategy, and data collection methods ensures the rigour and validity of the research.

The selection of the target population allows for a holistic understanding of the phenomenon. The sampling strategy focuses on large organisations with a strong culture of innovation, primarily in the Netherlands, ensuring accessibility and willingness to participate. The obtained ethical approval, along with the detailed process of participant recruitment and the qualitative data analysis using thematic analysis, further strengthens the credibility of the study's findings. In conclusion, the methodology section provides a robust framework that guides the research process and lays the groundwork for a deeper exploration of EDI initiatives within organisations.

4 Results

The following section presents the findings of the 12 semi-structured interviews. The interviews aimed to understand the different skills and practices needed for varying stages of the EDI process. I conducted a rigorous thematic analysis, which led to identifying prominent themes. Initially, this section deliberates on the concept of EDI, providing examples, discussing the challenges encountered, and presenting the achieved outcomes. Subsequently, I elucidate the management practices associated with recruiting and organising EDI initiatives. Finally, I expound upon leadership practices encompassing organisational culture, employee management, and recognition.

4.1 Employee Driven Innovation

All interviews begin with establishing an understanding of the participant's perception of EDI. 8 out of 12 participants were unaware of the term. However, after being informed of the definition and examples of EDI, participants could recognise such initiatives within their organisations. 10 out of 12 participants agreed that utilising the creative abilities of all employees is crucial. Half of the participants also mentioned the importance of prioritising EDI in their companies.

"I think my perception is that it's one of the most crucial and underestimated components in high tech organisations." - L3

The collective perspectives of the participants underscored the importance of EDI within organisational contexts. It encompasses the belief that ideas can come from various sources within the organisation and emphasises the active involvement of employees, including lower management, in driving innovation. It is an essential aspect of organisational culture, particularly for change managers and human resource practitioners, who aim to embed innovation as a core element of the company's DNA. The concept of EDI involves creating an environment that allows employees to contribute their innovative ideas and views, thus leveraging the workforce's full potential. While not all participants may clearly understand the term 'EDI,' they generally recognise the importance of involving employees in the innovation process as part of their regular responsibilities or as additional tasks alongside their primary roles.

4.1.1 Examples of EDI

After establishing a common understanding of what EDI means, the participants indicated the following examples of EDI during the interviews. I have grouped all the answers into four overarching categories. However, no category could accommodate the following two examples. They are, namely, dogfooding, an example given by L5 and bringing in universities to stimulate knowledge exchange, an example given by IM1 and IM2.

Analog and digital tools: Five participants highlighted the presence of standardised platforms and open forums within their organisations as examples of EDI. These platforms allow employees to submit their ideas and suggestions, fostering a culture of idea-sharing and participation. Furthermore, employees can raise "enhancement requests" to improve existing products and processes. The management plays a pivotal role in reviewing and evaluating these ideas, often through dedicated boards such as portfolio or business program boards. Categorising these ideas into specific "innovation buckets" is deemed crucial by IM1, as it facilitates the explo-

ration of new and forward-looking concepts. L3 elaborated on the assessment process, describing the evaluation of idea funnels and their potential application within the organisation's technology maps. HRM1 shed light on additional initiatives, such as "gigs," which allow employees to engage in supplementary projects beyond their regular responsibilities. These gigs are not limited to specific teams and allow employees to allocate 20% of their time to these projects. IM1 also mentioned the existence of "communities of practice" that foster collaboration across different topics and enable employees to network with experts who can provide support. Regarding the fate of ideas not selected for implementation, L2 explained that although some ideas may not progress further initially, they are archived and may resurface in subsequent cycles. Digital tools maintain and manage the idea buckets, ensuring continuity and accessibility.

Interactive and participatory sessions: The participants identified various examples of EDI sessions as standard practices within their organisations. L1 mentioned the regular occurrence of meetings where employees engage in continuous brainstorming. These sessions foster collaboration and encourage employees to explore innovative ideas by creating a visionary context and posing prompt questions such as "Wouldn't it be great if." L1 emphasised the importance of setting the stage, even if it means venturing into unrealistic or futuristic concepts reminiscent of Star Trek. The objective is to challenge employees' current ways of thinking and encourage them to select ideas based on their competencies.

Similarly, L2 highlighted the initiation of such sessions by presenting a "stupid" idea, aiming to inspire employees by demonstrating that if they can contribute, others can as well. In a specific session, L3 instructed employees to imagine themselves as Kung Fu fighters and apply the breakthrough perspective they sought. These sessions revolve around exploring subjects that require a breakthrough, ensuring that participants share a common understanding of the desired outcome and engaging them through face-to-face or digital interactions. An essential aspect is encouraging employees to think beyond conventional boundaries and invite diverse perspectives to contribute to the organisational breakthrough. E3 emphasised the significance of freedom in these sessions. According to IM1 and HRM1, such engagement workshops enhance collaboration and contribute to individual learning and development. Additionally, L5 stated that these sessions are regarded as opportunities for organisations to embrace valuable ideas.

Internal competitions: Participants highlighted various internal mechanisms implemented in their organisations, such as challenges, competitions, and hackathons, to foster EDI. Organisations often designed these initiatives around specific themes or problem statements, covering a wide range of topics from sustainability and productivity to niche issues such as reducing plastic waste in the supply chain. As described by HRM1, their organisation encouraged employees to form focus groups and work on identified problems, with winning teams getting the opportunity to present their ideas to the CEO at the global headquarters. IM2 mentioned another noteworthy example involving an internal "dragon's den" competition where employees were invited to pitch their ideas following a specified template. A jury then selected promising solutions, providing additional funding outside the regular budget to support the development and implementation of these ideas. These initiatives aimed to allocate resources and support employees in advancing their innovative projects towards successful outcomes.

Off-site sessions: To facilitate employees' departure from their usual work routines and promote creativity, participants identified off-site sessions as effective EDI initiatives. These sessions allowed teams to step back and engage in reflective thinking regarding their tasks and objectives. L4 emphasised that such sessions stimulated creativity by allowing the team to consider alternative approaches and perspectives. HRM1 referred to these sessions as "workcations," where a diverse group of engineers embarked on a vacation-like experience in a pleasant and sunny location. The employees, working from a spacious hotel or villa, were tasked with solving a specific problem within a week. HRM1 explained that the purpose of such sessions was to create an environment that not only changed the scenery but also provided a balance of enjoyment, relaxation, and focused problem-solving. The ultimate goal was for the team to develop a solution by leveraging the benefits of a different setting and mindset.

4.1.2 Outcomes of EDI

Collaboration and Diverse Perspectives: One common result highlighted by E2 was the emergence of cross-functional collaboration. This collaboration was seen as a tangible outcome that fostered a collaborative and innovative environment within the organisation. This outcome aligns with the measure of success mentioned by IM1, who emphasised the importance of engagement and alignment with company priorities as indicators of the success of EDI initiatives. Similarly, L3 underlined the value of inviting diverse perspectives to contribute additional dimensions to breakthrough innovations. By including diverse voices and ideas, these initiatives allowed for a broader range of insights and creative solutions to be explored. HRM1 expressed appreciation for these initiatives' infusion of fresh ideas and diversity of thought.

Pushing Boundaries and Learning Opportunities: These initiatives were seen as desirable by L3, as they pushed employees to explore uncharted territory and embrace change. They viewed these initiatives as opportunities to step out of their comfort zones and challenge traditional ways of thinking. The implementation of EDI initiatives also showcased employees' self-leadership and persistence. Participants noted that employees were willing to push boundaries and experiment with different approaches continually. This outcome exemplified their unwavering commitment to personal growth and their relentless drive to foster innovation within the organisation. E1 highlighted the measure of success as the integration of EDI initiatives into daily routines, emphasising the importance of incorporating innovative practices into regular work activities. According to E1, these initiatives provided valuable opportunities for learning and experimentation. Participants recognised the importance of continuous learning and the value of trying new ideas and approaches.

Catalysts for Innovation and Variation in Success: Participants perceived EDI initiatives as catalysts for generating ideas and driving innovation. The inclusion of diverse perspectives, the encouragement of cross-functional collaboration, and the focus on personal growth and experimentation all contributed to a culture of innovation within the organisation. The measures of success mentioned by L1, HRM1, IM1, and IM2, such as the idea becoming part of the product, numeric Key Performance Indicators (KPIs), engagement, alignment with company priorities, and linking ideas to the business, further emphasise the goal of generating tangible outcomes and driving innovation. It is worth noting that the definition of success in EDI initiatives varied among participants, reflecting the priorities set by their respective organisations. This result highlights the importance of aligning organisational goals and values with the outcomes and measures of success in EDI initiatives.

4.1.3 Challenges with EDI

EDI is not without its challenges; participants have encountered the following hurdles from designing the initiatives to implementing them. Table 3 and Table 4 summarize the challenges highlighted by the participants.

EDI is seen as a side job: A significant challenge associated with EDI is its perception as a side task. Participants, including L1, highlight that organisations do not compensate employees for ideation, considering it is not a primary responsibility. HRM1 also acknowledges that EDI is not a daily occurrence, as individuals are preoccupied with regular tasks. IM2 remarks that despite efforts to foster creativity, employees still have their designated "normal job" responsibilities. Both E1 and E4 concur that EDI-related work is additional to their responsibilities. This perception of EDI as an extra burden on top of regular tasks poses a challenge to its integration and implementation within organisations.

Balance of business and creativity: Participants in the study, such as L2, E1, E4, and HRM1, highlight the challenge of balancing daily job responsibilities with EDI. They note the heavy workload and time constraints employees face, which hinder their ability to dedicate sufficient time and energy to EDI initiatives. This struggle to strike a balance is evident in the tension between meeting business demands and fostering creativity, as mentioned by L1, L3, and HRM1. E4 also expresses a sense of discouragement in participating in EDI initiatives. Hence, there is a challenge in finding a balance between fulfilling immediate business obligations and dedicating time and energy to foster creative thinking and generate innovative ideas.

Organisational resistance: Organisational challenges in EDI emerge from both top-down and bottom-up dynamics, as highlighted by participants. Hierarchical structures often exhibit resistance from top management(L2). L2 emphasises aligning the vision and bandwidth between employees and management to foster innovation. Premature dismissal of ideas poses a challenge, as leaders often rely on their expertise, as mentioned by L3. Moreover, cultural norms and organisational governance can disrupt the innovation process, adding another layer of complexity, according to IM1. This resistance may necessitate change management strategies to overcome the aversion to change, as emphasised by IM1. Conversely, resistance can also originate from employees themselves. L2 notes the difficulty in convincing individuals to take the initiative and proactively contribute to change. Building a culture of collaboration and embracing the diversity of opinions becomes crucial, but HRM1 acknowledges the difficulty in developing these skills. Additionally, not all employees may possess the same motivation, participation, innovation, and execution capabilities, indicating variations in their capacity to engage in EDI initiatives.

Number of Ideas: L1 and IM2 identify the number of ideas as a challenge in the context of EDI. They emphasise the significance of managing the number of ideas their respective teams generate. Alongside the abundance of ideas, organisations face the difficulty of effectively integrating them within existing structures. Ideas can be highly disruptive, posing company resource allocation and implementation challenges.

Measuring innovation and success: E1 highlights ambiguity as a significant challenge in innovation. Given the ever-changing nature of markets, organisations must remain agile and adapt to new developments. To address this ambiguity, companies involve their employees in various

creative sessions. However, a notable observation is the lack of clear definitions for innovation and success in these initiatives. IM1 poses a critical question, asking how one can measure the novelty of an idea. L2 also identifies the definition of success as a specific challenge, supported by the perspectives of L3 and L4, who acknowledge the diverse range of outcomes that make defining success difficult.

Structuring the initiative: The participants' insights highlight the difficulties of structuring and implementing EDI initiatives within rapidly growing organisations. L4 emphasises that as organisations experience rapid growth, attention to ideation activities becomes diluted, making structuring and implementing EDI challenging. L5 underscores the importance and difficulty of aligning the entire organisation to act as a cohesive unit to make an impact on the market. Multiple participants, including E1, L1, and HRM1, identify the lack of a defined process for implementing ideas as a key challenge. The trade-off between flexibility and control emerges as a critical consideration in structuring EDI efforts. While L5 acknowledges that excessive flexibility may hinder progress at certain stages of the innovation process, E3 argues that an excess of structure can impede creativity, emphasising the importance of freedom. Participants caution against excessive control and attempt to overly engineer the innovation process, as they can stifle innovation and limit its potential, as noted by E3 and L1. Balancing flexibility and control to create an environment that fosters innovation is crucial. Allocating resources and providing space for innovation is another challenge mentioned by L2. The effective allocation of resources, both in terms of time and funding, is essential to support EDI initiatives and ensure their success.

Criteria for prioritising ideas: The participants identified challenges in the selection and prioritisation process for ideas in EDI. IM2 highlighted the difficulty associated with the selection process, while other participants expressed concerns regarding the narrowness of defined priorities. L1 emphasised that relying exclusively on business cases for evaluating ideas can restrict innovation and lamented the necessity of framing ideas in financial terms. The participant expressed disappointment with the requirement of depicting ideas in monetary terms. E4 noted that recognition is often contingent upon the economic success of ideas. Similarly, L2 observed that specific departments within organisations prioritise cost reduction above the merit of alternative ideas.

Table 3: Challenges with EDI (I)

Challenge	Explanation	Participants
EDI is seen as a side job	Organisations perceive EDI as an additional task rather than a primary responsibility, which can hinder integration and implementation.	L1, IM2, HRM1, E1, E4
Balance of business and creativity	Balancing daily job responsibilities, and engaging in EDI initiatives is challenging due to heavy workloads and time constraints.	L2, E1, E4, HRM1, L1, L3
Organisational resistance	Resistance to change can be observed from top-down and bottom-up dynamics within organisations, impacting the adoption of EDI.	L2, L3, IM1, HRM1

Table 4: Challenges with EDI (II)

Challenge	Explanation	Participants
Several ideas	Managing the abundance of ideas generated and effectively integrating them within existing structures can be challenging.	L1, IM2
Measuring innovation success	Ambiguity in defining innovation and success poses a challenge, as clear definitions and criteria need to be improved, affecting the implementation of EDI.	E1, L2, L3, L4, IM1
Structuring the initiative	Structuring and implementing EDI initiatives within rapidly growing organisations can be complex, requiring a balance between flexibility and control.	L4, L5, E1, L1, HRM1, E3, L2
Criteria for prioritising ideas	Challenges arise in the selection and prioritisation process for ideas, with concerns over narrow priorities and reliance on financial evaluations.	IM2, L1, E4, L2

4.2 Management Practices supporting EDI

In the pursuit of fostering EDI, high-tech organisations employ various management practices to create an environment conducive to innovation. The facilitation of eagerness to innovate is paramount, as emphasised by L3. This assistance allows employees to explore different possibilities and unleash their creative potential. Establishing a supportive organisational environment enables employees to drive innovation forward. IM1 sheds light on the significance of transparent governance in cultivating a well-functioning system where individuals can shift their focus from task-oriented concerns to pursuing their ideas. This system ensures clear roles and responsibilities within the organisation. 2 out of 3 change managers agree that having well-defined roles and responsibilities supports EDI. Discussions around roles and responsibilities within organisations often revolve around recruitment, the composition of the workforce, and the required employee skills. A summary of these skills can be seen in Table 5.

4.2.1 Recruitment aligned with culture

Firstly, when it comes to the recruitment process, there is the process itself, which then governs the kind of workforce an organisation is trying to build. HRM1 suggests using company values as guiding principles to align candidates with the organisation's culture during the recruitment process. The organisation conducts competency-based interviews to evaluate candidates and effectively assess their potential contributions to innovation. Participants in the study also highlight the importance of building a workforce that is "smart" and "well-educated," as this reflects the primary mindset of the organisation.

"One of our values is "go get it", that you should always have this bias for action and you should be ready to take the initiative and take risks and just do things and then gather your learnings and try again in a better way. So by default, our values

are also setting us up to think innovatively and act in such a way as well." - HRM1

Secondly, there are specific skills recruiters look for, in order to build a passionate workforce, which has a drive for contributing to innovation. Creativity and curiosity are deemed essential when it comes to employee skills for enhancing EDI. Employees need to possess the ability to think "outside the box" and innovate. Organisations emphasise the value of employees actively engaging in their work, as growth occurs through hands-on experience. L4 recalls the importance of having a few enthusiastic individuals who take the initiative and start working on generating ideas.

"So it's really to become persistent in creating breakthroughs instead of seeking breakthroughs." - L3

Intrinsic motivation is vital to an employee's work behaviour. The study reveals that 9 out of 12 participants emphasise the importance of continuously pushing and driving change to make ideas work. Employees who demonstrate intrinsic motivation, volunteer for new projects, and persist with their ideas exhibit self-leadership and an entrepreneurial mindset. L1 and E4 specifically mention the need to be an "internal entrepreneur" for one's ideas. Additionally, having a learning attitude and being unafraid to experiment are seen as crucial for personal and professional growth.

"Being also not afraid to try things, because not thinking that your first idea will succeed and don't feel demotivated if like the 1st 10-20 ideas that don't even work. You need to have the power to like to push through, even though every idea you just started just went left and didn't work." - E3

Collaboration is considered a significant factor in EDI. Encouraging employees to collaborate in ideation sessions is mentioned by L1 as a way to foster innovation. E4 agrees that team collaboration is vital for successful EDI, even in fun innovation-related activities. HRM1 highlights the assessment of teamwork and collaboration skills during recruitment, recognising the value they bring to learning and development. They also emphasise effective communication and stakeholder management as essential skills for collaboration. Embracing diversity of thought, accepting different opinions, actively listening to colleagues, and assuming good intent is recognised as challenging yet valuable skills to develop within the organisation.

"There's so many dependencies that you can't achieve things on your own. You can move the needle a little, but you won't make a big difference. So yeah, collaboration is encouraged." - HRM1

Understanding the market and stakeholders is critical for successful innovation. Four participants highlight the importance of listening carefully to customers and addressing their needs to achieve successful innovation. IM2 emphasises the significance of understanding the problems to be solved and relevant market solutions. Additionally, two participants emphasise the ability to understand the market as a crucial skill for generating innovative ideas.

Table 5: Key Employee Skills for EDI

Participant	Their general view	Key Skill
HRM1	Emphasises the importance of using company values as guiding principles for recruitment and conducting competency-based interviews. Recognises the significance of building a "smart" and "well-educated" workforce.	Company value alignment
L2	Highlights the need for employees to be creative, curious, and have a growth-oriented mindset.	Creativity and Growth mindset
L4	Recollects the importance of having a few enthusiastic people who generate good ideas and are willing to take risks.	Personal initiative and risk-taking
E4	Agrees with the idea of self-initiated idea implementation and the significance of risk-taking behaviour.	Personal initiative and risk-taking
E3	Acknowledges the importance of not being demotivated by failure during idea implementation.	Resilience
L1	Mentions Being an "internal entrepreneur" is a valuable skill for bringing ideas together. Encourages collaboration in ideation sessions and emphasises the acceptance of diverse opinions and active listening.	Collaboration and Entrepreneurship
L5	Stresses the collective acceleration of innovation and the need to understand customer problems for successful innovation. Encourages a solution-based approach and the importance of learning from failures.	Customer-centricity and Learning from failure
IM1	Emphasises the value of collaboration, teamwork, and communication skills during recruitment. States that innovation is about collective acceleration.	Teamwork and Communication
IM2	Highlights the importance of understanding clients, listening to their needs, and addressing them for successful innovation.	Customer understanding

4.2.2 Organizing EDI

"But if there is no real value added to a user, to a customer, to a citizen, to a company, why then should you innovate?" - L5

When exploring the practical aspects of implementing and managing EDI, participants shared valuable insights across different areas. I have categorised the discussions into four key themes: designing the initiative, idea generation, idea selection, and idea implementation. These themes

highlight crucial considerations and approaches for effectively fostering EDI within organisations. Table 6 and Table 7 provide a summary of each sub-category within the themes.

I. Designing the initiative

A. Fostering Engagement and Creativity: When developing an EDI initiative, creating an engaging and enjoyable experience is vital to stimulate participants' creativity (L1). Incorporating activities and approaches that challenge employees and push them outside their comfort zones can achieve this fun aspect, as highlighted by L3's concept of being "taken by surprise." Such an approach encourages innovative thinking and generates fresh ideas.

B. Connecting EDI to Daily Work and Experiences: To ensure a continuous flow of ideas, it is important to establish a strong connection between EDI initiatives and employees' daily work and experiences. HRM1 emphasises that a significant portion of their organisation's innovation stems from day-to-day job interactions, supported by IM2's assertion that ideas often emerge from regular activities. Integrating EDI into employees' routines encourages them to contribute ideas based on their daily experiences.

C. Allocating Resources and Promoting Accountability: An essential aspect of EDI initiatives is the formal allocation of resources. IM1 emphasises the necessity of a dedicated budget to support such initiatives, as it helps employees identify and access the necessary resources and support for their innovative efforts. Moreover, IM1 argues that this resource allocation reduces constant management intervention, enabling employees to take ownership of their innovation projects and fostering a sense of accountability.

"Like if my manager would stimulate it and say, you know, "Oh don't worry, we will compensate for the hours. We just really want you to do that." Then it would be fun, but they never did that before." - E4

II. Idea Generation

A. Embracing Open-mindedness and Mental Freedom: Maintaining an open-minded approach toward ideas is crucial for EDI initiatives, particularly from organisational management (IM2). This mindset creates a sense of mental freedom among employees, enabling them to overcome perceived barriers when contributing ideas (E3).

"Not only the idea for a new product or whatever, is a creative thing. But how to get from that idea to a product or something that is not only an idea anymore, it's also creative." - L1

B. Balancing Risk and Performance Evaluation: Participating in EDI initiatives involves a certain degree of risk, as ideas may fail, and employees' performance is often evaluated based on achieving targets (E4). To address this, incorporating EDI into annual performance assessments is crucial, as practised by HRM1 and L2. This alignment between employees' innovation efforts and organisational goals provides a framework for effectively evaluating their contributions and ensuring that innovation is recognised and rewarded appropriately.

"So they're focusing on the success points. You are the only person who can make

a definition of a success. Because if I think something is a success, my manager cannot tell me like, "no, it's not a success." But everybody is here pretty much, I call it, smart enough to notice what is a success " - E3

C. Meaningful Rewards: When considering rewards for EDI initiatives, making them meaningful to all participants is important. Seven out of twelve participants expressed the need for rewards that hold significance for everyone involved. Highlighting the value of team efforts can strengthen the collaborative aspect of innovation (L5). Additionally, L3 suggests celebrating the achievements of the entire team rather than focusing solely on individual contributions, fostering a sense of collective success. While extrinsic motivation is not considered the most effective driver of creativity, 10 out of 12 participants agree it can enhance EDI participation. According to E3, lacking motivation may result in employees focusing solely on their daily tasks. Therefore, incorporating extrinsic motivators is important to encourage engagement in EDI initiatives.

"Also, in my team, if I finish a project, we have like a digital pie with like eight pieces. I call it like points, and after someone has an achievement, I think an achievement is finishing a part of my project. I can add like a cake point and when the cake is full, so after eight successes from one of the 25 persons in my team, then we do a celebration so the manager gets like cake or we go out for drinks or are we go out to for pizza. " - E3

III. Idea Selection

"Business value is something that you connect to the strategy because what you're working innovation, you cannot ask people to make business cases from the start ... but at least people should be able to rationalise what is it that they're gonna get from it." - IM1

The company's strategic portfolio drives the selection of ideas, and a more formal process is executed for implementing ideas, as underscored by L4. The organisation's strategic priorities and alignment with value drivers are crucial in prioritising ideas (IM1). Business impact, customer needs, and satisfaction are critical factors in prioritisation. Furthermore, IM2 suggests innovating based on clients' pain points and enhancing ideas accordingly. Clear criteria and an understanding of scope help prevent dissatisfaction among employees whose views may be rejected (E4).

"At the end, the product must work, must be reliable, but there are always limits. So you have to think practical." - E2

A. Persistently Pushing Ideas and Resource Allocation

During the idea implementation phase, employees need to act as internal entrepreneurs and persistently push their ideas, even when facing obstacles (L1). Risk mitigation is essential, involving the assessment of risks through methods like bubble charts and return on investment analysis (IM2). Adequate resources, including financial, temporal, and staff allocation, are necessary to materialise ideas (IM2). Pilots and thorough reviews of results help in evaluating the impact of implemented ideas (L2, E1).

"They come with a completely new idea that doesn't fit in that project or process, you have to follow the process to get it selected, and there they have limited freedom. They have the freedom to pitch it and to bring it forward." - IM2

B. Engaging Leadership and Sponsorship

Pitching ideas to leadership is crucial for employees to secure the necessary resources for idea implementation. Establishing a common language facilitates effective communication between employees and management during idea discussions (L2, L1). Feedback from senior management helps refine ideas before they are ready for implementation (IM1). Senior managers often act as sponsors for initiatives, providing support and guidance throughout the implementation process (L2).

"When I spot an opportunity, I try to create a business case because, in essence, you know, I need more hands to cover something ... But I have to build the case first then sell it to higher management, then they can release some person to my team or something like that, and then we can grow in the area ... If I can't show a business case, then the support will remain the same ... but then it won't go so fast ... its management language, but they call it "empowerment", by being empowered, you know, then you can get going. And it's also important." - E1

IV. Idea Implementation

A. Recognising Different Levels of Control: While excessive structuring of EDI initiatives may hinder innovation, it is important to acknowledge that different idea generation and implementation stages require varying levels of control. L5 argues that different behaviours are necessary to drive innovation towards improved client engagement and enhanced user experiences. There is a need to find the right balance between flexibility and control. Initially, employees need space and freedom to generate ideas, as mentioned by E2 and E3. Allocating resources enables employees to create time within their agendas for EDI, giving them autonomy over their ideation sessions (L1).

"I think it's good that everyone is just talking to each other and testing out things, until the point that they need the resources and that's where you involve the managers...that's the role of the manager, is being able to identify those ideas that are good whenever they are reached by their employees, and then saying, "OK, this is somewhere where I'm gonna put my money and my people", and that is where they can control." - IM1

B. Encouraging Autonomy and Collaboration: Autonomy plays a significant role in EDI, allowing employees to choose their projects and teams based on their competencies and interests. E4 highlights the importance of being able to choose their team, as it fosters a sense of understanding and collaboration. This level of autonomy empowers employees to work on topics they are most inclined towards.

C. Establishing a Common Language, Defining Criteria, and Multiple Priority Groups:

When designing EDI, three key points emerge: establishing a common language, defining criteria for idea selection, and maintaining multiple priority groups. This standardisation of the language aids in idea comprehension by decision-makers, leading to broader organisational impact (L1). It also facilitates mature idea development and feedback generation (L5). Clear and defined selection criteria assist decision-making when faced with numerous ideas (IM2). Furthermore, multiple priority groups allow different perspectives to contribute to idea selection, accommodating ideas that do not follow a predefined path.

"... people have great ideas, they come with the solution, they make a solution, but they are not able to make it scale. Making it scale is crucial, and so successful for me is also that you not only make a customer happy, but you make a lot of customers happy. So you make it, you scale it too, and in that sense also scale it to make it financially also interesting." - IM2

Table 6: Overview of Management Practices for Organising EDI (I)

Management Practice	Key Points	Participants Referenced
Fostering Engagement and Creativity	<ul style="list-style-type: none"> - Make it fun and engaging - Connect to daily work - Allocate resources and promote accountability - Ignite creativity - Push employees out of comfort zones 	L1, L3, E3, HRM1, IM2, IM1
Connecting EDI to Daily Work and Experiences	<ul style="list-style-type: none"> - Integrate EDI into routines - Encourage idea generation from daily activities 	HRM1, IM2
Allocating Resources and Promoting Accountability	<ul style="list-style-type: none"> - Formal budget allocation - Reduces management intervention - Enhances employee accountability 	IM1
Embracing Open-mindedness and Mental Freedom	<ul style="list-style-type: none"> - Open-minded approach towards ideas - Mental freedom fosters idea generation 	IM2, E3
Balancing Risk and Performance Evaluation	<ul style="list-style-type: none"> - Align EDI with performance evaluations 	E3, Participants (10 out of 12)
Meaningful Rewards	<ul style="list-style-type: none"> - Rewards that hold significance for all - Highlight team efforts - Extrinsic motivation increases participation 	Participants (7 out of 12)
Encouraging Autonomy and Collaboration	<ul style="list-style-type: none"> - Different stages require varying levels of control - Autonomy in idea generation - Collaboration in teams 	L5, E2, E3
Establishing a Common Language, Defining Criteria	<ul style="list-style-type: none"> - Standardize language for idea comprehension - Clearly define selection criteria 	L1, L5, IM1, IM2

Table 7: Overview of Management Practices for Organising EDI (II)

Aspect	Key Points	Participants Referenced
Keeping Multiple Priority Groups	- Multiple perspectives in idea selection - Accommodate ideas not following a set path	L5, IM1
Idea Selection and Implementation	- Strategic portfolio drives idea selection - Formal process for implementation	L4, IM1, IM2, L3, L2
Persistently Pushing Ideas and Resource Allocation	- Internal entrepreneurship - Risk assessment and mitigation - Resource allocation for implementation	L1, E1, IM2, IM1, L2
Engaging Leadership and Sponsorship	- Pitch ideas to leadership for resources - Common language for effective communication - Sponsorship by managers	L2, IM1

4.3 Leadership Practices supporting EDI

When discussing different perspectives on leadership around EDI in high-tech organisations, the following learnings came to light. All five senior leaders agreed that creativity and innovation can come from all employees. IM1 also mentions promoting people who are good at connecting the dots and ensuring they have visibility. HRM1 remarks that even though Human Resources (HR) within companies play a significant role in EDI, leadership needs to advocate it and empower employees. Leadership hence need to recognise EDI as a contributing factor to the innovation process. L4 believes in really empowering employees so that they can contribute to improvements. Table 8 presents the summary of this section.

"There's another element why it's so important is people do things with passion. And if you take them seriously, they will do the best, provide the best quality, provide the best outcome to our customers." - IM2

4.3.1 Organizational Culture

I. Supporting EDI through Culture and Mindset

"Thinking outside of boxes very difficult because you need to have like your mental freedom and don't seem like any barriers." - E3

Supporting EDI requires a passionate and skilled workforce and a conducive culture and mindset, as acknowledged by HRM1 and L2. Cultivating a growth mindset within the organisation is essential for creating opportunities for employees to contribute. HRM1 further emphasises the significance of establishing a solid connection between employees and the organisation, which fosters excitement about the organisation's mission, vision, and values. Additionally, L5 describes the need for a collective and unified approach, likening it to a "single strengthened muscle" that embraces innovation. IM1 underscores the importance of a culture that facilitates the free flow of ideas. Organisations must raise awareness about EDI and create a safe environment where employees can freely share their opinions.

"You know that's something the company can offer, that safety to do that. Because if you don't feel safe, you don't want to do experiments. You wanna stick with the rule, and everything is exactly the same." - E1

II. Empowerment, Safety, and Trust for Promoting Innovation

L3 highlights the role of empowerment in fostering breakthroughs and emphasises the importance of granting employees the freedom to propose even the most unconventional ideas. L5 further emphasises the significance of a culture that encourages trust, non-judgment, and a sense of safety when exploring new ideas. Notably, eight participants emphasise the crucial role of security in enabling them to step outside their comfort zones and contribute diverse ideas and perspectives.

"Create that safe environment that they, you know, allow themselves to be uncomfortable and still be able to produce great results." - L3

III. Building a Community through Feedback and Collaboration

L5 highlights the importance of fostering an open attitude towards feedback to cultivate a better community. Collaboration is a highly valued skill by employers and plays a crucial role in fostering a network and community-building culture. This approach encourages employees to support and enhance each other's ideas, promoting collaboration. IM1 emphasizes the significance of establishing support networks that facilitate the coexistence of knowledge and expertise, further fostering employee collaboration and innovation.

"There is this feedback culture, which is very important. And so there are no bosses in the organisation; there are coaches. And that's how people work together." - L5

4.3.2 Coaching Employees

I. Fostering Maturity, Ownership, and Trust for Idea Acceptance and Innovation

Promoting maturity among employees is highlighted by L1 as a means to effectively manage their time between fulfilling business demands and generating new ideas. L1 further explains their coaching approach in helping employees understand how to get their ideas accepted by the organisation. Both IM1 and HRM1 assert the need for managers to enable and facilitate the free flow of ideas from employees. HRM1 suggests that manager enablement training can help cultivate this mindset among managers, reminding them that employees' efforts extend beyond daily tasks and encompass contributions to EDI.

"I think it's also, maybe managers don't need to control the output. I think it goes back to the role of a manager to be an enabler and not a diminisher. So enabling teams to own things and go above and beyond without wanting control over the outcome. Being there to guide the teams to deliver great results, but not diminishing and not controlling the outcome and slowing down things." - HRM1

II. Ownership, Freedom, and Trust for Idea Generation and Learning

L5 emphasises the importance of employees "owning" their business, as it influences their behaviour and obviates the need for micromanagement, allowing employees to embrace the ownership of their ideas. E3 appreciates the freedom their managers provide, who refrain from micromanaging and enable employees to determine their own time and space for innovation. Furthermore, L5 identifies trust as a critical element, where employees feel confident that mistakes are opportunities for learning rather than occasions for blame. E4 underscores the need for management support to create a sense of job security, enabling employees to share their ideas without fear. IM1 emphasises the value of measuring failures to understand the underlying reasons and facilitate learning from them. HRM1 adds that handling failures enables employees to improve in subsequent attempts, emphasising that innovation often requires multiple trials. E1 appreciates the learning process facilitated by their organisation's training, which comprises a compilation of mistakes and lessons from previous innovative endeavours by fellow employees.

"I can just tell my manager that I'm just gonna start a problem to make an implementation or to fix a part of the process, and there's no one that can tell me like, "no, you're not going to do that." They encourage me to start a project, really take my time " - E3

4.3.3 Recognizing Employees

"So making sure that you are promoting those people that are good to have the visibility." - IM1

I. Creating Positive Reinforcement and Recognition for Idea Sharing and Innovation

IM1 emphasises the significance of implementing positive reinforcement mechanisms to foster a culture where employees feel comfortable sharing their ideas. They assert that this practice is fundamental in cultivating motivation among individuals. E4 supports this viewpoint, emphasising how recognition is a powerful motivator for their innovative efforts. HRM1 also acknowledges the importance of non-monetary recognition, such as "public kudos" and company events, as practical strategies to incentivise EDI.

II. Highlighting Successes and Fostering Collective Acceleration

L5 underscores the value of emphasising achievements and successes rather than focusing on failures. They emphasise that this approach is crucial for "coaches" who aim to foster collective acceleration within the organisation. E1 recalls a personal experience where their strategy and work were praised during a meeting, inspiring other employees to adopt similar approaches. E3 and L2 also highlight how they receive recognition for their successful endeavours.

III. The Credit Principle and Opportunities for Idea Implementation

L1 describes their approach based on the "credit" principle, which entails that the more credit one earns within the business through exceptional work, the more opportunities one receives to bring their ideas to fruition. This principle aligns recognition with the generation and implementation of innovative ideas.

Table 8: Leadership Practices

Leadership Practice	Brief Summary	Participants Referenced
Supporting EDI through Culture and Mindset	Cultivating a growth mindset, and establishing a strong connection between employees and the organisation to foster innovation and create a safe environment.	HRM1, L2, L5, IM1
Empowerment, Safety, and Trust for Promoting Innovation	Granting employees empowerment and freedom to propose unconventional ideas, fostering a culture of trust, safety, and non-judgment for diverse contributions.	L3, L5, E3, E4
Building a Collaborative Community through Feedback and Collaboration	Fostering an open attitude towards feedback, promoting collaboration, and establishing support networks to encourage knowledge sharing and innovation.	L5, IM1
Fostering Maturity, Ownership, and Trust for Idea Acceptance and Innovation	Promoting maturity, coaching employees to get their ideas accepted, and enabling the free flow of ideas from employees through proper manager enablement training.	L1, L3, IM1, HRM1
Ownership, Freedom, and Trust for Idea Generation and Learning	Encouraging employees to take ownership of their ideas, providing freedom and trust, valuing mistakes as learning opportunities, and supporting employees with job security.	L5, E3, E4, IM1, HRM1
Creating Positive Reinforcement and Recognition	Implementing positive reinforcement mechanisms, recognising and appreciating employees' ideas and efforts, and using non-monetary recognition strategies to incentivise EDI.	IM1, E4, HRM1
Highlighting Successes and Fostering Collective Acceleration	Emphasizing achievements and successes, inspiring collective acceleration, and recognising successful endeavours to encourage innovation and adopting effective approaches.	L5, E1, E3, L2
The Credit Principle and Opportunities for Idea Implementation	Implementing a "credit" principle where exceptional work earns more opportunities to bring ideas to fruition, aligning recognition with the generation and implementation of innovative ideas.	L1

4.4 Summary of the results

This section begins by highlighting the initial understanding and perception of EDI among the participants. Initially, many participants were unaware of the concept, but after being informed, they recognised the importance of utilising the creative potential of all employees. The participants shared their perspectives on EDI, emphasising that ideas can come from anywhere and that employees play a crucial role in driving innovation. The discussions covered examples of EDI initiatives, such as utilising digital platforms for idea submission and enhancement requests, conducting interactive and participatory sessions for brainstorming and collaboration, organising internal competitions and hackathons, and hosting off-site sessions to stimulate creativity. The participants recognised various outcomes and results of EDI, such as cross-functional collaboration, diversity of thought, self-leadership, and persistence. However, the definition of success varied among participants, with some considering it the integration of ideas into products or daily routines, while others emphasised factors like customer satisfaction, scalability, or alignment with organisational priorities. The section also addresses the challenges associated with EDI. Participants highlighted issues such as perceiving EDI as a side job, balancing business priorities with creativity, organisational resistance at both hierarchical and grassroots levels, managing the number of ideas generated, and the lack of clear definitions for innovation and success.

When it comes to management practices to foster EDI, results show that organisations should create an environment that encourages innovation and allows employees to explore different possibilities. Transparent governance ensures employees can focus on their ideas rather than worrying about tasks. In terms of recruitment, building a passionate workforce is important for enhancing EDI. HRM1 emphasises the value of hiring individuals with a bias for action, initiative, and a willingness to take risks. Creativity, curiosity, and a growth-oriented mindset are sought-after skills in employees for fostering innovation and generating good ideas. Risk-taking behaviour, intrinsic motivation, teamwork, and collaboration skills are essential for supporting EDI.

Organising EDI initiatives involves designing the initiative, idea generation, idea selection, and idea implementation. Organisers should prepare initiatives to be fun, ignite the mind, and include exercises that push employees out of their comfort zones. Organisations should connect EDI to daily work and experiences and allocate a formal budget for these initiatives. Open-mindedness, mental freedom, and extrinsic motivation can increase employee participation in EDI. Recognition and rewards should be meaningful to all team members involved in creating breakthroughs.

Standardising the language, defining criteria for idea selection, and maintaining multiple priority groups help manage EDI effectively. During idea generation, it is paramount to provide freedom and autonomy to employees, allowing them to explore ideas without immediate scrutiny. Chaos and lack of structure during this phase can foster creativity. However, there should be a balance, ensuring that ideas remain practical and aligned with the organisation's goals. Strategic priorities, business impact, and customer needs play a significant role when selecting ideas for implementation. Prioritisation should consider the company's value drivers and the ability to scale the ideas for broader impact and financial viability. Employees should know the scope and criteria for idea selection to avoid dissatisfaction with rejections. Effective project

management, accountability, and support are essential in idea implementation. Organisations should provide the necessary resources and encourage collaboration among teams. Monitoring progress, adapting to challenges, and celebrating successes contribute to the overall success of EDI initiatives.

The importance of leadership advocating for EDI and empowering employees is also highlighted. Creating an organisational culture that fosters EDI involves having a growth mindset, creating awareness, and providing a safe environment for idea sharing. Safety, openness to feedback, and building communities are crucial elements for supporting EDI. Coaching employees to manage their time effectively and enable their ideas to flow is emphasised, along with the need for trust, ownership, and learning from failures. Recognising and incentivising employees through positive reinforcement and public kudos is crucial. Promoting individuals who demonstrate visibility and highlighting successes rather than focusing on failures is also mentioned.

5 Discussion

This thesis aims to identify the key factors and practices for effectively organising EDI within high-tech organisations. Interviews have been conducted and analysed to understand the success metrics, challenges, designs and implementation of EDI initiatives within companies. The previous section has delineated all the results from 12 semi-structured interviews. In this chapter, I have interpreted and analysed the study's findings. I have then provided detailed discussions of the findings, supported by relevant data and evidence. I have examined the results with the research question and objectives and compared and contrasted them with existing literature. Furthermore, I have discussed the theoretical and practical implications of the findings, the study's limitations and their impact on the interpretation of results. This section also provides recommendations for future research. Lastly, I have summarised the main points discussed in the chapter, emphasising the overall contribution of the study to the field and providing a concise conclusion that ties everything together.

5.1 Analysis of the findings

According to [Crossan and Apaydin \(2010\)](#), innovation is defined as a novelty encompassing both the process and outcome. Results agree with this definition and acknowledge that innovation is any change that occurs. It contains many aspects, including products, processes, and solutions for new and existing elements. New ideas hence pave the way for new directions, representing innovations in their own right. Hence, the results resonate with the understanding of innovation as described. The two trends that have given rise to EDI ([Kesting and Ulhøi, 2010](#)) are also evident in the conversations. The first trend is the rapid transformation of the workplace. The second trend is employees' desire to realise their potential at work. There is a shared understanding of harnessing the creative potential of all employees and recognising their contributions to the innovation process. There is an emphasis that employees' resources are underutilised. Hence, utilising employees' "brain capacity" is a fundamental driver of innovation. However, it is worth noting that 8 participants were unaware of the term "EDI," as defined by ([Kesting and Ulhøi, 2010](#)). This highlights the need to recognise and promote such organisational initiatives to raise awareness formally.

EDI recognises that every employee has the potential to be innovative, and the organisation has to acknowledge and provide them with the chance to showcase their creative abilities ([Opland et al., 2022](#)). Personal initiative is a crucial employee trait discussed in the interviews, and this is also the concept highlighted by [Bäckström and Lindberg \(2019\)](#). It considers individual agency and proactive behaviour particularly relevant for idea generation. Regardless of status, all employees are encouraged by the EDI process to innovate outside their everyday responsibilities ([Bäckström and Lindberg, 2019](#)). The study by ([Kesting and Ulhøi, 2010](#)) emphasises employees becoming active participants in the decision-making process to enable them to drive innovation within organisations. However, the interviews conducted in the present study reveal that organisations already recognise the importance of granting power to their employees. The primary concern is to *shift* towards effective strategies for gathering ideas, enhancing employee engagement, and implementing ideas to achieve tangible outcomes. The focus lies on improving the processes of idea generation, employee involvement, and successful implementation of ideas.

The results from this research agree with previous studies, which indicate that employees cannot work in isolation and that innovative processes result from ongoing interaction and collaboration between the organisation, its management, and its employees. Hence, it's crucial to recognise the value of both organisational and material resources (Aaltonen and Hytti, 2014). This viewpoint takes into account elements such as the degree of freedom and autonomy granted to employees, incentives, organisational culture, support and collaboration from managers, trust and emotional security, as well as allocating time and implementing processes for capturing ideas that are essential for fostering innovative behaviour (Aaltonen and Hytti, 2014). Management hence plays a crucial role by acknowledging and prioritising EDI initiatives (Amundsen et al., 2014). Research has also explored the impact of a managerial intervention on employee participation in EDI (Bäckström and Lindberg, 2019), highlighting the reciprocal relationship between employees and management (Amabile, 1988). The fostering of EDI thus entails addressing various discussion points and adopting strategies to carefully balance of behaviours and approaches (Bäckström and Lindberg, 2019).

Traditional innovation research, according to Bäckström and Lindberg (2019), concentrates on the early stages of creativity and idea production, but EDI also includes paying attention to idea execution. Since innovation is the main objective, additional control is required to steer members in an appropriate and practical direction for the organisation (Flocco et al., 2022). Hierarchical types of leadership have clear limitations given the increasing complexity of internal company processes (Telljohann, 2010). Employees act as informal leaders during the EDI process by initiating projects. This initiation depicts plural leadership, and both designated and emergent leaders are present. Since formal leaders are typically invested in leading the process (planning and promoting the work), whilst informal leaders typically lead content (contributing with their knowledge and ideas), there is a type of preset split of responsibilities. Vertical leadership has a positive impact on team effectiveness, and shared leadership impacts team innovativeness (Flocco et al., 2021).

Furthermore, academic literature also widely recognises the importance of employee creativity as a catalyst for corporate innovation (Chaubey and Sahoo, 2022). There is a growing need for researchers and practitioners to delve into the factors that contribute to employee creativity and innovation (Opland et al., 2022). While management support is instrumental in facilitating EDI, it is also essential to recognise the significance of specific employee skills and behaviours in effectively engaging in EDI. Employees must think beyond their immediate responsibilities and areas of expertise and consider how they may help the organisation achieve its goals (Amundsen et al., 2014). Results emphasised the importance of entrepreneurial orientation, which encompasses risk-taking, innovativeness, and pro-activeness (Ritala et al., 2021). These qualities were pivotal in driving EDI. Through this study, it became evident that it is imperative for employees need to understand the client and market to contribute to EDI. Hence, the organisation must provide access to comprehensive information and continuous learning opportunities. Many organisations prioritised thorough information exchange, creativity, and tolerance for failure as crucial factors for organisational learning and innovation potential (Amundsen et al., 2014).

Therefore, organisational support should include structured processes and frameworks for problem solving. Providing employees with a systematic approach, such as design thinking or lean problem-solving methodologies, can guide their efforts and enhance their effectiveness in finding solutions. These frameworks can help employees identify root causes, generate alternative

solutions, and test their effectiveness. To synthesise all these insights from interviews and literature, Table 9 provides a comprehensive summary of the organisational support factors that foster employee behaviour for EDI. These factors, both from a management and employee point of view, can contribute to the successful implementation of EDI.

Table 9: Enhancing EDI: Key Factors for Organisational Support and Success

Organizational Support	Employee Behaviour
Manage pressure (Amabile, 1988)	Creativity (Chaubey and Sahoo, 2022)
Empowering employees	Self-leaders (Echebiri, 2020) (Entrepreneurial orientation (Saether, 2019)), intrinsic motivation (Ahmed 1998; Auernhammer and Hall 2014; Becker et al. 2021)
Creating a Non-judgmental Environment	Trust the organization (Price et al., 2012)
Promoting Autonomy (Bäckström and Lindberg 2019; Bäckström and Bengtsson 2019; Echebiri 2020; Opland et al. 2022)	Accountable (Price et al., 2012)
Fostering Networking Opportunities (Amabile 1988; de Jong and Hartog 2007), communication channels (Auernhammer and Hall, 2014)	Collaboration and teamwork attitude (Teglborg-Lefèvre 2010; Opland et al. 2022)
Establishing a Safety Culture (Ahmed 1998; Martins and Terblanche 2003), tolerating failure (Amundsen et al. 2014; Auernhammer and Hall 2014)	Risk-takers (Ritala et al., 2021)
Encouragement from leadership (Amabile, 1988; de Jong and Hartog, 2007; Auernhammer and Hall, 2014; Bäckström and Bengtsson, 2019)	Proactive (Ritala et al. 2021; Chaubey and Sahoo 2022), taking personal initiative (Weigt-Rohrbeck and Linneberg, 2019)
Access to comprehensive information and continuous learning opportunities	Understand the market and clients
Structured processes and frameworks for problem-solving	Solution-based approach (de Jong and Hartog, 2007)

Leveraging digital communication and community tools was a major over-arching category discussed in the interviews. These tools can increase direct participation by employees (Høyrupe, 2010). They support "ordinary employees" to contribute to innovation and boost employee engagement (Opland et al., 2022). They can continuously capture ideas (Amundsen et al., 2014) and facilitate building communities of practice. These communities can foster employee collaboration, an antecedent to EDI (Opland et al., 2022). They are hence a purposeful and organised way to ask employees to come up with fresh and helpful ideas based on an established or new area of interest (Bäckström and Lindberg, 2019). Digital tools can have structural and behavioural implications. Structural implications include increased dissemination and access to internal knowledge, and behavioural implications affect how people and processes interact. The challenges associated with such tools are comprehending and making sense of employee ideas (Gressgård et al., 2014). Identifying a clear organisational framework for idea submission and approval can mitigate this challenge. Such a clear framework can bring employees and management to a common ground, where employees can understand the scope and man-

agement can understand the idea's value. Although employee autonomy is the emphasis of the literature, uncontrolled employee participation can be detrimental. Hence, an organisational framework is required to ensure employees' ideas are implemented (Flocco et al., 2022).

Managers must consider several design options when pursuing various objectives, involving employees, and implementing innovation (Flocco et al., 2022). Regular creative ideation sessions serve as a space for idea generation. The engagement between leaders and employees exemplifies an opportunity for fostering relationships (de Jong and Hartog, 2007). Such relationships can potentially cultivate trust and accountability among the individuals involved. Participants demonstrate a transformational leadership style by articulating a vision and encouraging intellectual stimulation (Becker et al., 2021). Furthermore, these leaders can be regarded as empowering, as they actively promote employee initiative and problem-solving (Echebiri and Amundsen, 2021). The viewpoints expressed in the results also emphasise the importance of granting autonomy and instilling a sense of ownership among employees, further aligning with the characteristics of an empowering leadership style (Echebiri and Amundsen, 2021). Therefore, it is evident that interactive and participatory sessions of this nature necessitate the presence of both transformational and empowering leadership styles.

Internal competitions and off-site sessions are notable examples of enabling employees to leave their regular activities. Individuals can perceive these initiatives as valuable occasions for fostering networking and collaboration. Off-site sessions offer the advantage of exploring new opportunities outside the confines of the workplace, creating a sense of comfort and freedom from the judgment that may be perceived within the office environment. By engaging in EDI, organisations gain the opportunity to identify critical challenges and leverage the diverse perspectives brought forth by numerous employees. A key factor contributing to the success of these initiatives is the presence of clear criteria and effective communication channels, ensuring a structured approach to problem-solving. However, the effectiveness of these endeavours is contingent upon the motivation of employees to participate. As emphasised in the interviews, employees may only feel inclined to engage actively with appropriate compensation.

EDI initiatives lead to various outcomes, including increased cross-functional collaboration, the inclusion of diverse perspectives in innovation, infusion of fresh ideas and diversity of thought, exploration of new territory and acceptance of change, and the development of self-leadership and persistence. Results showed that these initiatives were also valuable opportunities for learning and experimentation, generating a wide range of ideas applicable in different contexts. The definition of success in EDI initiatives can vary depending on different perspectives. While management might view specific outcomes as failures, employees may see them as successes (Ellström, 2010). The success of these initiatives is influenced by the priorities set by each organisation involved. However, measuring this success remains challenging due to the lack of universally defined metrics. Some indicators of success mentioned in the results include engagement, alignment with company priorities, integration into daily routines, numeric KPIs, and linking ideas to the business. Nevertheless, it is widely agreed that the successful implementation of EDI practices requires top management to recognise their significance in fostering innovation capacity (Amundsen et al., 2014).

The results highlight how implementing EDI initiatives entails grappling with various challenges. Firstly, EDI is often perceived as a secondary task, as employees may not be reimbursed for their involvement in ideation activities. Moreover, they struggle to balance their regular job

responsibilities and engage in creative endeavours, citing time constraints as a significant hurdle (Kesting and Ulhøi 2010; Bäckström and Lindberg 2019). Organisational resistance emerges as another obstacle (Price et al., 2012), manifesting both top-down, with hierarchical structures hindering innovation, and bottom-up, as employees may resist collaboration and diverse perspectives. The sheer volume of ideas generated during EDI can be overwhelming, making it challenging to allocate them effectively within the organisation. Additionally, ambiguity surrounding the definitions of innovation and success further complicates the implementation of EDI initiatives. Establishing criteria for prioritising ideas also proves challenging, as narrow selection processes and overemphasising financial considerations may restrict innovation.

5.2 Theoretical Implications

Researchers have been studying the involvement of employees for some years; however, they have not yet formalised it in terms of a theoretical or practical framework. There have been studies on the role of culture and the role of employees, but no work on the structural implementation of EDI that gets embedded in day-to-day activities and does not remain as specific initiatives. In contrast to earlier findings, this study goes beyond the requirements for creativity and actively advocates for a mechanism and daily integration of EDI.

EDI assumes that all employees have hidden innovative capabilities and are willing to utilise them (Kesting and Ulhøi, 2010). However, this study proposes a *shift* in this assumption. It proposes to give employees the *choice* to innovate. Each employee has their own set of circumstances and capabilities, and assuming that all are willing at all given opportunities to innovate, creates pressure. Instead, organisations need to provide them with daily opportunities to contribute. Employees hence do not need to wait for ‘EDI events’. Given the right culture and mindset, employees can be ready to contribute to EDI. Employees’ routines can create boundaries (Kesting and Ulhøi, 2010). However, when EDI becomes part of their routine, the need for management intervention can be reduced. This, in turn, frees up time for managers to engage with employees and cultivate an innovation culture.

According to work by Kesting and Ulhøi (2010), EDI consists of two phases: idea generation and implementation. However, I suggest an alternative perspective introducing a third phase, the *idea selection phase*. By incorporating this additional phase, potential uncertainties or ambiguities can be mitigated, promoting a more structured and effective EDI process. The study’s findings indicate that employees can benefit from a clear understanding of the idea selection criteria and the scope of breakthrough initiatives beforehand. This additional phase can give management clarity regarding the considerations of scalability and valuation measures. This expanded framework aims to enhance the transparency and alignment between employees and management in the EDI process.

5.3 Practical implications of the findings

This study highlights how EDI ‘processes’ within companies, instead of ‘initiatives’, can be a novel way to view EDI. The proposition is to integrate the choice of EDI as a day-to-day activity. Such a process can lead to successful innovation, which is chaos inside rules. In other words, top management can set aside strategic goals but give individuals much flexibility within the goals’ parameters (Martins and Terblanche, 2003).

The thesis contributes by introducing a new intervention framework (Jensen et al., 2016) that can be utilised to integrate EDI processes into employee work routines, thus closing the existing implementation gap. This framework suggests integrative practices and a simultaneous approach to EDI (Flocco et al., 2022). Organisations can use this framework for technical and cultural goals, such as the rapid development of new products, product quality and performance improvement. Cultural goals include giving employees autonomy and space, leveraging and enabling collaboration, and fostering a sense of community (Tirabeni and Soderquist, 2019). Learning becomes a continuous process of belonging (to a social unit), becoming (growing skills), experiencing (understanding the significance of a shared work task), and doing (practical action that supports the common work task), using this framework (Høytrup, 2010). Clear roles and responsibilities will support this framework. This framework hence aligns with the research of Martins and Terblanche (2003) on the importance of a supportive culture and the study by Ahmed (1998) emphasising the need for senior management involvement and infrastructure support.

Though I propose an intervention framework, I acknowledge that EDI can mean different things to different organisations. Hence, it is important to acknowledge that different organisations will choose a different strategic scope of this approach (Teglborg-Lefèvre, 2010):

- The extent to which EDI is articulated in the firm's overall strategy
- The extent to which a structured approach is embedded in the organisation
- Type of innovation sought
- The role of EDI in individual employee's daily routine

Organisations implementing this intervention framework should consider these key factors. Firstly, the strategic intensity of the approach needs to be assessed, determining whether EDI is merely a bonus or a significant part of the company's overall strategy. This evaluation should include considerations of budget, allocated time, and proper staffing dedicated to EDI. Secondly, determining the extent of the structured approach involves establishing common ground through idea templates and explicit selection criteria and fully embedding this approach into a routine. Moreover, organisations should clarify the type of innovation, whether it encompasses all activities with clearly defined parameters or focuses on specifically defined areas. Additionally, the role of EDI in daily activity should be considered, whether employees are free to participate, invited to contribute, or actively encouraged to engage in EDI (Teglborg-Lefèvre, 2010). By considering these factors, organisations can use the comprehensive intervention framework that promotes EDI and creates an environment conducive to idea generation, selection, and implementation.

In addition to this framework, this study emphasises the importance of recognising and rewarding employees for their efforts. Based on an organisation's preferences, this can be done in the idea generation or implementation phases. It recommends implementing positive reinforcement and recognition mechanisms to foster a culture encouraging idea-sharing and innovation. Highlighting successes and enabling collective acceleration by emphasising achievements rather than failures motivates employees and inspires future innovative approaches. For example, the "credit" principle highlights the link between recognition and generating and implementing creative ideas. Organisations can balance risk and performance evaluation by incorporating EDI into annual assessments, ensuring employees' innovation efforts are appropriately evaluated

and rewarded. Meaningful rewards and recognition that hold significance for all employees, such as team-based acknowledgements and positive reinforcements, further motivate and engage employees in EDI initiatives.

5.3.1 Proposed EDI Intervention Framework

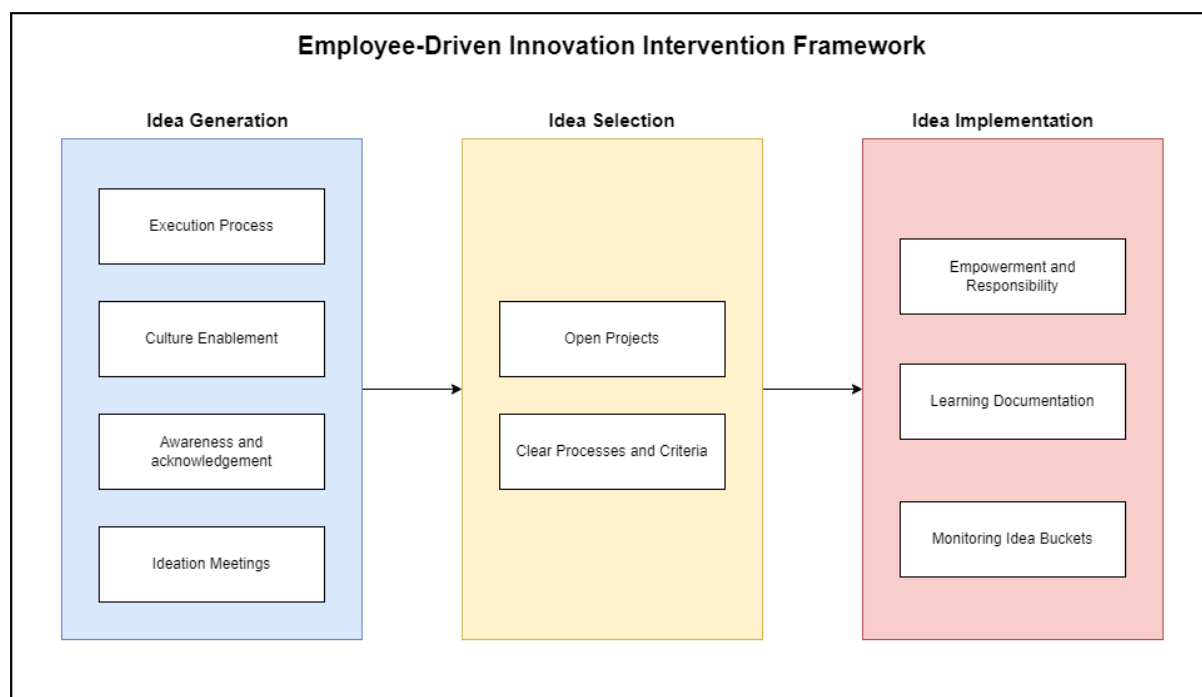


Figure 4: EDI Intervention Framework

This intervention framework serves as a roadmap for guiding the design, implementation, and evaluation of EDI, ensuring that efforts are targeted, evidence-based, and systematic. It helps promote consistency in approach and enhances the likelihood of achieving desired outcomes. This section outlines the key strategies and practises in the three phases: Idea Generation, Selection, and Implementation. Figure 4 depicts this framework.

I. Idea Generation

A. Execution Process: Integrate innovation into employees' *daily work* by establishing an execution process aligned with the organisation's innovation strategy. Allocate dedicated resources in terms of time and budget for employees to engage in idea generation.

B. Cultural Enablement: Foster a culture that encourages employees to actively participate in EDI as a *natural part of their work*. Organisations can incentivise this cultural shift through rewards and recognition for innovative contributions.

C. Awareness and Acknowledgment: Create organisational awareness and acknowledge all employee contributions to EDI initiatives. This approach reduces organisational resistance and fosters a supportive environment for idea generation.

D. Ideation Meetings: Conduct regular ideation meetings to stimulate creativity, facilitate manager-employee bonds, and build trust. These sessions allow employees to step out of routine tasks and contribute innovative ideas. Additionally, such meetings highlight enthusiastic employees, giving them visibility and fostering eagerness to innovate. They also promote engagement between leaders and employees.

II. Idea Selection

A. Open Projects: Maintain various open projects within the organisation, allowing employees to self-select teams and collaborate on EDI initiatives that align with their interests and skills.

B. Clear Processes and Criteria: Establish clear processes, selection criteria, and success metrics for idea selection. This clarity enables employees to effectively scope their ideas, reach out to relevant stakeholders, and allocate time for implementation. Clear criteria indicate what management looks for from EDI and helps bring both management and employees on the same page. A clear process could, for example, be a template which employees follow to pitch their idea.

III. Idea Implementation

A. Empowerment and Responsibility: Integrating EDI into employees' daily work routines allows them to control their time and provides flexibility. By granting employees the freedom to allocate their time based on their daily tasks, they can take ownership of their innovation projects, fostering maturity and responsibility.

B. Learning Documentation: Implement a process to document learnings, mistakes, and experiences related to EDI initiatives. This documentation serves as a reference point for employees, allowing them to explore new avenues and facilitating the resurfacing of previous ideas as newer workforce members join.

C. Monitoring Idea Buckets: Monitor both idea generation and implementation using idea buckets. This monitoring allows for effective tracking of progress, evaluation of ideas, and adjustments as needed to ensure the successful implementation of EDI initiatives.

5.4 Limitations and Recommendations for Future Research

It is important to acknowledge the limitations inherent in this study, as they have implications for the interpretation of the findings and may also provide avenues for future research. Furthermore, it is crucial to note that the primary objective of this study did not involve specifically testing any particular models that incorporate the concepts of knowledge creation and creativity.

Choice of Sample: The study used purposive sampling to select participants, intentionally choosing individuals with possible experience and utilisation of EDI concepts. While this approach allowed for a targeted investigation of individuals familiar with EDI, it may introduce a bias. Additionally, a limitation of this study is the small sample size, which can impact the generalizability of the findings. With a limited number of participants, it becomes challenging to

identify potential variations specific to particular sectors or industries ([Gressgård et al., 2014](#)).

A larger sample size would enhance the study's ability to draw broader conclusions and capture a more diverse range of perspectives. Furthermore, it is essential to acknowledge that this study focused on employees in high-tech companies in The Netherlands. The cultural, organisational, and contextual factors specific to the studied setting may influence the outcomes and may not necessarily be representative of other contexts. Therefore, future studies can research different employee types, job functions, companies, or nations.

Generalizability of Framework: The structured approaches to EDI involve various interactions among different actors. An innovation decision cannot account for all the specifics and possibilities. These approaches often result in strategic uses and the adoption of new practices. However, due to the interpretative flexibility inherent in these approaches, there is often a gap between the desired objectives and the actual outcomes. The size of this gap can vary depending on the specific circumstances ([Teglborg-Lefèvre, 2010](#)). To maintain simplicity, certain key factors have been omitted from the intervention framework, including the influence of the industrial sector, the specific technology characteristics, company size and age, cultural traits, and human capital characteristics. It is important to note that the EDI process is sensitive to variations in these parameters ([Kesting and Ulhøi, 2010](#)).

Further research could delve into the scalability and applicability of the intervention framework across various industries, company sizes, and cultural contexts. These studies would comprehensively understand its effectiveness and identify potential adaptations for different organisational settings. Exploring how EDI practices vary among industries and countries would shed light on the contextual factors influencing innovation processes. Additionally, investigating the impact of organisation type and size, market dynamics, and other external variables on EDI practices would contribute to a nuanced understanding of the framework's implementation challenges and opportunities. By addressing these research concerns, future studies can contribute to developing a more robust and contextually relevant intervention framework for fostering EDI.

Subjective Nature of Data: Using interviews as the primary source of empirical data is not without limitations ([Bäckström and Lindberg, 2019](#)). One concern is that steering the conversation in a particular direction may inadvertently influence the interviewee's responses, leading them to provide the information they believe is expected or desired by the interviewer. As the researcher, I managed to minimise the impact of leading questions by allowing informants to express their perspectives and apply the concept of innovation to their regular work activities and responsibilities. The study employed open-ended questions that encouraged informants to freely discuss their ongoing initiatives and daily tasks to mitigate this issue. However, it is important to acknowledge that interviews may provide insights into interviewers' perceptions and discussions on a given topic rather than solely capturing the actual behaviours and practices of participants in their daily routines ([Bäckström and Lindberg, 2019](#)). While interviews offer valuable subjective insights, they may not fully capture the objective reality of participants' actions in practice. There is hence a need to test the resultant intervention framework from these findings objectively.

Recommendations for future research in this context include conducting longitudinal studies to examine the long-term impact of implementing each component on EDI. This would help

practitioners understand the sustainability and durability of the framework's effects over time. Additionally, empirical research is needed to support the theoretical findings and provide concrete evidence of the framework's effectiveness. A combination of qualitative and quantitative techniques, or even an experimental approach, could be employed to investigate and compare the quality and quantity of employee contributions due to implementing the framework. Furthermore, it would be valuable to prototype the framework with small groups of workers from the same department or professional field and evaluate the outcomes, as this would provide practical insights into the feasibility and applicability of the intervention framework in real-world settings. Such research efforts would contribute to a deeper understanding of the intervention framework and its implications for fostering EDI.

For example, the following propositions can be further evaluated based on the intervention framework:

1. Organisations that maintain various open projects and establish clear processes, selection criteria, and success metrics for idea selection will have a higher rate of successful implementation of EDI initiatives than organisations without clear processes and criteria.
2. Organisations that integrate EDI into employees' daily work routines allowing them to control their time and providing flexibility, will experience higher levels of employee ownership, maturity, and responsibility, leading to more successful idea implementation than organisations without such integration.
3. Organisations that implement a process to document learnings, mistakes, and experiences related to EDI initiatives and encourage the inclusion of diverse perspectives from new employees will have a higher rate of knowledge sharing and continuous improvement in the innovation process than organisations without such documentation.
4. Organisations that monitor both idea generation and implementation through the use of idea buckets will have better tracking of progress, more effective evaluation of ideas, and increased chances of successful implementation of EDI initiatives compared to organisations without a monitoring system.

6 Conclusion

The literature review conducted in this study focused on understanding the definition and implementation of EDI within organisations. It explored academic studies that examined different management and leadership practices that facilitate innovative work behaviour and, consequently, EDI. While there is recognition of the importance of EDI, there is a notable gap in research on how to organise and implement EDI, specifically within the context of high-tech organisations. Therefore, the primary objective of this study was to identify key strategies and factors crucial for effectively organising EDI initiatives in high-tech organisations. The research involved conducting and analysing interviews to understand EDI initiatives' success metrics, challenges, designs, and implementation.

The findings not only answer the research questions but also lead to different theoretical and practical implications. It contributes to the understanding of organisational support factors that foster employee behaviour for EDI, including managing pressure, empowering employees, creating a non-judgmental environment, promoting autonomy, fostering networking opportunities, establishing a safety culture, encouraging leadership, providing access to information and learning opportunities, and implementing structured problem-solving processes. The study challenges the assumption that all employees have hidden innovative capabilities and are always willing to innovate. Instead, it suggests allowing employees to innovate based on their circumstances and capabilities. This change requires providing daily opportunities for employees to contribute rather than relying solely on specific EDI events.

Previous research has explored employee involvement in innovation, but there is a lack of theoretical or practical frameworks for structurally implementing EDI in day-to-day activities. The study emphasises the need for a mechanism that embeds EDI into routine operations, reducing the need for constant management intervention and allowing managers to focus on creating and maintaining an innovation culture. The study proposes an expanded framework for the EDI process, introducing an additional "idea selection phase." This phase aims to mitigate uncertainties and provide clarity to both employees and management. It ensures that employees understand the criteria for selecting ideas and the scope of breakthrough initiatives while enabling management to consider scalability and valuation measures. By incorporating this phase, transparency and alignment between employees and management in the EDI process are enhanced.

The thesis proposes a novel intervention framework to integrate EDI processes into employee work routines. The framework addresses technical and cultural goals, such as developing new products, enhancing product quality, and fostering employee autonomy and collaboration. It emphasises the importance of creating a supportive culture that encourages idea generation and gives employees the flexibility and responsibility to contribute to innovation. The framework comprises three phases: Idea Generation, Idea Selection, and Idea Implementation. Overall, the contribution of this study lies in providing new insights for understanding EDI, the factors influencing its implementation, and the role of organisational support and leadership in EDI. By implementing the study's proposed comprehensive intervention framework, organisations can foster a culture of innovation, empower employees to contribute to the innovation process and increase the likelihood of achieving successful outcomes.

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A Interview Protocol

The following interview protocol's introduction remains the same across the participant, however, the questions change according to the job description of the participant. The interviewer will introduce herself briefly and briefly explain the purpose of the study. She will then provide a brief overview of the interview process, including the estimated duration (30 Minutes) and any confidentiality measures in place (That the meeting will be recorded). She will cross-check that the informed consent form has been obtained from the participant. On the approval of the request to record the meeting, the video call will be recorded and transcribed in MS Teams.

[Senior Management]

Introductory Questions:

- What is your job role?
- How do you perceive employee-driven innovation?

Idea Generation:

1. Are EDI initiatives prioritized within the organisation? – *SQ4*
2. How do you encourage your team to think creatively and generate innovative ideas within your department? – *SQ3*
3. How do you deal with the risks and ambiguity that accompany innovation? – *SQ3*
4. How do you empower employees and give them autonomy to make decisions and innovate? – *SQ3*

EDI:

5. Can you provide examples of EDI initiatives that your organisation has implemented? – *SQ4*
 - (a) What were the results of these initiatives?
6. How do you define the success of EDI initiatives? - *SQ1*
 - (a) Is success measured on the team level or organisation level?
 - (b) What metrics do you use to measure the success of EDI initiatives?
7. What are the main challenges you face when implementing EDI initiatives? - *SQ2*
 - (a) How did you approach these challenges?

Idea Implementation:

8. What happens after a good idea is generated? – *SQ4*
 - (a) a. Is there a process to screen or prioritize ideas for implementation?
9. How do you allocate resources to support the implementation of new ideas generated by employees? – *SQ4*

Closing Question:

10. How do you balance giving employees the freedom to come up with and implement new ideas, and ensuring that managers maintain control over the overall process of employee-driven innovation? – *SQ3*

[Change Management - HR Managers]

Introductory Questions:

- What is your job role?
- How do you perceive employee-driven innovation?

Idea Generation:

1. To what extent are EDI initiatives prioritized within the organisation? – *SQ4*
2. How do you take into account employee creativity and innovation potential when it comes to the recruitment of new employees? – *SQ3*
3. How do you offer training and development opportunities to support EDI? – *SQ3*
4. Do you incentivize EDI, by giving employees compensation, performance appraisals, or other kinds of rewards for their participation in EDI? – *SQ3*
5. How is collaboration encouraged between employees? – *SQ4*
6. How do you empower employees and give them autonomy to make decisions and innovate? – *SQ3*

EDI:

7. Can you provide examples of EDI initiatives that your organisation has implemented? – *SQ4*
 - (a) What were the results of these initiatives?
8. How do you define the success of EDI initiatives? - *SQ1*
 - (a) Is success measured on the team level or organisation level?
 - (b) What metrics do you use to measure the success of EDI initiatives?
9. What are the main challenges you face when implementing EDI initiatives? - *SQ2*
 - (a) How did you approach these challenges?

Closing Question:

10. How do you balance between giving employees the freedom to come up with and implement new ideas, and ensuring that managers maintain control over the overall process of employee-driven innovation? – *SQ3*

[Change Management - Innovation Managers]

Introductory Questions:

- What is your job role?
- How do you perceive employee-driven innovation?

Idea Generation:

1. How do you define innovation? – *SQ4*
2. How do you involve employees in the innovation process? – *SQ3*
 - (a) What methods do you use to gather their ideas and feedback?
3. How is collaboration encouraged between employees? – *SQ3*
4. How do you give employees autonomy to make decisions and innovate? – *SQ3*
5. What types of resources and support do you provide to employees to help them develop and implement their innovative ideas? – *SQ3*

EDI:

6. Can you provide examples of EDI initiatives that your organisation has implemented? – *SQ4*
 - (a) What were the results of these initiatives?
7. How do you define the success of EDI initiatives? - *SQ1*
 - (a) Is success measured on the team level or organisation level?
 - (b) What metrics do you use to measure the success of EDI initiatives?
8. What are the main challenges you face when implementing EDI initiatives? - *SQ2*
 - (a) How did you approach these challenges?

Idea Implementation:

9. What happens after a good idea is generated? – *SQ4*
 - (a) Is there a process to screen or prioritize ideas for implementation?

Closing Question:

10. How do you balance giving employees the freedom to come up with and implement new ideas, and ensuring that managers maintain control over the overall process of employee-driven innovation? – *SQ3*

[Employees]**Introductory Questions:**

- What is your job role?
- How do you perceive employee-driven innovation?

Idea Generation:

1. In your opinion, what does innovation mean to your organisation?
2. Can you share how your organisation maintains and builds this innovation culture? – *SQ3*
3. What do you think is the most important skill or attribute for someone who wants to be an innovator within your organisation? – *SQ3*
4. In what ways are you supported to innovate and think creatively within your organisation? – *SQ3*
5. Are you recognized and rewarded for innovative ideas and contributions?– *SQ3*
 - (a) Does this motivate you to innovate more?
 - (b) Does this create pressure to innovate more – any potential competitiveness within teams?

EDI:

6. Can you provide examples of EDI initiatives that your organisation has implemented? – *SQ4*
 - (a) What were the results of these initiatives?
7. How do you define the success of EDI initiatives? - *SQ1*
 - (a) Is success measured on the team level or organisation level?
 - (b) What metrics do you use to measure the success of EDI initiatives?
8. What are the main challenges you face when implementing EDI initiatives? - *SQ2*
 - (a) How did you approach these challenges?

Idea Implementation:

9. What happens after a new idea is generated due to EDI initiatives? – *SQ4*
 - (a) Do you, the innovator, control the implementation?
 - (b) Does your manager take the idea ahead and start the official implementation?
 - (c) Are formal resources and time allocated for the new ideas?

Closing Question:

10. Do employees need more autonomy in both idea generation and implementation phases, or is managerial control needed in both phases? – *SQ4*

B Participant confirmation email

Hello Participant,

Thank you so much for accepting my request for an interview. This is the official invite for the interview.

Here is a summary of the project: This thesis project is to develop an understanding of the contribution of leadership and management practices to the success of Employee Driven Innovation (EDI) initiatives in high-tech organisations. The research aims to understand the specific practices that are most effective in promoting a culture of innovation and creativity, as well as the challenges that organisations face in implementing EDI initiatives. The study will involve interviews with HR managers, organisational leaders, and other stakeholders to gather their perspectives on the success of EDI initiatives and the factors that contribute to their success. Thematic analysis of the interviews will be conducted to draw patterns and make conclusions in order to contribute to the research of innovation management.

The interview will be recorded for transcription, but all your details will be anonymized. You will be sent over a consent form, to clarify all the data related concerns before the interview.

If there are any concerns, please do reach out to me.

Regards,
Aditi Gupta

C Participant consent request email

Hello Participant,

As we have this interview scheduled for my master thesis research, I am sending over the consent form for the same. Please fill in the form attached with this email, and send it back to me at any time convenient to you. As a student at TU Delft, it is mandatory for me to collect forms from all participants, as this makes sure that the participant is aware of how the data of the interview will be handled.

If there are any other concerns, please feel free to reach out to me.

Regards,
Aditi Gupta
(MSc MOT)

D Participant Consent Form Template

Dear Participant,

You are being invited to participate in a research study titled Effective Leadership and Management for Employee-Driven Innovation in High-Tech organisations. This study is being done by Aditi Gupta from the TU Delft. The purpose of this research study is to develop an understanding of the contribution of leadership and management practices to the success of EDI initiatives in high-tech organisations and will take you approximately 30 minutes to complete. The data will be used for thematic analysis, to draw patterns and make conclusions in order to contribute to the research of innovation management. I will be asking you questions about Employee Driven Innovation (EDI) and how your organisation plans and implements EDI initiatives. As with any online activity, the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by: Participants in the study will have access to their personal information and the right to correct or delete it without providing any reason. Only the master student researcher and supervisor conducting the interviews will have access to personal information during the study, which will be stored on stored on TU Delft's One Drive and the data will be deleted at the latest 2 years after the end of the project (but may be deleted sooner). The data may be used to as supporting material for future scientific publication and presentations. The data will be stored in a TUD OneDrive and will not be shared with 3rd parties. Non-personal information (anonymised transcripts) may be shared anonymously for scientific publications and presentations. Participants may withdraw from the study at any time without providing a reason. You will receive anonymised transcripts before publication and you are free to contact us if there are any concerns. Your participation in this study is entirely voluntary and you can withdraw at any time. You are free to omit any questions.

[Corresponding Researcher: Aditi Gupta: a.gupta-37student.tudelft.nl

Responsible Researcher: Dr. Nikos Pachos-Fokialis: N.Pachos-Fokialistudelft.nl]

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
A: GENERAL AGREEMENT – RESEARCH GOALS, PARTICIPANT TASKS AND VOLUNTARY PARTICIPATION		
1. I have read and understood the study information above, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	<input type="checkbox"/>	<input type="checkbox"/>
2. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	<input type="checkbox"/>	<input type="checkbox"/>
3. I understand that taking part in the study involves: a video recorded online interview on Microsoft Teams, as well as the storage of your name and email ID for contact purposes (calendar invites). The recordings will be transcribed as text and the recordings will be destroyed.	<input type="checkbox"/>	<input type="checkbox"/>
4. I understand that the interview will end in 30 minutes.	<input type="checkbox"/>	<input type="checkbox"/>
B: POTENTIAL RISKS OF PARTICIPATING (INCLUDING DATA PROTECTION)		

Figure 5: Consent Form - Part 1

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
5. I understand that taking part in the study also involves collecting specific personally identifiable information (PII) [name, email] and associated personally identifiable research data (PIRD) [job position] with the potential risk of my identity being revealed.	<input type="checkbox"/>	<input type="checkbox"/>
6. I understand that the following steps will be taken to minimise the threat of a data breach, and protect my identity in the event of such a breach: Anonymous data collection, (pseudo-) anonymisation, secure data storage/limited access, transcription	<input type="checkbox"/>	<input type="checkbox"/>
7. I understand that personal information collected about me that can identify me, such as [my name, email ID and job position], will not be shared beyond the study team.	<input type="checkbox"/>	<input type="checkbox"/>
8. I understand that the (identifiable) personal data I provide will be destroyed.	<input type="checkbox"/>	<input type="checkbox"/>
C: RESEARCH PUBLICATION, DISSEMINATION AND APPLICATION		
9. I understand that after the research study the de-identified information I provide will be used for: quotes from interviews (anonymised names), anonymized transcripts and indigenous knowledge that contributes to the research of innovation management.	<input type="checkbox"/>	<input type="checkbox"/>
10. I agree that my responses, views or other input can be quoted anonymously in research outputs	<input type="checkbox"/>	<input type="checkbox"/>
D: (LONG-TERM) DATA STORAGE, ACCESS AND REUSE		
11. I give permission for the de-identified [anonymized transcripts] to be archived in the publicly available TU Delft repository so they can be used for future research and learning.	<input type="checkbox"/>	<input type="checkbox"/>
12. I understand that I will receive the anonymized transcripts before publication to review.	<input type="checkbox"/>	<input type="checkbox"/>

Figure 6: Consent Form - Part 2

Signatures		
_____	_____	_____
Name of participant	Signature	Date
Study contact details for further information: [Aditi Gupta, a.gupta-37@student.tudelft.nl]		

Figure 7: Consent Form - Participant signature

E Transcript summaries of participants

E.1 Participant E1

E1: Sales Manager in organisation for Benelux region

- **Importance of innovation:**
 - Products were similar in the past, but recent years have brought a wave of new and innovative products.
 - Focus on sustainability and energy transition.
 - Products have remained the same in essence but with innovations.
 - Shift from emphasizing product features to how the product benefits the customer.
 - Example: Installing 50 gigawatts of energy-saving products annually, equivalent to heating the city of Paris.
 - Emphasis on making the world a better place through product innovation.
- **Staying ahead in the market:**
 - Being the innovative party attracts and retains customers.
 - Winning customers based on innovation sets the company apart.
 - Innovation helps maintain market leadership.
- **Training and knowledge sharing in the organisation:**
 - Learning portal and documented knowledge.
 - Example: Successful application in a refinery is noted for others to learn from.
 - Competitions and design challenges to keep designers sharp.
 - Onboarding program to meet key people and understand systems.
 - Continuous learning through online courses, factory training, and customer interactions.
- **Balancing learning and daily job responsibilities:**
 - Importance of emphasizing the value of learning to employees.
 - Feedback and explanation provided for designs.
 - Challenges of finding time for learning amidst daily tasks.
 - Access to the learning portal and the ability to enroll in training courses.
- **Structured approach to learning and development:**
 - Performance dialogues twice a year to set goals and discuss training needs.
 - Employees with a strong desire for growth and learning.
 - Need to balance classroom learning with practical work.
- **Qualities and characteristics for successful innovation:**
 - Curiosity and the drive to explore new ideas.
 - Confidence to take calculated risks and experiment.
 - organisation's culture encourages trying new things without fear of failure.
- **Market pressure and intrinsic drive**
 - Innovation necessary to stay relevant and avoid becoming obsolete.
 - Creating business cases to support innovative ideas.
 - Seeking management support and resources for implementing innovations.

E.2 Participant E2

E2: Project Manager at the organisation, working on several business units.

- **Innovation:**
 - Clients request innovation in company products.
 - Focus on:
 - * Pushing everything into a small area.
 - * Fulfilling requirements quickly and safely.
 - * Hiding technical equipment in designs.
 - Green environment:
 - * Clients ask for carbon dioxide minimum production.
 - * Search for ways to minimize carbon dioxide exhaust.
- **Clients' Requests:**
 - Solutions for client requests.
 - Pushing the limits of green production.
 - Pushing suppliers to meet requirements.
- **Approach:**
 - Creative and solution-based.
 - Practical thinking within limits.
 - Balancing clients' desires and realistic proposals.
- **Project organisation:**
 - Clients present issues or problems.
 - Finding strong, realistic, and reliable solutions.
 - Focus on various product details.
- **Client Satisfaction:**
 - Clients are initially happy with concepts.
 - Use of nature-friendly and climate-friendly materials.
 - Surprise clients with innovative and reusable products.
- **Expectations:**
 - Existing clients have expectations based on previous ideas.
 - New clients are astonished by the company's capabilities.
 - Company works in an innovative industry.
- **Challenges:**
 - Balancing time, space, and technical disciplines.
 - Parallel engineering and time schedules.
 - Ensuring a nice outcome.
- **Freedom in Projects:**
 - Full freedom in project concepts.
 - Consultation with clients, but overall freedom.

E.3 Participant E3

E3: Sequence Engineer in high-tech organisation in Netherlands

- **Employee-Driven Innovation**
 - Employees come up with ideas and improvements.
 - Innovation involves doing the same in less time or stress while maintaining quality and producing more products.
 - Identifying gaps in the market and filling them.
- **Employee Innovation Process**
 - Idea boxes for employees to submit their ideas.
 - Dedicated department for innovation thinkers, providing necessary resources and support.
- **Key Factors for Innovation**
 - Understanding the market and its dynamics.
 - Thinking outside the box without limitations.
 - Being willing to try and persevere despite initial failures.
- **Freedom and Time for Innovation**
 - Freedom to think and explore different approaches.
 - Flexible working hours and work locations.
 - Time to analyze problems, find solutions, and prevent future issues.
- **Project Ownership and Recognition**
 - Employees have ownership of their projects.
 - Ability to adjust project timelines and collaborate with others.
 - Recognition and rewards for successful projects and achievements.
- **Pressure and Micromanagement**
 - No pressure to constantly start new projects.
 - Individual autonomy in managing time and workload.
 - Lack of micromanagement, allowing employees to work independently.
- **Challenges and Accountability**
 - Ensuring motivation and productivity among employees.
 - Periodic monitoring to identify lack of productivity.
 - Negative aspects of freedom, some individuals may take advantage.
- **Stability and Control**
 - Company culture remains unchanged due to successful approach.
 - Freedom and trust promote self-control and responsibility.
 - Limited micromanagement due to large company size.
- **Feedback and Openness**
 - Encouraging feedback and idea sharing.
 - Opportunity to suggest improvements and celebrate diversity.
 - Company values employee ideas and provides resources for trials.

E.4 Participant E4

E4: UX Designer and Consultant

- **EDI Perception**
 - Perception varies depending on the role. Consultants may view innovation differently than others.
 - Innovation at E4's organisation is focused on customer innovation and working on new, unexplored areas.
 - Examples of employee-driven innovation: Parking apps, internal projects like a garage occupancy tracker.
- **organisational Culture**
 - E4's perception is that the organisation is sales-oriented and not heavily focused on innovation.
 - Hackathons are organized and funded by the organisation, but most other initiatives are driven by employees.
 - Employees have the freedom to pursue their own ideas but may need support from managers for larger initiatives.
- **Skills for Innovators**
 - Entrepreneurial skills are crucial for driving innovation within the organisation.
 - Research departments provide opportunities for working on truly innovative projects.
 - Specific skill requirements may vary depending on the type of innovation pursued.
- **Balancing Innovation and Practicality**
 - E4 learned to balance innovation with practicality due to customer expectations and cost considerations.
 - Pursuing personal innovative projects may require extra time and effort outside regular job responsibilities.
 - Challenges: Consultant work is billed by the hour, so time spent on non-billable activities like hackathons can affect performance evaluation.
- **Support and Recognition**
 - Managerial support is necessary for pursuing innovative projects within the organisation.
 - Successful initiatives may be recognized, but recognition for innovation is not common.
- **Motivation and Inspiration**
 - Innovation can inspire and motivate employees to make a difference.
 - Personal passion projects can drive innovation within the organisation.
- **organisational Structure**
 - The organisation's size makes it challenging to generalize innovation across all teams and locations.
 - Innovation initiatives are more likely to succeed when championed within individual teams.
 - Collaboration within teams is important for fostering innovation.
- **Controlling Innovation**
 - The organisation has minimal control over employee-driven innovation.
 - Participation in activities like hackathons is optional, and personal initiative is crucial for driving innovation.

E.5 Participant L1

L1: Group leader of a hardware team responsible for designing and improving hardware.

- **Understanding of Employee Driven Innovation:**
 - Innovation is driven by ideas, which can come from anywhere.
 - Many companies struggle with how to structure and channelize ideas for development.
 - Importance of finding the right people who can quickly identify new structures for innovative ideas.
- **Avoiding Over-structuring:**
 - Structuring the innovation process too much can hinder creativity.
 - Allowing for some chaos in the process and relying on experienced individuals to manage it effectively.
 - Each innovation follows its unique path to maturity, requiring new routes and structures.
- **Prioritization and Business Impact:**
 - Ideas are prioritized based on their potential business impact.
 - Some ideas may have narrow business cases, but prioritization is often driven by personal opinions and flavours.
 - Actual success is when an idea is developed and becomes part of the product.
- **Creating a Vision and Nurturing Ideas:**
 - Setting a futuristic vision to inspire the team and stimulate innovative thinking.
 - Allowing time and support for idea maturation, helping the team bridge the gap between ideas and implementation.
 - Collaborating with team members, providing guidance on the next steps for their ideas.
- **Becoming an Internal Entrepreneur:**
 - Encouraging team members to take ownership of their ideas and persistently push them forward.
 - Emphasizing the importance of trying different approaches and continuously pushing for success.
- **Empowering and Motivating Team Members:**
 - Making team members responsible for their innovation-related work.
 - Allowing time for them to explore new ideas within the context of the product.
 - Motivating collaboration and providing assistance in finding the right approach or technology for their ideas.
- **Managing Ideas and Risk:**
 - Evaluating ideas from a risk management perspective, looking for potential setbacks and mitigating them.
 - Engaging pessimistic and optimistic perspectives to identify potential issues and opportunities.
- **Balancing Normal Work and Ideation:**
 - Ideation is often a side task in regular business settings.
 - Intrinsic motivation is crucial to driving idea development alongside regular work responsibilities.
 - Building credit and performance managing team members to increase opportunities for idea implementation.

E.6 Participant L2

L2: Manager of strategy and transformation

- **Perception of Employee-Driven Innovation**
 - Innovation often involves taking a big step, such as deploying a new system and moving away from an outdated one.
 - After the big step, employees drive further innovation by identifying areas that can be improved.
 - Employees who work with the systems on a daily basis know best what needs improvement.
 - Leaders in L2's area recognize the expertise of employees and allow them to drive the innovation process.
 - EDI is crucial as it brings creativity and problem-solving skills to the forefront.
- **Examples of Employee-Driven Innovation**
 - Employees suggest improvements based on their experience and expertise with the systems.
 - Innovating involves finding solutions for problems and adapting to new legislation in different countries.
 - Examples include improving processes, finding better ways of doing things, and enhancing service delivery.
 - Innovation can also involve implementing changes in a different manner to achieve better results.
 - L2's organisation uses an application to collect and discuss ideas for innovation.
- **Implementation and Approval**
 - Initiatives are defined, and their expected savings and benefits are evaluated.
 - Business cases are created to justify the implementation of the initiatives.
 - A green light is given to initiatives with a favourable business case.
 - L2's current project involves creating a standard platform for leveraging improvements globally.
 - Implementation may require piloting initiatives in specific countries and demonstrating their value.
- **Overcoming Challenges**
 - Some countries may resist cooperation or implementation due to cultural differences or special circumstances.
 - Top-down approaches like mandates can be effective but not necessarily yield the best results.
 - It's important to convince countries about the benefits of initiatives and use change management techniques.
 - Techniques like unfreeze, change, and refreeze help prepare minds for change and encourage cooperation.
 - Communication packages are created to facilitate global understanding and cooperation.
- **Encouraging Employee Participation**
 - L2 creates an environment where employees feel comfortable sharing their ideas.
 - To encourage participation, L2 sometimes starts discussions with a deliberately "stupid" idea to reduce fear.
 - The organisation's culture supports and rewards employee-driven innovation.
 - Employees are empowered to make changes and are recognized for their contribu-

tions.

- Participation in innovation projects can positively impact annual performance evaluations and salary increases.
- **Evaluation and Decision-Making**
 - Ideas and initiatives go through voting sessions and discussions with senior management.
 - Good ideas that don't proceed immediately may be revisited in the future.
 - Evaluations consider the benefits, results, and compliance with regulations.
 - Senior management makes the final decisions on which initiatives to implement.
 - L2's organisation uses a scorecard system to evaluate and prioritize initiatives.

E.7 Participant L3

L3: Portfolio & Program Manager

- **Employee-driven innovation:**
 - Employee inputs are crucial and underestimated in high-tech organisations.
 - Engagement with employees is necessary to unlock their full creativity.
 - Employee-Driven Innovation (EDI) is important but complex.
 - Initiatives include engaging people with a distance to the labor market.
 - Prioritization is based on providing ownership to employees and project scale.
 - Ownership provided to employees leads to innovation.
- **Methods used for employee engagement:**
 - Both analog and digital tools are used.
 - Exploring subjects for breakthroughs.
 - Face-to-face and digital sessions for engagement.
 - Encouraging out-of-the-box thinking and involving diverse perspectives.
 - Brainstorm sessions with unconventional activities.
- **Creating a safe environment:**
 - Bringing employees out of their comfort zones.
 - Surprise exercises and ways of working.
 - Unleashing creativity within a safe environment.
 - Allowing discomfort and focusing on being fully present.
- **Challenges and balance:**
 - Balancing pressure and deadlines with time for creativity.
 - Pressure often hinders creativity.
 - Striking a balance between business as usual and future innovation.
- **Process and measurement:**
 - Trial and error approach.
 - Accelerating successful components.
 - Empowerment comes from safety and focus on breakthroughs.
 - Rewarding attempts and launching ideas, not just success.
 - Celebrating the team's efforts, not individual contributions.
- **Testing and assessment:**
 - Prototyping and testing scenarios.
 - Testing multiple ideas simultaneously.
 - Allowing ideas to be developed to a significant extent.
 - Assessing and selecting the best idea, but not discarding others.
 - Adapting the process based on achieving the breakthrough.
- **Review and collaboration:**
 - utilising reference boards for idea review.
 - Balancing experience and company needs.
 - Exploring the application of other ideas in different areas.
- **Engaging suppliers:**
 - Demanding innovation from suppliers.
 - Assisting suppliers in starting key processes.
 - Encouraging persistence in creating breakthroughs.

E.8 Participant L4

L4: Portfolio and Project manager

- **Employee-driven Innovation:**
 - L4 is in favor of employee-driven innovation and believes it is a good thing.
 - Employees have the opportunity to spend a percentage of their time (e.g., 10%) on innovative creation.
 - Hackathons and similar events unlock the potential of creativity and are encouraged.
 - Workshops and groups (e.g., sustainability groups) are facilitated to support employee-driven innovation.
 - Examples given include hackathons, workshops, LHT groups, and sustainability initiatives.
- **Formal Prioritization:**
 - L4 is not fully aware of the formal prioritization process for ideas.
 - Ideas and innovations are not formally prioritized, as far as L4 knows.
- **Diverse Initiatives:**
 - Examples of diverse initiatives include monthly cleaning initiatives, teaching technology and innovation to local schools, improving work processes, and formal portfolio improvements.
 - The organisation is involved in various activities due to its size.
- **Success Metrics:**
 - L4 states that success metrics for employee-driven innovation are diverse and cannot be answered directly.
 - Success is often determined by momentum and active involvement.
- **Screening and Prioritization:**
 - There is no formal screening or prioritization process for ideas.
 - The top management does not take forward ideas or allocate resources to them.
- **Control and Formalization:**
 - The control and formalization of employee-driven innovation are relatively limited.
 - The process is more about ensuring sustainability and voluntary participation.
 - Results do not matter as much as the overall process.
- **Employee Participation and Engagement:**
 - L4 believes employee participation and engagement are crucial aspects of starting employee-driven innovation.
 - Extrinsic motivation can help, but it is not the main driver.
 - Facilitating innovation within the formal activities of the organisation helps stimulate participation.
- **Opinionated Employees and Empowerment:**
 - L4 values employees who have their own opinions and drive.
 - Facilitating eagerness to innovate and empowering teams align with modern management models like agile.
 - L4 strongly advocates for employee-driven innovation, even if it were their own company.

E.9 Participant L5

L5: Leader in high-tech organisation

- **Employee Driven Innovation:**
 - Innovation is at the heart of the organisation.
 - No separate innovation department; innovation is measured by challenging oneself, clients, and the ecosystem.
 - Culture of innovation and 10X thinking.
 - * 10X thinking: Solving problems in a way that is 10 times better, cheaper, and more client-friendly.
 - * Encourages different solutions and approaches.
 - Innovation involves understanding problems and finding relevant solutions.
 - Building blocks of innovation culture:
 - * Open source development and community feedback.
 - * "Start fast. Fail fast" approach.
 - * Creating a safe environment for experimentation and learning from failures.
 - * utilising data for objective decision-making and strategy execution.
- **How to Foster Employee Driven Innovation:**
 - Professional tools like workshops and engagement managers for guiding innovation processes.
 - Strategic brainstorming sessions to change perspectives and generate new ideas.
 - Recognizing that not all organisations resonate with innovation.
 - Reaching out to senior management for support and bandwidth.
 - Being aware of and respecting risks, as well as the readiness of the environment for innovation.
- **Challenges in Implementing Employee Driven Innovation:**
 - Ensuring innovation becomes a strengthened muscle of the organisation.
 - Distinguishing innovation departments from the organisation as a whole.
 - Different skills, behaviors, and responsibilities required for successful innovation.
 - Flexibility and adaptability in implementing innovative ideas and strategies.
- **Importance of Solving Real Problems with Innovation:**
 - Differentiating between great ideas and those that solve real challenges.
 - Ownership and progress in problem understanding, ideation, and product/service development.
 - Examples include innovations in healthcare and e-healthcare.
- **Generating Feedback and Interaction for Innovation:**
 - Internal processes like "dog food" for employee feedback on developments.
 - Leveraging employee contributions and interactions to improve products before market launch.
 - High employee engagement and close interaction with users for better product outcomes.
- **Cultural Factors in Fostering Employee Driven Innovation:**
 - Ownership, trust, and safety in owning one's work and business.
 - Feedback culture and coaching instead of micromanagement.
 - Highlighting achievements and fostering collective acceleration.
 - Encouraging speaking up and utilising different perspectives.

E.10 Participant IM1

IM1: Supply Chain Innovation Lead

- **Definition of Innovation**
 - Innovation: Anything related to change, including process improvement and new product development.
 - Innovation is about solving problems and identifying needs.
 - Innovation should involve something new and untried.
- **Employee Driven Innovation**
 - Importance of leveraging knowledge and ideas from all employees.
 - Enable and motivate employees to share ideas.
 - Capitalize on brain capacity and expertise within the organisation.
- **Techniques for Employee Driven Innovation**
 - Process Perspective:
 - * Design thinking sessions, challenges, and one-on-one idea-sharing sessions.
 - Culture Perspective:
 - * Creating motivation and positive reinforcement mechanisms.
 - * Change management to drive acceptance of new ideas.
 - * Breaking cycles and building networks to overcome bureaucracy.
 - * Promoting and bringing in talent with expertise and knowledge.
- **Methods for Employee Driven Innovation**
 - Open innovation forum for free idea-sharing.
 - Dedicated workshops using design thinking and liberating structures.
 - Internal challenges on specific topics to generate ideas.
- **Encouraging Collaboration between Employees**
 - Creating a culture of open communication and personal connections.
 - Establishing communities of practice around different topics.
 - Connecting ideas with experts and facilitating support among employees.
- **Autonomy for Driving Innovation**
 - Providing people with accountability and budget to drive their own ideas.
 - Clear governance and roles to streamline the innovation process.
- **Resources and Support for Employee Driven Innovation**
 - Budget allocation for mature ideas.
 - Networking with experts within the organisation.
 - Supporting business case development and engaging with students for initial knowledge.
- **Example of Successful Employee Driven Innovation**
 - Infinity Challenge focused on reducing plastic in the supply chain.
 - Engaged teams and suppliers to redesign packaging and reduce plastic use.
- **Measurement of Employee Driven Innovation**
 - Measure quantity and quality of ideas generated.
 - Measure execution and success/failure of tested ideas.
 - Differentiate between failing due to testing and failing due to execution.
- **Measurement of Employee Driven Innovation in Supply Chain**
 - Metrics may vary based on different business lines within the supply chain organisation.

E.11 Participant IM2

IM2: Head of innovation

- **Employee Driven Innovation**
 - Employees are encouraged to contribute ideas and suggestions.
 - Ideas are taken seriously, and there are processes in place to evaluate and implement them.
 - What EDI means to them: Understanding customer needs through close interaction and addressing their challenges. Allowing employees to bring forward ideas and not dismissing them. Linking ideas to business units and existing products, or starting new initiatives.
- **Definition of Innovation**
 - Innovation involves addressing customer concerns and needs comprehensively.
 - Examples of innovation: Developing new AI-driven solutions tailored to specific organisational and product details, simplifying the supply chain and optimizing components for cost and availability, and improving existing solutions and products to exceed customer expectations. Examples include logistical solutions, cost-reduction measures, and improved user interfaces.
- **Project Management**
 - Projects are categorized based on different criteria and customer needs.
 - Project managers and departments with specific competencies are assigned accordingly.
 - Agile methodologies, including sprints, are increasingly adopted for project execution.
- **Employee Input and Formal Processes**
 - Standard processes are in place for raising improvement ideas, enhancements, and complaints.
 - Formal boards evaluate ideas and assess their alignment with customer and business needs.
 - Ideas with a good fit become formal projects and are staffed accordingly.
 - Majority of ideas are impactful, relatively small, and connected to existing products.
- **Innovation Competitions**
 - Regular innovation competitions are held to foster productivity and cost-reduction ideas.
 - Ideas selected by a jury are fully funded and supported for implementation.
 - Mature ideas become part of larger programs to implement multiple functionalities.
- **Success Metrics and Scalability**
 - Success is measured by customer satisfaction and financial viability.
 - Solutions should be scalable to make an impact on a larger customer base.
 - Balancing passion for customer satisfaction with organisational growth and profitability.
 - The challenge lies in selecting ideas that are both impactful and scalable.
- **Selection Process**
 - The selection process involves defining criteria for evaluating ideas:
 - The focus is on selecting initiatives with the biggest impact on customers and the organisation.
 - Multiple factors are considered, including business case, manufacturing, deployment, and service costs.

E.12 Participant HRM1

- **Importance of Employee-Driven Innovation**
 - Being innovative is part of the company's DNA.
 - Innovation should come from all employees, not just specific teams.
 - Creating a space for employees to contribute to innovation.
- **Company Prioritization of Innovation**
 - Innovation is a big priority for the company.
 - All teams can contribute to innovation, both in product and process.
 - Occasional opportunities are provided for employees to contribute to innovation.
- **Competency-Based Interviews and Company Values**
 - Competency-based interviews are conducted to assess traits related to innovation.
 - Company values, such as "go get it," encourage innovative thinking and action.
- **Learning and Development for Innovation**
 - Learning and growth are divided into 70%, 20%, and 10% segments.
 - Most learning comes from day-to-day work and interactions with colleagues.
 - Structured learning resources are available for innovation and other skills.
- **Recognition and Incentives for Innovation**
 - Performance-driven compensation philosophy with monetary rewards.
 - Recognition through public kudos and internal competitions.
 - Examples of innovation-focused competitions and rewards.
- **Motivation and Collaboration for Innovation**
 - Motivation is essential for employees to think beyond their daily tasks.
 - Collaboration is encouraged and assessed during recruitment.
 - Values like embracing diverse thought and solving for the company's objectives support collaboration.
- **Creating a Culture of Innovation**
 - Working autonomously, taking risks, and learning from failures.
 - Examples of initiatives like workations and cross-functional gigs.
 - Fresh ideas and diversity of thought lead to successful innovation.
- **Metrics and Challenges in Employee-Driven Innovation**
 - Data-driven company with KPIs and success metrics.
 - Challenges include time, bandwidth, and team capacity.
 - Role of managers as enablers and reducing dependencies for innovation.
- **Expansion of Employee-Driven Innovation**
 - Employee-driven innovation should increase in culture-driven companies.
 - HR plays a role in recruitment, learning, and development, and enabling managers.
 - Leadership support and advocacy are crucial for promoting employee-driven innovation.

F List of codes

Challenges with EDI

- all employees are different - collaboration
- ambiguity
- balance of business and creativity
- criteria for prioritizing
- defining innovation
- defining success
- employees have a lot on their plate
- empowering employees
- giving space
- lack of completeness of ideas
- lack of process to implement idea
- not all ideas find a place
- number of ideas
- organisational resistance: bottom-up
- organisational resistance: top-down
- prioritizing only monetarily
- resource allocation
- side job
- structuring

Culture

- create awareness
- create employee-organisation connection
- embrace change
- growth mindset
- network building
- open to feedback
- safety
- workforce quality

EDI

- assess and mitigate risks
- choose context according to competency
- connect it to their daily jobs
- define clear criteria for idea selection
- don't confine idea generation
- don't structure too much
- employees choose teams
- employees choose time
- employees get space
- establish common language
- has allocated resources

- has incentives
- keep multiple priority groups
- make it fun
- needs culture
- open minded approach to ideas
- structure idea implementation

Employee Skills

- ability to collaborate
- communication
- creative
- curious
- drive change
- entrepreneurial mindset
- have intrinsic motivation
- learning attitude
- persistent
- risk-taking
- solution-based
- strategic thinking
- take initiative
- teamwork attitude
- understand customer - stakeholder management
- understand market

Examples of EDI

- analog and digital tools
- boards - portfolio, program
- bringing in universities
- build communities based on context
- creative sessions which allow unrealistic ideas
- dogfood
- dragon's den
- engagement workshops
- gigs - open projects
- hackathons
- maintain idea banks
- off-site sessions
- prompt questions
- regular collaboration meetings - brainstorm

Idea generation

- can happen anywhere
- creative process
- driven by ideas
- need identification
- needs entrepreneurial mindset
- not all ideas follow same routes

Idea implementation

- do pilot runs
- idea needs to be mature
- manage risks
- needs a sponsor
- needs to be managed
- needs to be thought through
- pitch idea
- reference boards
- score ideas based on selection criteria

Idea selection

- business case
- business function
- company strategy
- context
- customer needs
- level of innovation
- low effort, high impact
- maturity
- pain points
- scale
- scope

Interviewee

- Employee
- Human Resources
- Innovation Manager
- Leader

Managers

- acknowledge everyone's creative ability
- coach employees
- create vision
- don't judge
- empower employees
- let employees learn as needed
- no micro-managing
- promote collaboration
- recognise EDI

- recognise participation
- show trust

organisation

- clear role definitions
- competency based interviews
- define values
- diversity in workforce
- evaluate growth and contribution
- focus on efforts
- let employees explore
- manager enablement - trainings
- prioritizing EDI
- prioritizing innovation
- provide trainings based on learnings
- tolerate errors

Recognition

- build credit
- learnings from mistakes
- what goes well
- positive reinforcements

Results of EDI

- cross-functional collaboration
- different perspectives come to light
- embrace change
- ideas that are relevant in different contexts
- instill persistence in employees
- learnings
- lots of ideas
- self-leadership

Rewards

- count EDI in performance
- leaderboards
- make them meaningful to all
- success points
- team celebration

Solutions

- accountability
- clear definitions
- empower employees to step out of comfort zone
- innovation is company strategy
- keep track of mistakes and make learnings
- leader engagement
- manage pressure
- providing flexibility
- resource allocation
- space creation

- structure the process of implementation

Success of EDI

- based on defined priorities
- creates customer satisfaction
- impacts of ideas on business
- incorporated in daily routine
- maturity of ideas
- measure engagement
- numeric driven
- updating existing products