MBA Innovation, Digitalization & Entrepreneurship

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A framework of how to create successful innovation with joint ventures between corporates and startups in the healthcare market

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Mag. Heimo Hammer

Adrian Brodesser, BSc

51832855

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Eidesstattliche Erklärung

Ich, **ADRIAN BRODESSER, BSC**, versichere hiermit

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Danksagung

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Kurzfassung

Hintergrund: Die Gesundheitsbranche durchläuft tiefgreifende Veränderungen, die durch innovative Partnerschaften zwischen etablierten Unternehmen und Start-ups vorangetrieben werden.

Ziel: Untersuchung, wie Kooperationen zwischen Unternehmen und Start-ups die Innovation im Gesundheitswesen vorantreiben können, wobei der Schwerpunkt auf Joint Ventures als Innovationsmethode liegt.

Methode: Diese Forschung wurde als systematische Literaturübersicht durchgeführt. Darüber hinaus wurden eine Reihe von vier Interviews mit Experten auf dem Gebiet der Innovation, des Venture-Buildings und des Gesundheitswesens geführt. Eine detaillierte Suche in PubMed, Scopus, Science Direct und Google Scholar wurde für bis zum 10. Januar 2024 veröffentlichte Artikel durchgeführt.

Ergebnisse: Die Analyse von Joint Ventures ergab, dass Ähnlichkeiten im Alter, der Fokus der finanzierenden Organisation auf Innovation und die Beteiligung interner Unternehmens-Joint Ventures an integrativen Aktivitäten entscheidende Faktoren sind, die zur Innovation beitragen. Joint Ventures bieten Organisationen die Möglichkeit, die operative Effizienz zu steigern, das Volumen zu erhöhen und den Umsatz zu steigern.

Conclusio: Diese Arbeit bietet wertvolle Einblicke, wie Kooperationen zwischen Unternehmen und Start-ups die Innovation im Gesundheitswesen vorantreiben können. Sie bietet Strategien, einschließlich der Nutzung der Agilität von Start-ups, der Einrichtung von Unternehmensbeschleunigern und der Neugestaltung von Kollaborationsmodellen, um die Mechanismen der Transformation im Gesundheitswesen zu verstehen.

Schlüsselwörter: Gesundheitswesen; Innovation; Joint Ventures; Unternehmen; Start-ups.

Abstract

Background: The healthcare industry is undergoing profound changes driven by innovative partnerships between established corporations and start-ups.

Objective: To examine how collaborations between corporations and start-ups can advance healthcare innovation, with an emphasis on joint ventures as an innovation method.

Method: This research was conducted as a systematic literature review. Furthermore, a series of four interviews with experts in the field of innovation, venture building, and healthcare have been conducted. A detailed search of PubMed, Scopus, Science Direct, and Google Scholar was done for articles published up to 10th January 2024.

Results: Analysis of joint ventures revealed that age similarity, the sponsoring organisation's focus on innovation, and the involvement of internal corporate joint ventures in integrative activities are key factors that contribute to innovation. Joint ventures offer organisations the opportunity to enhance operational efficiency, boost volume, and increase revenue. Collaboration models have replaced traditional equity-based approaches with shared technology, resulting in start-up agility and integration of corporate resources. The evaluation of corporate accelerators highlights the importance of carefully considering design dimensions (proposition, process, people, and place) when incorporating these accelerators into a firm's innovation strategy.

Conclusion: This thesis provides valuable insights into how collaborations between corporations and start-ups can advance healthcare innovation. It offers strategies, including leveraging the agility of start-ups, establishing corporate accelerators, and redefining collaboration models to help understand the mechanisms propelling transformation in healthcare.

Keywords: Healthcare; Innovation; Joint ventures; Corporates; Start-ups.

Contents

1. Introduction

Nowadays, the healthcare sector in Europe and the United States of America is going through a lot of unprecedented challenges due to various factors that have been changing over time. This has given rise to an environment with new challenges. In Europe, there are many different kinds of healthcare systems throughout the continent that cause each country to face its unique problems. The increase in the number of older people, cost escalation in the health sector, and demands on public health infrastructure are some major concerns. In addition, the ongoing impact of the COVID-19 pandemic has revealed weaknesses in health systems and emphasized the need for flexibility and resilience.

However, the United States has a complex medical arena involving both private and public players. Escalating medical costs, accessibility issues and disparities, intricacies surrounding insurance coverage, and policy debates are significant, unprecedented challenges confronting the United States medical system.

The partnership between established corporations and agile start-ups is increasingly important in driving innovation and tackling the intricate challenges the sector is grappling with (Kohler, 2016). This collaboration holds great potential for groundbreaking advancements that could transform the industry (Kohler, 2016). An industry that used to rely on traditional methods and isolated approaches is now leading the way in a digital revolution (Stoumpos et al., 2023). Thanks to advancements in technologies such as artificial intelligence, big data analytics, and the Internet of Things (IoT), the potential for improving patient care, optimising operations, and achieving better healthcare outcomes has expanded exponentially (Stoumpos et al., 2023).

Corporates offer extensive experience, resources, and a thorough grasp of regulatory frameworks (Weiblen & Chesbrough, 2015). Their well-developed networks and infrastructure provide a solid basis for expanding innovations and ensuring widespread acceptance (Burns, 2012). However, start-ups possess a unique advantage with their ability to adapt quickly, think outside the box, and operate without the constraints of traditional procedures (Weiblen & Chesbrough, 2015). They can address emerging needs and develop innovative solutions that larger, more conventional organisations may struggle with (Weiblen & Chesbrough, 2015). The healthcare industry faces

rising costs, fragmented data systems, and the demand for personalised medicine (Stange, 2009). These challenges require a collaborative approach to address them effectively. The collaboration between corporations and start-ups can create an environment that facilitates the transformation of innovative ideas into practical solutions (Conicella et al., 2021).

The increasing collaboration between corporations and start-ups is driven by their common objective of creating significant and influential innovations (Weiblen & Chesbrough, 2015). The corporate sector acknowledges the immense potential of start-ups in bringing new ideas and groundbreaking technologies to the healthcare industry. On the other hand, start-ups are interested in the support and validation established corporations offer (Weiblen & Chesbrough, 2015). They also see the value in accessing resources and markets that would otherwise be difficult to enter. This collaborative model is evident in various facets of healthcare, from pharmaceuticals to digital health solutions (Conicella et al., 2021). Pharmaceutical industry startups are utilising advanced technologies to optimise drug discovery processes, resulting in increased efficiency and cost-saving (Conicella et al., 2021). Corporations, leveraging their vital research and development capabilities, play a crucial role in expediting the transformation of these discoveries into market-ready products (Conicella et al., 2021), which ensures that innovative therapies can be made available to patients promptly.

Within digital health, start-ups are creating cutting-edge apps, wearables, and telehealth solutions that enable individuals to manage their health proactively (Kasoju et al., 2023). These companies are pioneering by harnessing the power of digital technologies to develop therapeutic solutions that stand out from traditional pharmaceutical approaches. The fast approvals of these digital therapies represent a paradigm shift, offering novel and technology-enabled interventions that complement or, in some cases, replace pharmaceutical treatments.

Numerous start-ups are at the forefront of this digital health revolution, leveraging advances in artificial intelligence, machine learning, wearable technologies, and telemedicine to develop interventions that address various health conditions. This emerging field is not just about improving healthcare but also about fundamentally reshaping treatment modalities.

Digital technologies, including mobile applications, virtual reality, and remote patient monitoring, have been shown to improve patient outcomes and engagement significantly.

Corporations, with their established customer bases and distribution channels, can play a pivotal role in scaling up these solutions, making them accessible to a broader population (Weiblen & Chesbrough, 2015). This collaboration positively impacts patient engagement and supports the shift towards preventive and personalised healthcare. In addition, the partnership between corporations and start-ups is dismantling long-standing obstacles that have impeded advancements in healthcare (Weiblen & Chesbrough, 2015). Addressing regulatory challenges, interoperability issues, and data privacy concerns necessitates a collaborative approach to surmount these intricate obstacles (Reegu et al., 2021). Through collaboration and shared knowledge, corporations and start-ups can better address these challenges, leading to the smooth integration of cutting-edge solutions into the healthcare ecosystem (Weiblen & Chesbrough, 2015).

1.1. Motivation

The motivation behind this thesis stems from recognising that the traditional healthcare sector paradigms are encountering unprecedented challenges (Kelly & Young, 2017; Abdulsalam, 2022). The ever-accelerating development and adoption of new technologies create many new opportunities that – if not monitored and regulated correctly can lead to growing inequality. The pace of technological advancement, coupled with shifting demographics and evolving patient expectations, necessitates a departure from conventional approaches (Reegu et al., 2021). This calls for (social) innovative solutions to address these challenges. While the healthcare market has always been innovative regarding new technologies, it is essential to mention that these technologies have always been disease or use-case-specific and rarely systemic, such as the recent advances in digital therapies. These developments may lead to cost reduction in the respected field but are still being primarily implemented in the private healthcare sector. The combination of corporate strategic expertise and the innovative mindset of start-ups can proactively shape the future of healthcare (Weiblen & Chesbrough, 2015).

The next ten years will present significant challenges for the public sector to keep up with these developments. If the public sector fails to regulate and implement these new technologies, we

might see a worsening for the people who need it the most. One key factor that needs to be highlighted is the impact of venture capital in healthcare. Venture capital funding is like the fairy godparent of start-ups, providing the magic wand of financial support to help them grow and thrive. These investors, often venture capitalists (VCs), inject capital into promising start-ups in exchange for equity, essentially betting on their potential for success. Now, why might this become a significant problem in the coming years?

The answer lies in the nature of venture capital. VCs are risk-takers looking for the next big thing. They seek start-ups with the potential for rapid growth, scalability, and, most importantly, a substantial market. The reason? VCs want a return on their investment, and quick scaling often translates to quick returns.

While propelling innovations and breakthroughs, this approach poses a challenge in the healthcare field. Many groundbreaking ideas addressing smaller but no less significant health issues might struggle to attract venture capital attention. Conditions affecting fewer people or with less apparent market potential often find themselves ignored because of more widespread, lucrative diseases.

Moreover, the profit-driven motive in venture capital funding can create a misalignment with the fundamental goals of healthcare. When profitability becomes the primary driver in the private sector, some diseases might not even be worth curing since curing them might not result in the same profit. Meanwhile, the public sector tends to lag due to focusing on altruistic goals rather than profit margins.

This discrepancy in the adoption of cutting-edge technologies poses a looming problem. The speed of technological advancements outpaces the pace at which the public sector can keep up. The result? A potential divide develops between those who can afford and access the latest medical innovations and those with outdated or insufficient healthcare solutions.

So, while venture capital is a boon for innovation, its penchant for rapid, scalable growth might inadvertently contribute to a healthcare system where profitability eclipses accessibility and the public sector struggles to keep up with the breakneck speed of progress. Striking a balance between

profit motives and the altruistic pursuit of public health remains an ongoing challenge in this complex dance between innovation and societal well-being. This thesis will focus on the innovation potential between start-ups and corporates, mainly from a commercial perspective. While this significant potential is exciting, it might also be the greatest risk to our current healthcare system.

1.2. Problem Definition

The healthcare sector is at a crossroads, struggling with the urgent need for innovation to keep pace with the dynamic landscape of modern medicine (Kelly & Young, 2017). Traditional models, often characterized by bureaucratic structures and conservative approaches, are lagging behind in the face of rapid technological development and ever-changing patient demands (Kelly & Young, 2017). This disconnect hinders the seamless integration of breakthrough technologies and innovative practices, creating a noticeable innovation gap.

Given this urgent need for a paradigm shift, there is a growing consensus that collaboration with start-ups could be a crucial solution to bridging the innovation gap (Conicella et al., 2021). These dynamic and forward-thinking companies serve as catalysts for change by bringing new ideas, cutting-edge technologies, and flexible strategies to the rigid fabric of the healthcare ecosystem (Weiblen & Chesbrough, 2015). The importance of this innovation push cannot be overstated, as it has the potential to revolutionize patient care, streamline processes, and improve overall healthcare.

However, the path to effective collaboration between established companies and start-ups is full of complexities (Weiblen & Chesbrough, 2015). It is not just a matter of throwing these companies into a common melting pot but requires a nuanced understanding of the intricacies involved in such partnerships. This research explores these complexities, focusing on joint ventures as a strategic way to leverage the strengths of corporates and start-ups.

Joint ventures bring together the financial stability, industry expertise, and infrastructure of established companies with the agility, innovation, and disruptive potential of start-ups. Deciphering the dynamics of such collaborations reveals a landscape of opportunities and

challenges. This study explores the mechanisms of successful joint ventures in the healthcare sector to identify the strategies and frameworks that foster a harmonious relationship between corporates and start-ups.

The ultimate goal of this endeavor is not just collaboration for collaboration's sake but to create an environment conducive to breakthrough innovation. By harmonizing the unique strengths of companies and start-ups, this research aims to provide valuable insights into how the healthcare sector can master the complexity of the modern age. The desired outcome is a healthcare ecosystem that keeps pace with technological development, leads the way, and provides optimal and forward-looking care to patients worldwide.

1.3. Research Question

The central research question guiding this exploration is: How can collaborations between corporate entities and start-ups drive innovation within the healthcare sector, particularly emphasising the efficacy of joint ventures as an innovation method? This question guides the research, encouraging a thorough exploration of these collaborations' mechanisms, strategies, and outcomes.

1.4. Hypothesis

The hypothesis posits that strategic collaborations, especially joint ventures between corporations and start-ups, have the potential to enhance innovation significantly within the healthcare industry. This hypothesis is substantiated by synthesising existing literature and empirical studies, providing a foundational framework for subsequent analyses.

1.5. Objectives and Structure of the Thesis

The primary objectives of this thesis are to dissect and critically evaluate the various models and strategies employed in the collaboration between corporates and start-ups, with a specific focus on joint ventures. The structured examination encompasses understanding the agility of start-ups, the role of corporate accelerators, and the transformation of collaboration models. The thesis is organised into subsequent chapters, each delving into specific facets of the research question.

2. Background and Literature Review

2.1. The Significance of Innovation in Healthcare

The role of innovation in the healthcare sector cannot be overstated. It is crucial in shaping patient care, treatment options, and the industry's competitiveness (Flessa & Huebner, 2021). Innovation in healthcare goes beyond traditional boundaries, impacting medical practices, technological advancements, and systemic efficiencies (Flessa & Huebner, 2021). Innovation is a driving force and a crucial element in transforming the healthcare landscape (Flessa & Huebner, 2021). The significance of innovation in healthcare is most evident in improving patient care (Brown et al., 2009). Advancements in medical research, diagnostic tools, and treatment methodologies bring forth a new era of possibilities, where previously challenging ailments now succumb to innovative interventions (Brown et al., 2009). The power of precision medicine, driven by genomic research and personalised therapies, is genuinely transformative (Ginsburg & Phillips, 2018). Customising treatments based on an individual's genetic makeup has a dual benefit: it enhances effectiveness while reducing potential side effects (Ginsburg & Phillips, 2018). This approach marks a significant shift towards patient-centred care.

In addition, using advanced technologies has completely transformed how patients experience healthcare (Brown et al., 2009). Telemedicine, wearable devices, and health informatics enable individuals to manage their healthcare actively (Haleem et al., 2021). By implementing real-time monitoring, remote consultations, and data-driven insights, healthcare providers can improve preventive care and empower patients to be more engaged and well-informed (Haleem et al., 2021). The widespread availability of healthcare information on digital platforms has revolutionised how patients engage with their well-being, empowering them to take an active role in healthcare decisions (Haleem et al., 2021).

In the enormous scope of industry competitiveness, innovation is crucial for healthcare organisations to maintain their positions in a rapidly changing market (Flessa & Huebner, 2021). Organisations prioritising and encouraging innovation have a competitive advantage in attracting top talent, establishing strategic partnerships, and adapting to evolving regulatory environments (Flessa & Huebner, 2021). Through resilience and adaptability, healthcare entities can effectively

navigate various challenges, including global health crises and changing demographic trends (Flessa & Huebner, 2021).

The significance of innovation in healthcare on the economy cannot be emphasised enough (Zoidze & Abuselidze, 2023). Groundbreaking treatments and therapies save lives and contribute to economic growth (Zoidze & Abuselidze, 2023). The advancement and widespread use of new drugs, medical devices, and diagnostic tools positively impact society by improving job opportunities, economic prosperity, and the overall well-being of the healthcare sector (Zoidze & Abuselidze, 2023). Regarding this matter, innovation is crucial in driving sustainable development and creating a healthcare ecosystem adaptable to present demands and forward-thinking in addressing future obstacles.

By analysing the available literature, it is evident that many experts agree that innovation is not merely a luxury but an essential requirement for the ongoing progress of healthcare (Thimbleby, 2013). Research highlights the vital link between fostering innovation and achieving better patient outcomes, highlighting the importance of healthcare organisations taking a proactive approach to adopting technology and refining processes (Thimbleby, 2013). Moreover, research sheds light on the relationship between innovation and cost-effectiveness, dispelling the misconception that advanced technologies always result in high healthcare expenses (Thimbleby, 2013).

2.2. The Role of Start-ups in Healthcare Innovation

Start-ups significantly impact healthcare innovation, leading to advancements that traditional healthcare companies may take longer to develop because of their more extensive and complex organisational structures (Chakraborty et al., 2021). These agile organisations typically prioritise the latest technology, solutions that put patients first, and creative approaches to business, significantly impacting the ongoing development of the healthcare sector (Chakraborty et al., 2021). Start-ups in the healthcare industry have made significant advancements in the field of digital health technologies (Vainauskienė & Vaitkienė, 2021). They have significantly developed health apps, telemedicine platforms, and wearable devices (Vainauskienė & Vaitkienė, 2021). These innovations provide patients and healthcare providers with valuable real-time data and the ability to remotely monitor health conditions (Vainauskienė & Vaitkienė, 2021). For instance, MedTech has completely transformed patient care using AI-driven diagnostic tools, resulting in more personalised and efficient care (Mathur et al., 2021).

In addition, start-ups play a crucial role in advancing precision medicine by leveraging big data and analytics to customise medical treatments for each patient (Johnson et al., 2021). Genomic Insights and other companies have made notable advancements in gene therapy and genomics, developing personalised treatments tailored to an individual's genetic composition (Johnson et al., 2021). They also play a significant role in the healthcare industry by introducing fresh business models alongside technological advancements. These models frequently prioritise cost reduction and accessibility, aiming to fill essential gaps in the healthcare system (Johnson et al., 2021). HealthShare, a start-up, has created a platform that enables small clinics to share expensive medical equipment. This innovative solution reduces costs and enhances accessibility to advanced medical technologies (Brady & Saranga, 2013).

Due to their agility, start-ups can quickly adapt to emerging health crises (Weiblen & Chesbrough, 2015). During the COVID-19 pandemic, many healthcare start-ups quickly focused on creating various solutions (Mhlanga, 2022). These included rapid testing kits and data analysis tools that helped track the spread of the virus (Mhlanga, 2022). The responsiveness highlighted here emphasises start-ups' crucial role in tackling current and changing healthcare challenges. Collaborations between start-ups and established healthcare corporations have played a crucial role in bringing innovations to market (Weiblen & Chesbrough, 2015). Partnerships between start-ups and corporations offer valuable resources such as funding, regulatory guidance, and market access. This collaboration enables corporations to accelerate their innovation efforts beyond what they could achieve internally (Weiblen & Chesbrough, 2015).

Start-ups in the healthcare industry encounter various obstacles that can hinder their progress. These include navigating through complex regulations, dealing with the financial burden of product development, and overcoming the challenges of scaling up their operations (Weiblen & Chesbrough, 2015). These challenges underscore the importance of creating a conducive environment for innovation, including supportive ecosystems encompassing investment, mentorship, and regulatory frameworks (Tian et al., 2021).

2.3. Current State of Research

The current research on corporate collaborations in healthcare provides a detailed and ever-changing view, highlighting the convergence of technological advancements, strategic alliances, and leadership dynamics (Kraus et al., 2021). At the forefront of this research is recognising digital transformation as a key driver in healthcare innovation. Thanks to their agility and dedication to

cutting-edge technologies, start-ups play a crucial role in driving this transformation (Kraus et al., 2021). Academic literature highlights the significance of start-ups in bringing forth groundbreaking technologies such as AI, telemedicine, and digital health platforms (Stoumpos et al., 2023). Established healthcare corporations quickly embrace and incorporate these innovations (Stoumpos et al., 2023). These collaborations are technological and strategic, often involving navigating regulatory landscapes and aligning with healthcare policies (Stoumpos et al., 2023). The literature emphasises the advantages for both start-ups and corporates. Start-ups can gain access to resources and markets, while corporates can integrate innovation into their operations, improving their adaptability and service delivery (Weiblen & Chesbrough, 2015).

Recent studies have also highlighted the importance of leadership in fostering and maintaining these collaborations (Gunderman, 2009). Leadership within healthcare corporations is pivotal in creating a culture that is receptive to innovation. Successful leaders understand the importance of embracing the energy and innovation of start-ups (Gunderman, 2009). They create a corporate culture that promotes experimentation and taking risks. It is widely recognised that adopting a different leadership style is crucial for effectively connecting structured corporate environments with the dynamic nature of start-ups (Gunderman, 2009).

Incubators and accelerators are vital in this ecosystem (Page et al., 2018). They serve as middlemen, connecting start-ups with crucial resources for growth, such as mentorship, funding, and networking opportunities (Page et al., 2018). At the same time, they provide corporates with a carefully selected pool of innovative solutions and potential investment prospects. This research emphasises the importance of these platforms in helping start-ups overcome market entry barriers and assisting corporations in effectively finding and incorporating innovations that align with their strategic objectives.

Successful collaborations are often attributed to the importance of strategic alignment and cultural integration. According to Conicella et al. (2021), successful partnerships require a strong alignment of goals and values. It is essential to have a clear understanding and appreciation for the product or solution and the working culture and values of each organisation involved. It is widely recognised that effective communication, clear goal-setting, and established metrics for evaluating success are crucial elements in this context (Conicella et al., 2021). In addition, collaborations have higher chances of success when seen as long-term strategic partnerships rather than short-term transactional arrangements (Conicella et al., 2021).

2.4. Models of Innovation in Healthcare: Development and Applications

In the dynamic healthcare sector, staying ahead of the curve is crucial to tackling intricate issues and fulfilling the increasing need for enhanced patient care and health results (Wass & Vimarlund, 2016). Three models of innovation are highly relevant to the healthcare sector: The Open Innovation Model, the Disruptive Innovation Model, and the Incremental Innovation Model. Every model has its distinct way of promoting innovation and advancing healthcare.

2.4.1. The Open Innovation Model

The Open Innovation Model in healthcare signifies a notable departure from conventional, exclusive research and development practices. This model, first introduced by Henry Chesbrough and widely adopted in the technology sector, has quickly gained popularity in the healthcare industry (Chesbrough, 2003). This industry is known for its intricate challenges that often require collaboration and resources from multiple entities (Weiblen & Chesbrough, 2015). Open innovation is all about going beyond the limits of an organisation and welcoming external ideas, technologies, and expertise (Wass & Vimarlund, 2016). At the same time, it involves sharing internal resources and breakthroughs with external entities. The foundation of this collaborative ethos recognises that valuable ideas can come from various sources, such as industries, academia, start-ups, and even patients (Wass & Vimarlund, 2016).

The Open Innovation Model in healthcare has emerged as a solution to address the rising costs and risks of innovation while keeping up with the rapid expansion of medical knowledge and technological advancements (Wass & Vimarlund, 2016). Collaboration is critical in creating ecosystems that bring together pharmaceutical companies, biotech firms, academic institutions, and patients. These ecosystems are supported by digital platforms, innovation hubs, and strategic partnerships, which enable the exchange of data, resources, and expertise (Secundo et al., 2019). An exciting example is the Innovative Medicines Initiative in Europe, which brings together industry, academia, and patient organisations to speed up and improve drug development (Faure et al., 2018).

2.4.2. Applications of the Open Innovation Model in Healthcare

The open innovation model, as elucidated by Chesbrough (2003), has emerged as a versatile paradigm with extensive applications in healthcare, promising a substantial impact across various domains. In particular, the collaboration between pharmaceutical companies, biotech start-ups, and academic institutions has become a cornerstone in expediting the intricate drug discovery and development process (Conicella et al., 2021). This collaborative approach addresses complex medical challenges that necessitate diverse expertise and substantial resources, consequently accelerating innovation. Noteworthy outcomes include a significant reduction in research and development expenses and a mitigation of risks, reflecting the transformative power of open innovation in the pharmaceutical sector (Conicella et al., 2021).

The evolution of medical devices and digital health solutions serves as a compelling case study in implementing open innovation within the healthcare industry (Conicella et al., 2021). Pioneering advancements often spring from synergistic partnerships between technology companies, healthcare providers, and research institutions, effectively marrying medical expertise with cutting-edge technology. These collaborative endeavors not only foster innovation but also yield products and services that are finely attuned to the evolving needs of patients and the practicalities of healthcare delivery (Conicella et al., 2021).

Beyond the realms of traditional collaboration, the open innovation model has catalyzed the emergence of platforms like health tech incubators and accelerators (Page et al., 2018). These platforms transcend mere financial support, serving as crucibles for collaboration between tech start-ups, healthcare providers, and enterprises, propelling the creation and expansion of novel digital health solutions (Page et al., 2018). Their impact extends beyond funding to encompass mentorship, regulatory guidance, and access to vital networks, all essential in nurturing the growth and success of healthcare innovations (Page et al., 2018).

Furthermore, the healthcare sector has witnessed a surge in the popularity of open innovation challenges and hackathons (Page et al., 2018). These events serve as dynamic forums where individuals with diverse backgrounds converge to share their ideas and expertise in healthcare innovation. These initiatives break down historical barriers that have impeded innovation in

healthcare by emphasizing transparency, collaboration, and shared objectives. The inclusivity and collective problem-solving ethos inherent in open innovation challenges and hackathons fosters an environment conducive to fresh perspectives and unconventional solutions, propelling the healthcare sector into a new era of collaborative innovation (Page et al., 2018).

2.4.3. The Disruptive Innovation Model

According to Christensen et al. (2017), the Disruptive Innovation Model in healthcare brings about a transformative approach that profoundly impacts market dynamics and questions existing norms. This model deviates from the usual approach of minor improvements to existing products or services (Christensen et al., 2017). On the other hand, innovations in healthcare that are considered disruptive have a unique ability to establish fresh markets and value networks, often displacing established market leaders and long-standing practices (Christensen et al., 2017).

As seen in Figure 1, disruptive innovation is characterized by its bottom-up approach. It fundamentally reshapes industries by creating its own market and customer base. This revolutionary paradigm targets overlooked areas of pain points, addressing them with an innovative product or solution that challenges traditional norms. In the healthcare industry, however, where heavy regulation is the norm, introducing disruptive innovation becomes a particularly challenging and often more expensive endeavor.

In the realm of disruptive innovation, the emphasis is on upending established models and introducing entirely new concepts to the market. Unlike incremental innovation, which builds upon existing technologies and processes, disruptive innovation starts from scratch, often intending to address unmet needs or pain points that conventional approaches have neglected. By doing so, disruptive innovators create their own niche and redefine the rules of the game.

Within the healthcare sector, the complexity and stringency of regulations add a layer of challenge to introducing disruptive innovations. Regulatory frameworks are designed to ensure patient safety, data security, and overall industry stability. While these regulations are crucial for maintaining standards and ethical practices, they also create formidable barriers for innovators seeking to bring groundbreaking solutions to the market.

Navigating the regulatory landscape in healthcare requires financial investment and a thorough understanding of the intricacies involved. The stringent testing, approvals, and compliance processes significantly extend the time and resources required to bring a disruptive innovation to the market. The need for rigorous adherence to regulatory standards can contribute to a more prolonged development phase, delaying the potential benefits these innovations could bring to patients and the industry as a whole.

Moreover, the inherent risks associated with disruptive innovations in healthcare often result in higher development costs. Uncertainties related to regulatory compliance, acceptance by healthcare professionals, and integration into existing systems can lead to increased investment in research, development, and market entry strategies. These elevated costs pose a challenge for innovators, potentially limiting the scope and scale of disruptive solutions that can be introduced.

Despite the hurdles, the potential benefits of disruptive innovation in healthcare are immense. Addressing unmet needs and revolutionizing outdated processes can improve patient outcomes, enhance efficiency, and even save costs in the long run. However, striking the right balance between innovation and compliance remains a delicate and intricate task, requiring collaboration between innovators, regulatory bodies, and industry stakeholders.

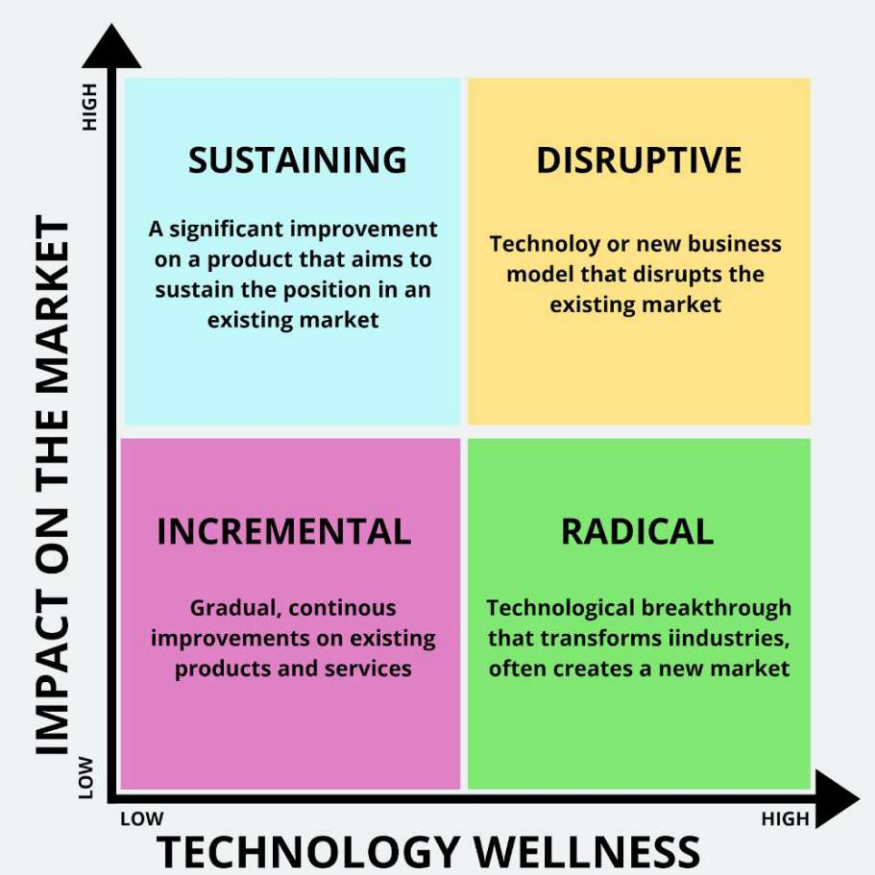

Figure 1: Different forms of innovation and their impact on the market as well as technology wellness. Copyright: Alcorfund

At the heart of disruptive innovation in healthcare lies the creation of products or services that are simpler, more affordable, and accessible (Tian et al., 2022). These innovations are specifically designed to cater to segments of the market that have been historically overlooked. These groundbreaking advancements slowly but surely gain popularity and have the power to reshape industry norms (Tian et al., 2022). The healthcare model has been developed due to the pressing need to tackle the rising costs and accessibility challenges that have plagued the system for a long time (Christensen et al., 2017). There has been a growing emphasis on finding and supporting innovations that have the potential to revolutionise the way care is provided and managed in healthcare (Tian et al., 2022). This is especially true for advancements that utilise technology to develop services and products that prioritise the needs of patients. Technology has played a crucial role in driving the evolution of the Disruptive Innovation Model in healthcare, enabling the development of new patient-centric services (Christensen et al., 2017). These services and products

aim to be more accessible and cost-effective than traditional options, helping to tackle some of the most urgent challenges in healthcare delivery (Christensen et al., 2017).

2.4.4. Applications of the Disruptive Innovation Model in Healthcare

Telemedicine is a classic example of how innovation is transforming the healthcare industry. Originally designed to provide healthcare to people in remote or underserved areas, it has now become a widely accepted healthcare method, which challenges the traditional in-person consultation model (Lee et al., 2021). Telemedicine has revolutionised healthcare by increasing accessibility and introducing a new model of patient engagement and convenience (Lee et al., 2021). This has significantly transformed patient expectations and experiences (Lee et al., 2021). Another notable example is the rise of wearable health monitoring devices. These devices have revolutionised health monitoring, empowering patients to take charge of their health (Kasoju et al., 2023). Wearable technology has revolutionised health management by providing patients with up-to-date information about their health status (Kasoju et al., 2023). This has encouraged a proactive approach to healthcare and a greater emphasis on preventive measures (Kasoju et al., 2023). These groundbreaking advancements typically start by catering to a specific, overlooked group but eventually gather enough traction to transform the entire field completely (Tian et al., 2022). Their influence goes beyond providing new solutions. They push existing healthcare providers to adapt and innovate, leading the entire industry towards more efficient, patient-centric, and cost-effective models of care (Tian et al., 2022).

2.4.5. The Incremental Innovation Model

The Incremental Innovation Model, a cornerstone in the healthcare landscape, is recognized for its distinctive focus on perpetually making incremental, small-scale improvements to existing products, services, or processes (Ponzianelli et al., 2021). This model's significance reverberates through the healthcare industry, where it plays a pivotal role in elevating healthcare delivery quality, efficiency, and effectiveness (Ponzianelli et al., 2021). Unlike disruptive innovations, which aim to forge new markets or redefine existing ones, incremental innovations within the healthcare domain build upon established knowledge and technologies (Flessa & Huebner, 2021).

This systematic and evolutionary approach provides a more foreseeable and stable trajectory for progress.

The Incremental Innovation Model in healthcare has evolved to meet the sector's perpetual need to enhance medical treatments and devices (Ponzianelli et al., 2021). This resonates with the cautious approach commonly observed in the industry, particularly when evaluating the potential impact of radical changes on patient safety and outcomes. Embracing a series of small-scale enhancements or iterations and incremental innovation, though individually modest, collectively catalyses significant progress in healthcare quality and efficiency (Ponzianelli et al., 2021).

The strategic importance of incremental innovation becomes apparent when considering its dynamic role in addressing the complexities inherent in healthcare systems. By building upon existing foundations, this model navigates the delicate balance between advancing technology and ensuring the stability of healthcare practices. Its continuous and measured improvements align with the industry's commitment to patient safety and the rigorous standards governing healthcare delivery.

Moreover, the Incremental Innovation Model bridges tradition and progress, allowing healthcare practitioners and institutions to integrate advancements seamlessly. This gradual evolution mitigates the potential disruptions that might arise from radical shifts, fostering a smoother transition and integration of new technologies and methodologies into established healthcare frameworks.

The Incremental Innovation Model in healthcare is a testament to the industry's commitment to improvement while maintaining a steadfast dedication to patient welfare. By navigating the delicate equilibrium between innovation and stability, this model propels the healthcare sector forward, ensuring that progress aligns with the meticulous and measured standards governing the realm of healthcare.

2.4.6. Applications of the Incremental Innovation Model in Healthcare

Medical imaging technologies, such as MRI and CT scanners, are a testament to the relentless advancement in medical devices, which have experienced transformative progress in recent years (Hussain et al., 2022). With each successive generation, these devices undergo evolution, introducing enhancements that not only refine image quality and reduce processing times but also prioritize the crucial aspect of patient comfort (Hussain et al., 2022). Although these improvements might not fundamentally alter the underlying technology of the devices, their cumulative impact significantly amplifies the accuracy of diagnoses and elevates the overall patient experience (Ponzianelli et al., 2021). This iterative enhancement underscores the profound impact of incremental innovation in the field of medical imaging.

Similarly, the pharmaceutical industry is a fertile ground for the manifestation of the Incremental Innovation Model, focusing on creating novel drug delivery systems and reformulating existing drugs (Conicella et al., 2021). These incremental improvements primarily aim to augment drug effectiveness, minimize potential side effects, and enhance patient adherence to treatment regimens. By consistently refining existing medications in alignment with the latest scientific knowledge and patient needs, the Incremental Innovation Model ensures the continuous advancement of current drugs, extending their lifespan and therapeutic value (Conicella et al., 2021).

Delving deeper into the landscape of incremental innovation, its applications reverberate across various domains within healthcare, encompassing service delivery, medical devices, and pharmaceuticals (Ponzianelli et al., 2021; Conicella et al., 2021). Within healthcare service delivery, the scope for improvement is vast and varied, ranging from making patient workflows more efficient to enhancing healthcare information systems and implementing superior resource management in hospitals and clinics (Ponzianelli et al., 2021). While these enhancements may not grab headlines like the introduction of groundbreaking technologies or revolutionary drugs, their significance lies in their pivotal role in amplifying the efficiency and effectiveness of healthcare services.

One distinguishing feature of incremental innovation is its relatively lower risk profile when compared to disruptive innovations (Ponzianelli et al., 2021). This characteristic stems from its foundation in building upon and refining existing knowledge and established ideas rather than introducing entirely new concepts or paradigms. In the healthcare sector, where precision is paramount, and the repercussions of mistakes can be severe, this inherent lower risk profile renders incremental innovation particularly well-suited. It aligns seamlessly with the industry's commitment to precision, providing a dependable avenue for continuous improvement without introducing unnecessary uncertainties.

In essence, incremental innovation emerges as a linchpin in fostering progress, whether witnessed in the evolution of medical imaging technologies, pharmaceutical advancements, or the nuanced improvements in healthcare service delivery. Its cumulative impact, characterized by measured enhancements and refinements, epitomizes a strategic and sustainable approach to advancing healthcare technologies and services in a manner that prioritizes precision, safety, and overall efficacy.

3. Methodology

3.1. Research Approach

This research was conducted as a systematic literature review focusing on how collaborations between corporates and start-ups can advance healthcare innovation, emphasising joint ventures as an innovation method. Furthermore, four interviews were conducted with experts in the innovation, joint ventures, and healthcare fields. Different strategies were systematically explored, including leveraging the agility of start-ups, establishing corporate accelerators, and redefining collaboration models. Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines (Moher et al., 2009) were used to find published studies. The goal was to provide a comprehensive understanding of the mechanisms propelling transformation in healthcare through innovative collaboration.

3.2. Search Criteria

A detailed search of PubMed, Scopus, Science Direct, and Google Scholar was done for articles published up to 20th January 2024. The search was done to retrieve peer-reviewed articles

exploring how collaborations between corporations and start-ups can advance healthcare innovation. The following combinations of phrases were applied: Healthcare AND (Collaboration OR Partnership) AND (Start-up OR Corporations OR "Corporate accelerators" OR "Joint Ventures") AND Innovation. The search phrases were used exhaustively in different combinations in various databases.

3.3. Inclusion and Exclusion Criteria

The studies included in this review met the following criteria: they comprised academic papers, government or industry reports, case studies, and publications from international organisations; they were available in English; and they focused on how collaborations between corporations and start-ups can advance healthcare innovation. Ineligible studies were excluded because they did not focus on innovation in the healthcare industry, were abstracts, or were works in progress.

3.4. Data Selection and Extraction

After completing the initial search strategy, an article was chosen using a systematic and step-by-step approach. The Zotero Reference Manager was utilised to eliminate duplicate articles, and the resulting studies were incorporated into the evaluation and screening phases. A thorough evaluation was conducted on all potential articles. The first step in the screening process was to evaluate the titles and abstracts of the papers to determine if they met the inclusion criteria. The full texts of the remaining publications were assessed using the specified criteria for inclusion and exclusion.

3.5. Data Sources and Analysis Methods

The reliability and validity of information are pivotal in ensuring the robustness of the research. Data sources included academic papers, government reports, industry reports, case studies, and publications from international organisations, focusing on recent developments to capture the dynamic nature of healthcare innovation. This study employed a qualitative analysis approach, which involved comprehensively examining and interpreting the information from the selected sources. A meta-analysis was impossible due to the high heterogeneity in the selected data sources and outcome measures.

3.6. Validation of Information

Validating information is a thorough process that ensures accuracy and reliability by cross-referencing data from various sources. This study utilised the triangulation method to prevent biases and increase the credibility of the information collected (Moon, 2019). Examining data from various angles or perspectives achieved a more comprehensive and nuanced understanding of the subject matter. Throughout the iterative validation process, the accuracy and reliability of the information were continually improved with each round of analysis. Through the implementation of strict standards, the iterative process guarantees that the data utilised in future analyses maintains a superior level of quality. Using triangulation helps to reduce the chances of errors and strengthens the reliability of the conclusions based on the validated information (Moon, 2019). Triangulation is widely recognised as fundamental to ensuring information accuracy, reliability, and credibility in diverse research fields.

4. Results and Proposed Solutions

4.1. Study Selection Outcome

Two hundred and seventy-seven potential articles were found throughout the search, and 14 duplicates were removed. Exclusion criteria, title, and abstract screening removed 231 articles. Twenty-two articles were sought for retrieval and subsequently assessed for eligibility. Ten articles were removed since they did not meet the stipulated inclusion criteria. Twelve were considered eligible for review after the screening, as shown in Figure 1.

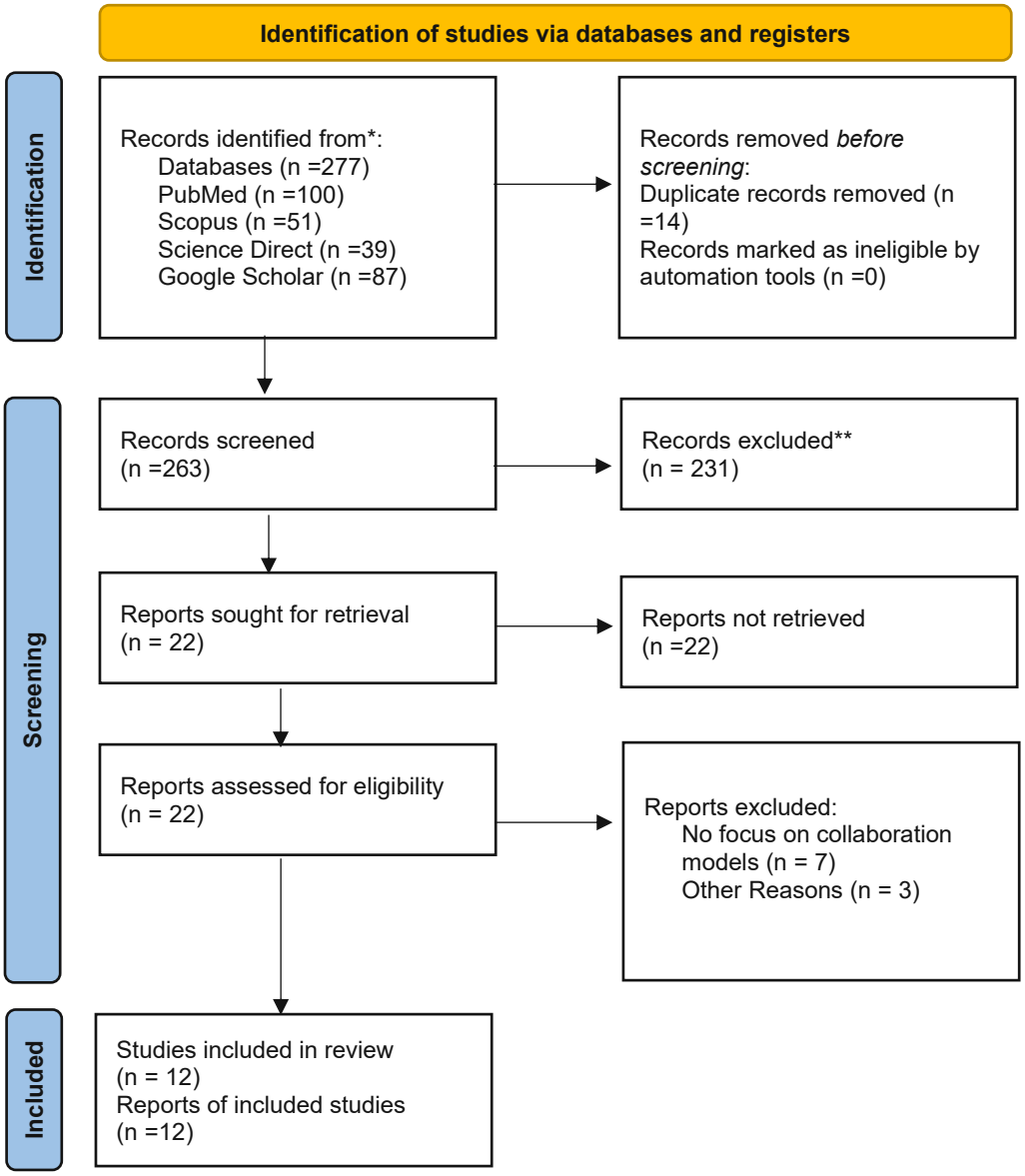

Figure 2: PRISMA flow diagram for literature search process.

4.2. Main study characteristics

The characteristics (Author, publication year, study design, study region, sample size, and main findings) were extracted and summarised in the main study characteristic table (Table 1). The primary outcomes included the agility of start-ups, establishing corporate accelerators, analysis of joint ventures, and redefining collaboration models.

Table 1: Main study characteristics

Author	Study Design	Sample size	Study Region	Study Objective	Major Findings
(Kohler, 2016)	Case study (semi-structured interviews)	40-managers	Not reported	To identify effective accelerators' strategies and tactics and generate insights on how to facilitate the interplay between corporations and start-ups.	**Corporate accelerators (CAs):** To effectively incorporate CAs into a firm's innovation strategy, managers must carefully and systematically consider the various design dimensions of proposition, process, people, and place. This will help leverage the innovation that start-ups bring to the table.
(Nesner et al., 2020)	Case study (semi-structured interviews)	67-page interview transcript	Germany	To explore the objectives and benefits of organisations implementing corporate accelerators.	**Corporate accelerators:** CAs act as intermediaries connecting established companies with start-ups. In addition, CAs initiate the process of organisational learning.
(Mahmoud-Jouini et al., 2018)	Case study	Not reported	France	To investigate critical factors in building corporate accelerator capabilities.	**Corporate accelerators (CAs)**: The findings emphasise the importance of two critical factors in establishing a successful corporate acceleration capacity. Firstly, creating a unique value proposition for start-ups is crucial to leveraging corporate assets. Secondly, a well-defined process should be developed to

					effectively manage the relationships between the corporation and the start-ups participating in the accelerator.
(Guardiet et al., 2022)	Comparative analysis	109 corporate accelerators	Germany	To analyse qualitative data and identify the key factors that contribute to the success of a specific group of corporate accelerators.	**Corporate accelerators (CAs):** Five key factors that have a strong positive correlation with the success of corporate accelerators include corporate partners, a rigorous selection process that includes dedicated selection days for the shortlisted start-ups, and an increased number of start-ups per batch.
(Hu, 2020)	Case study (semi-structured interviews)	Not reported	Sweden	To explore strategies for start-ups to choose suitable corporate accelerators and partner with large organisations.	**Corporate accelerators (CAs):** It is evident that early-stage start-ups greatly benefit from having a framework to navigate establishing partnerships with large corporations. Additionally, corporate accelerators have been identified as a valuable tool for connecting start-ups with networks, corporate resources, and potential customers. In addition, trust, clear objectives, and partner compatibility are crucial factors for success in startup-corporation partnerships.

(Zajac et al., 1991)	Comparative analysis	53 internal corporate joint ventures (ICJVs)	Not reported	To explore utilising a recently emerging organisational structure called the internal corporate joint venture (ICJV) to foster innovation.	**Analysis of joint venture:** Based on the empirical findings, three key factors are strongly linked to innovation in the ICJVs. These factors include similarity in age among organisational members, the sponsoring organisation's focus on innovation, and the involvement of the ICJV in integrative activities with the sponsoring organisation. The study suggests that more focus should be given to "nested innovation," which refers to innovation within a new organisational form, an administrative innovation.
(Solheim-Kile & Wald, 2020)	Case Study	Three (public-private joint ventures) PPJVs and 34 individual projects	UK	To gain insights into the factors influencing goal alignment in healthcare public-private joint ventures (PPJVs), specifically focusing on the UK's Local Improvement Finance Trust (LIFT) model.	**Analysis of joint venture:** One of the key factors driving economic growth is the potential for future opportunities, which helps to establish a strong foundation for the future. Additionally, there are social incentives in place that allow individuals to make a positive difference in society. Expanding the scope of the future can motivate both parties to consider the long-term implications, steering clear of short-sighted actions.
(Harrison, 2006)	Comparative analysis	1,940 Hospitals with joint ventures and 1,792 hospital	US	To evaluate the characteristics, market factors, and profitability of US hospitals that operate joint ventures with other healthcare organisations.	**Analysis of joint venture**: Joint ventures offer organisations the opportunity to enhance operational efficiency, boost volume, and increase revenue. They offer the chance to centralise physician offices in one location, enhance patient care, and reduce staff turnover. The findings also indicate that joint ventures tend to be established in organisations with a

		s without joint venture s.			higher clinical complexity level. Additionally, these joint ventures often lead to increased occupancy rates and slightly higher profitability.
(Weible n & Chesbro ugh, 2015)	Not reported	Not reporte d	US	To explore the integration of entrepreneurial innovation from start-ups into large corporations in the tech industry.	**Redefining collaboration models:** Newer collaboration models have been found to replace equity with shared technology, effectively bridging the gap between the agility of start-ups and the resources of corporations. The shift towards shared technology was recognised for improving the collaboration while reducing organisational expenses, increasing efficiency, and enhancing flexibility. The study emphasised the changing nature of collaboration, highlighting a shift towards more adaptable and technology-driven approaches in the interaction between major corporations and start-ups. **Start-up agility:** Start-ups have a distinct advantage when staying competitive. Their ability to make quick decisions, adapt their business strategies, and respond to emerging trends sets them apart. The start-up's agility was highly valued by large corporations, who saw it as a valuable asset in collaborative endeavors. They recognised that the start-up's ability to bring innovative solutions to market faster than traditional corporate structures was a significant advantage.

(Kurpjuweit & Wagner, 2020)	Case study (semi-structured interviews)	Not reported	Western Europe	To investigate start-up supplier programmes, examining their implementation, essential elements, and management strategies.	**Redefining Collaboration Models:** The study highlights three key findings regarding start-up supplier programmes: the consolidation of internal start-up activities, the changing role of purchasing in start-up collaborations, and the promotion of exchange with external entrepreneurial ecosystems. These programmes enabled the redirection of start-ups based on their level of development, highlighted the importance of purchasing in the sourcing process, and promoted collaboration with talented start-ups outside of competitive environments, all of which contributed to the broader innovation ecosystem.
(Conicella et al., 2021)	Case study	31 pharmaceutical companies	Italy	To analyse Open Innovation (OI) initiatives in the life science and digital health sectors. It examined 107 programs across 31 pharmaceutical companies and identified eight distinct OI models.	**Redefining Collaboration Models:** The Zambon case study offers valuable insights for OI initiatives, highlighting the need to align the accelerator's scope with corporate strategy to achieve more impactful project outcomes and generate greater interest from corporate colleagues. The importance of engaging with both internal and external ecosystems has become evident, highlighting the significance of building networks within the corporate and broader innovation ecosystem. The study highlighted the importance of effectively managing expectations, as there can be variations in how corporations and start-ups perceive time. In the healthcare industry, it is essential to have a long-term perspective when

					evaluating the process/solution development life cycle.
(Abdulazizov, 2023)	Case study	Not reported	US	To explore and offer valuable insights into how corporate agility can be maintained and adjusted as companies grow from agile start-ups to larger organisational structures.	**Start-up agility:** Hybrid models combine the dynamism of start-ups with the stability of corporations, which is a practical approach to achieving corporate agility. The results highlight the significance of fostering a collaborative culture beyond organisational boundaries to maintain long-term corporate agility. The importance of organisations embracing change, fostering continuous learning, and redefining leadership paradigms to navigate the agile landscape is highlighted.

4.3. Main Outcomes

4.3.1. Analysis of Joint Ventures

Analysis of joint ventures revealed that age similarity among organisational members, the sponsoring organisation's focus on innovation, and the involvement of internal corporate joint ventures in integrative activities are key factors contributing to innovation (Zajac et al., 1991). Joint ventures stimulate economic growth and promote positive social impact (Solheim-Kile & Wald, 2020). Additionally, joint ventures offer organisations the opportunity to enhance operational efficiency, boost volume, and increase revenue (Harrison, 2006). They offer the chance to centralise physician offices in a single location, enhance patient care, and reduce staff turnover (Harrison, 2006).

4.3.2. Evaluation of Corporate Accelerators

The evaluation of corporate accelerators highlights the importance of carefully considering design dimensions (proposition, process, people, and place) when incorporating these accelerators into a firm's innovation strategy (Kohler, 2016). Essential factors for achieving successful corporate acceleration capacity involve developing a distinct value proposition for start-ups, establishing a clear process for managing relationships, and securing the involvement of corporate partners (Mahmoud-Jouini et al., 2018). Early-stage start-ups can significantly benefit from corporate accelerators as they provide valuable frameworks for partnerships, networks, and resource access (Hu, 2020).

4.3.3. Insights from Start-up Agility

Insights from start-up agility highlight start-ups' significant competitive edge due to their flexibility and ability to make quick decisions and respond rapidly to emerging trends (Weiblen & Chesbrough, 2015). Large corporations greatly appreciate the agility of start-ups, as they recognise their ability to quickly bring innovative solutions to the market compared to traditional structures (Weiblen & Chesbrough, 2015). Hybrid models, which blend start-ups' energy with corporations' reliability, have emerged as a practical approach to achieving corporate agility (Abdulazizov, 2023). Fostering a collaborative culture beyond organisational boundaries is essential to maintaining long-term corporate agility (Abdulazizov, 2023).

4.3.4. Redefining Collaboration Models

Collaboration models have replaced traditional equity-based approaches with shared technology, resulting in start-up agility and integration of corporate resources (Weiblen & Chesbrough, 2015). The shift towards shared technology improves collaboration, reduces organisational costs, increases efficiency, and enhances flexibility (Weiblen & Chesbrough, 2015). In addition, start-up supplier programs highlight the importance of consolidating internal start-up activities, the changing role of purchasing, and the promotion of external entrepreneurial ecosystems (Kurpjuweit & Wagner, 2020).

4.4. Proposed Solutions and Implementation Approaches

4.4.1. Guide for Successful Joint Ventures Implementation

When it comes to successfully implementing joint ventures, adopting a strategic approach that comprehensively considers various dimensions is paramount (Zajac et al., 1991). Organizations must prioritize the formation of cohesive teams, placing a particular emphasis on ensuring age similarity among their members (Zajac et al., 1991). This strategic emphasis on team composition not only fosters a harmonious work environment but also significantly contributes to the overall success and effectiveness of the organization. The resulting collaborative atmosphere encourages innovation, nurtures a shared understanding, and cultivates a culture of cooperation (Zajac et al., 1991).

To achieve success, the sponsoring organisation must prioritise fostering innovation (Zajac et al., 1991). This necessitates the seamless integration of innovative thinking into the core values and objectives of the organization. The organization can create a culture conducive to innovation by actively promoting and supporting creative thinking. Moreover, ensuring the availability of requisite resources for innovative initiatives within joint ventures is crucial (Zajac et al., 1991).

Implementing practical and effective strategies can significantly enhance the success of joint ventures. One such approach involves centralizing physician offices in a single location, which not only streamlines operations but also improves overall efficiency (Harrison, 2006). Additionally, focusing on enhancing patient care can lead to higher satisfaction rates and increased patient trust. An equally important aspect is the reduction of staff turnover, as this contributes to maintaining continuity and stability within the joint venture (Harrison, 2006).

By embracing these strategic considerations and incorporating them into the organizational framework, joint ventures can maximize their potential for success and create a sustainable and innovative business environment. This holistic approach to joint venture management ensures short-term gains and long-term viability and resilience in the ever-evolving business landscape.

4.4.2. Optimising Corporate Accelerators

Effectively optimizing corporate accelerators demands a meticulous and comprehensive approach that spans various critical design dimensions, including process, people, and place (Kohler, 2016). Managers spearheading these initiatives should prioritize the development of a robust value proposition for start-ups, leveraging the unique assets at the corporation's disposal (Mahmoud-Jouini et al., 2018). By crafting a compelling value proposition, corporate accelerators can attract and retain innovative start-ups, laying the foundation for mutually beneficial collaborations and successful outcomes.

To enhance the effectiveness of corporate accelerators, it becomes imperative to concentrate on establishing solid corporate partnerships. This involves fostering strategic alliances beyond mere financial support, encompassing mentorship, access to networks, and shared resources (Guardiet et al., 2022). Additionally, implementing a meticulous selection process, complete with dedicated selection days, contributes significantly to the accelerator's success. The careful curation of start-ups for each batch ensures a diverse and promising cohort, fostering a conducive environment for collaboration and innovation (Guardiet et al., 2022).

Potential adjustments to the operational structure, like increasing the number of start-ups per batch, can also be explored to bolster the impact of corporate accelerators (Guardiet et al., 2022). The scalability of the program can be crucial for accommodating a larger pool of innovative ventures, diversifying the range of solutions and ideas introduced into the corporate ecosystem.

For sustained success, a continuous and adaptive approach is essential. Regularly evaluating and refining the accelerator's strategy is crucial, necessitating a keen awareness of evolving market trends and technological advancements (Hu, 2020). By staying abreast of the dynamic business landscape, corporate accelerators can proactively adapt their programs to remain relevant and effective. This flexibility enables them to seize emerging opportunities and navigate challenges effectively.

Lastly, integrating a culture of innovation within the corporate ecosystem is pivotal to seamlessly incorporating the benefits of the accelerator into the overall organizational strategy (Hu, 2020).

This involves fostering an environment that encourages creativity, risk-taking, and collaboration, aligning the accelerator's goals with the organization's broader objectives. Establishing a dynamic innovation pipeline becomes an organic outcome of such an ingrained innovative culture, ensuring a continuous flow of groundbreaking ideas and solutions.

In conclusion, optimizing corporate accelerators is a multifaceted endeavor that necessitates strategic thinking, adaptability, and a commitment to fostering innovation. By addressing proposition, process, people, and place with a nuanced approach, corporate accelerators can drive short-term success and establish a foundation for sustained innovation and growth within the corporate ecosystem.

4.4.3. Integrating Agility into Corporate Structures

Incorporating agility into corporate structures requires thoughtful cultural transformation (Weiblen & Chesbrough, 2015). Organisations should emphasise continuous learning, fostering an environment where employees are motivated to embrace new challenges and proactively keep up with emerging trends (Abdulazizov, 2023). In addition, incorporating agility requires establishing a culture that fosters experimentation and embracing risks (Abdulazizov, 2023). Creating innovation hubs, incubators, or collaborative spaces can foster the exchange of ideas and promote a culture of ongoing improvement (Abdulazizov, 2023).

Leadership should foster a positive perspective on change, seeing it as a chance for growth rather than something to be feared. This mindset empowers employees at every level to actively contribute to the organisation's ability to adapt and respond effectively. It is important to continuously evaluate and refine these strategies to ensure they align with the changing market dynamics (Abdulazizov, 2023). To successfully incorporate agility into corporate structures, it is essential to take a comprehensive and adaptable approach. This involves being open to change, promoting collaboration, and fostering a culture of innovation across the organisation (Abdulazizov, 2023).

4.4.4. Implementing New Collaboration Models

When venturing into the realm of collaborative models that intertwine start-ups and corporations, a meticulous consideration of strategic factors becomes imperative to harness the full potential of synergy. An evolving approach calls for organizations to embrace the transition towards shared technology, signalling a departure from traditional equity-based collaborations (Weiblen & Chesbrough, 2015). This innovative strategy seeks to amalgamate the inherent strengths of start-ups with the robust resources of corporations, fostering an environment of collaboration, cost reduction, and flexibility (Weiblen & Chesbrough, 2015). However, the effective implementation of this model necessitates a deliberate allocation of resources towards reliable technology-sharing platforms and the cultivation of an atmosphere that actively promotes innovation.

In the strategic playbook of organizations, the positioning of accelerators emerges as a key move, strategically aligned with specific innovation needs and overarching corporate objectives (Conicella et al., 2021). The proactive connection with internal and external ecosystems becomes a critical facet, demanding the establishment of networks that permeate within the corporate structure and across the broader innovation ecosystem. Effectively managing expectations is another linchpin in this strategic dance, particularly when navigating the varied perspectives on time inherent in different corporations and start-ups (Conicella et al., 2021).

Within the intricacies of the healthcare industry, adopting a long-term perspective assumes heightened importance, especially when evaluating the development life cycle (Conicella et al., 2021). The healthcare landscape, characterized by its unique challenges and regulatory intricacies, demands a strategic foresight that extends beyond immediate gains. Organizations venturing into collaborative models must recognize the extended timelines inherent in healthcare innovation, where meticulous research, rigorous testing, and regulatory approvals are integral to the development journey.

Furthermore, fostering an atmosphere that encourages collaboration demands a cultural shift within organizations. It entails cultivating an ethos that not only values innovation but also provides the necessary support structures for it to flourish. This might involve creating cross-

functional teams, incentivizing risk-taking, and establishing mechanisms for open communication between start-ups and corporate entities.

In conclusion, the strategic considerations in implementing collaboration models between startups and corporations extend far beyond a contractual arrangement. It involves navigating the delicate balance between shared technology, strategic accelerator placements, effective network establishment, nuanced time management, and a long-term perspective, especially in healthcare. A well-thought-out strategy not only maximizes the benefits of collaboration but also sets the stage for sustained innovation, ensuring that the union of startups and corporations becomes a catalyst for enduring success in the rapidly evolving business landscape.

4.4.5. Insights from Piet Verhoeve

Piet Verhoeve is the founder of Origanius, an innovation consulting company based in Menen, Belgium. The transcription of the full interview can be found in Appendix A.

During the conversation, he talked about a nuanced view of innovation, technology, joint ventures, and the healthcare field, reflecting a deep understanding of the complexities and opportunities within these domains.

Healthcare Excitement and Human-Centric Focus:
Piet Verhoeve expresses a profound fascination with the healthcare sector, underscoring its unique attributes. He views healthcare as an exceptionally exciting field due to its human-centric nature. In contrast to more established industries like automotive, healthcare still presents substantial untapped potential, offering numerous possibilities for technological enhancements. Verhoeve sees the human element as a central driving force, with interactions between doctors and patients forming a significant part of the healthcare landscape. This perspective positions healthcare as a dynamic arena where technology can be pivotal in improving patient experiences.

Challenges in Technology Adoption in Healthcare:
While acknowledging the promise of innovation, Verhoeve candidly addresses the challenges associated with integrating technology in healthcare. He highlights the cautious approach dictated

by safety considerations, given the unique life-and-death nature of healthcare decisions. Verhoeve draws attention to the fact that traditional technology methodologies, such as the "fail fast, learn fast" approach common in electronics and ICT, are often incompatible with healthcare due to the irrevocable consequences of errors. This insight demonstrates a keen awareness of the need for a distinct approach to innovation within the healthcare sector.

Joint Ventures and Framework for Collaboration:

Verhoeve sees joint ventures between corporates and startups as a strategic pathway to unlock innovation in healthcare. He stresses the significance of establishing a robust framework for successful collaboration, acknowledging the inherently different cultures and operational dynamics between these entities. The speaker emphasizes the critical role of trust, an open mindset, and mutual respect in fostering successful joint ventures. Drawing from personal experiences and observations, Verhoeve underscores that successful collaboration relies more on team dynamics than contractual agreements, noting that an effective team can overcome challenges even with less-than-ideal contracts.

Economic Models and Sustainability in Healthcare Innovation:

A crucial aspect of Verhoeve's perspective is the necessity of sustainable economic models in healthcare innovation. He challenges the misconception that healthcare innovation cannot coexist with economic viability. By debunking this notion, the speaker highlights a historical misunderstanding in the industry. He argues that for innovations to be sustainable, there must be an acknowledgement that economic models are essential. This understanding goes against the historical backdrop where societal benefits were perceived as incompatible with economic gains in healthcare.

Challenges in Implementing KPIs in Startup-Corporate Collaborations:

Verhoeve discusses the challenges associated with implementing key performance indicators (KPIs) in the context of startups collaborating with corporates. He draws attention to the clash between the inherently flexible nature of early-stage startups and the more rigid KPIs often associated with corporate structures. The speaker provides a compelling example from the railway industry, illustrating how poorly designed KPIs can lead to unintended consequences. This insight

demonstrates a critical understanding of the delicate balance required when imposing metrics on innovative and dynamic entities.

In summary, Piet Verhoeve's insights underscore the unique challenges and opportunities within the intersection of innovation, technology, joint ventures, and the healthcare field:

Excitement in Healthcare: Verhoeve recognizes healthcare as an exciting, human-centric field with considerable untapped potential for technological advancements, particularly in improving patient experiences.

Challenges in Technology Adoption: Despite the promise of innovation, Verhoeve acknowledges the cautious approach necessitated by safety concerns in healthcare. The irreversibility of healthcare decisions requires a distinct approach to technology adoption compared to other industries.

Joint Ventures and Collaboration Framework: Verhoeve sees joint ventures between corporates and startups as a strategic avenue for healthcare innovation. He emphasizes the need for a robust collaboration framework, underlining the crucial role of trust, an open mindset, and mutual respect between the entities involved.

Economic Models and Sustainability: Verhoeve challenges the misconception that healthcare innovation cannot align with economic viability. He argues for the necessity of sustainable economic models, debunking historical notions that societal benefits must be divorced from economic gains in healthcare.

Challenges in KPI Implementation: Verhoeve discusses the challenges of implementing key performance indicators (KPIs) in startup-corporate collaborations, highlighting the clash between the flexible nature of startups and the rigid KPIs associated with corporate structures. He provides a tangible example from the railway industry, illustrating the unintended consequences poorly designed KPIs can bring.

Main Takeaway - Innovation Challenges in Healthcare:

Piet Verhoeve's insights collectively reveal the difficulty of innovating in healthcare. Safety considerations, slow technology adoption, and the intricate regulatory landscape make healthcare unique and challenging. The need for a distinct approach, collaboration frameworks, and sustainable economic models underscores the complexity of achieving successful innovation in the healthcare sector.

4.4.6. Insights from Heimo Hammer

Heimo Hammer is the founder of Kraftwerk, an innovation consulting company based in Vienna, Austria. The transcription of the full interview can be found in Appendix B.

During this insightful interview, Hammer, a prominent figure in corporate ventures, provided valuable insights into the realms of innovation and healthcare. Hammer highlighted the dynamic nature of companies like Nokia and Samsung, emphasizing their evolution over time. He stressed the importance of recognizing market opportunities and adapting strategies accordingly.

In the context of innovation, Hammer introduced the concept of creating a secondary brand for startups, suggesting that companies should explore opportunities beyond their initial market. Drawing from his experience, he recommended that startups delve into solutions developed for the healthcare sector and identify potential applications in other industries. He encouraged the exploration of cross-industry possibilities to ensure sustained growth and market relevance.

The conversation shifted towards the intricacies of corporate ventures, where Hammer discussed the necessity of new leadership and diverse teams. He advocated for injecting fresh perspectives into the management of startups to foster innovation and adaptability. Additionally, he highlighted the challenges of aligning corporate key performance indicators (KPIs) with the agile nature of startups, acknowledging the need for a delicate balance between financial control and encouraging innovative practices.

Moving into the healthcare domain, Hammer shared experiences from projects such as the development of Gesundheit.tv.at, a health portal that integrated various digital products, including the COVID-19 app and vaccination passports. The interview delved into the challenges faced during the pandemic, specifically in the healthcare sector, where the lack of structure and preparedness became apparent. Hammer discussed the complexities of managing sensitive patient data and the importance of stringent data protection measures.

Hammer provided concrete examples of healthcare-related projects, such as collaborating with a startup, Mgin, in the onco-pharmaceutical space. The project involved implementing an application to manage patient data for a study comparing the performance of new and traditional cancer treatments. The interview shed light on the intricacies of data ownership in healthcare, discussing the blurred lines between patient data and institutional access.

The conversation expanded to address innovative solutions in the pharmaceutical sector. Hammer shared a compelling case of creating an online pharmacy for homeopathic products. This venture, developed in collaboration with an established pharmacy with multiple locations, successfully tapped into the growing trend of online pharmaceutical purchases during the COVID-19 pandemic. Hammer elaborated on the challenges posed by stringent regulations in the Austrian market and how the team navigated these hurdles to establish a profitable online pharmacy.

In summary, Hammer's comprehensive discussion touched on key aspects of innovation and healthcare. His insights into market dynamics, corporate ventures, and healthcare projects provided a holistic view of the challenges and opportunities in these domains. Throughout the interview, Hammer's practical examples illustrated the complexities of innovation and healthcare, offering valuable lessons for startups and corporate ventures alike.

4.4.7. Insights from Georg Frick

Georg Frick is the founder of V-labs, an innovation consulting company based in Vienna, Austria. The transcription of the full interview can be found in Appendix C.

In the interview, Georg Frick delved into the intricacies of his daily responsibilities within V-labs, covering business leadership, key accounting, customer acquisition, and active participation in innovation projects. He shed light on the challenges faced during the growth phase, particularly the transitional period between 18 and 30 employees. Here, the absence of middle management introduces unique hurdles, making organizational development a pivotal focus.

Frick placed significant emphasis on problem-centered innovation, highlighting the importance of addressing existing issues with new solutions. He elucidated the two facets of innovation, distinguishing between incremental improvements and radical or disruptive business model innovations, the latter often necessitating entirely novel approaches.

Exploring the initiation of innovation at work, Frick explained that encounters with innovative concepts often arise when clients present significant problems or emerging trends. These challenges may require the development of novel business models or the exploration of ideas through startup initiatives. Frick underscored a methodical approach to innovation, expressing a preference for agile methodologies, clarifying that agility should not be misconstrued as a lack of methodology.

Frick identified key factors influencing the success of corporate ventures, including the paramount importance of having the right people. Dispelling the notion that individuals who excelled in traditional corporate roles would automatically succeed in a startup environment, he stressed the need for agility and adaptation. Additionally, he highlighted the advantages of leveraging a corporation's resources, such as customer access and technological progress and ensuring sufficient capital for sustained growth.

Discussing the relationship dynamics between startups and corporates, Frick stressed the necessity of aligning the startup's goals with the overarching corporate strategy. He advocated for a flexible

steering mechanism that allows strategic adjustments coupled with an openness to change. Drawing from a specific case, he highlighted the need for adaptability, recounting a situation where a startup pivoted its focus to a different industry for a better fit.

On the topic of team selection, Frick expanded on the misconception that individuals excelling in corporate roles will seamlessly transition to success in a startup environment. He explained their approach, often beginning with a team of full-service providers and later supplementing specific expertise externally as the startup progresses and demands evolve.

Addressing the cultural differences between startups and corporates, especially within the context of corporate ventures, Frick underscored the necessity of treating these ventures as autonomous units. He acknowledged the challenges in navigating cultural shifts and recommended a clear definition of the startup's business domain and governance rules from the project's inception. Frick also delved into the complexities of budget allocation for multiple startup initiatives within a corporate structure.

In the realm of healthcare ventures, Frick explored the heightened regulatory requirements, data protection concerns, and complexities associated with stakeholder involvement. He stressed the need to adapt business models to accommodate national regulatory variations. He also expounded on the challenges of innovation within the public space, where private-public partnership models may be imperative.

4.4.8. Insights from Erich Kruschitz

Erich Kruschitz is the Managing Director of SanusX, the innovation daughter company of UNIQA Insurance Group based in Vienna, Austria. The transcription of the full interview can be found in Appendix D.

The interview with Erich Kruschitz offered a comprehensive exploration of various dimensions within SanusX's innovative initiatives. Kruschitz provided deep insights into his perspective on successful innovation within the healthcare sector, highlighting the importance of addressing specific customer problems and broader challenges within the insurance space. Emphasizing the

need for relevance and scalability, Kruschitz outlined a vision to significantly contribute to UNIQA's €6 billion revenue group, setting a specific target of €100 million by 2025.

Kruschitz delved into the core success factors, underscoring the significance of reaching a substantial number of people with healthcare services. He introduced a nuanced understanding of profitability, acknowledging the importance of not only growing rapidly but also ensuring sustained financial viability. This dual focus on relevance and scalability became the guiding principle for evaluating the success of SanusX's innovative endeavors.

The interview unfolded the intricacies of SanusX's innovation process, shedding light on the identification of "hunting zones" – broad areas within healthcare marked by specific criteria. Kruschitz provided detailed insights into the complex decision-making process, elucidating how dedicated budgets and stringent criteria guided the development of new ideas. The balance between exploration and long-term profitability was a recurrent theme, reflecting SanusX's commitment to responsible and impactful innovation.

Collaboration with startups emerged as a pivotal strategy in SanusX's innovation playbook. Kruschitz emphasized the importance of startups understanding the corporate perspective, pinpointing the need for immediate and measurable impact. Tangible success stories, such as the collaboration with Wallaby, underscored the significance of startups offering complementary skills and fulfilling specific needs, such as certifications and regulatory expertise.

A closer look at the scouting process revealed a dual approach, where SanusX actively scanned the market while considering incoming proposals. The interview contextualized the establishment of SanusX during UNIQA's strategy development, aligning with the concept of ambidexterity and reflecting the company's commitment to both exploration and exploitation.

Reflecting on decision-making, Kruschitz elaborated on the initial foundation of trust that allowed for a considerable degree of freedom. As SanusX evolved, the need for specific key performance indicators (KPIs) became apparent, ensuring that the progress aligned with UNIQA's overarching goals. The interview culminated in a discussion on team structure, with Kruschitz sharing

experiences of initially forming a core team from UNIQA and subsequently seeking external talent. This deliberate effort to infuse diverse perspectives into SanusX's innovative culture underscored a commitment to fostering a unique and dynamic working environment under Kruschitz's leadership.

5. Framework

A structured framework for fostering innovation within the healthcare sector has been formulated after the comprehensive analysis of research findings and interviews. This framework aims to furnish corporations with a systematic roadmap, complete with key milestones, to steer their innovation endeavors effectively.

5.1. Start with Why

In today's fast-paced technological landscape, innovation has emerged as a cornerstone of corporate strategy, essential for maintaining relevance and competitive advantage. Even industry giants renowned for their success must proactively integrate innovation processes to safeguard against obsolescence in the years ahead. While the imperative for innovation is universal, its successful execution hinges on a nuanced understanding of the underlying "why" specific to each organisation.

This foundational question transcends mere profit motives, necessitating alignment with the company's core values, culture, and overarching mission. It is not just about chasing financial gains but about cultivating a deeper sense of purpose and direction that resonates with stakeholders at every level. Developing this intrinsic "why" requires a thoughtful examination of the organization's ethos, vision, and aspirations, guided by its unique cultural dynamics.

Moreover, the process of defining the "why" is not a one-size-fits-all approach but rather a bespoke endeavor tailored to the intricacies of each company's culture and identity. It requires introspection, dialogue, and alignment across various stakeholders to distill a common vision that guides

innovation efforts. By anchoring innovation initiatives in this shared sense of purpose, organizations can foster a culture of creativity, collaboration, and commitment, driving sustainable growth and resilience in an ever-evolving business landscape.

Establish Purpose and Values

Begin by identifying the core purpose and values that drive the company beyond mere profitability. This introspective process sets the foundation for aligning actions with long-term vision and inspiring stakeholders.

Challenge Assumptions and Embrace Vision

Reflect on underlying assumptions and leverage insights to distinguish between outcome-driven and vision-driven approaches. Embrace a compelling vision rooted in authenticity and values to inspire stakeholders and cultivate a sense of shared purpose.

Cultivate Trust and Integrity

Build trust and integrity by aligning actions with overarching values, fostering loyalty and commitment. Transparency and consistency in messaging and actions reinforce authenticity, credibility, and confidence among stakeholders.

Navigate Market Dynamics and Drive Adoption

Understand market dynamics and target efforts towards influential innovators and early adopters to drive market acceptance. Gain traction among forward-thinking individuals to pave the way for broader adoption and market penetration.

Foster Active Engagement and Adaptability

Facilitate meaningful engagement through active listening, responsiveness, and collaboration. Solicit feedback, understand stakeholder perspectives, and foster a culture of adaptability to navigate challenges and drive continued success in a dynamic environment.

5.2. Innovation Thesis

Achieving alignment across an entire organization necessitates a structured and lucid strategic narrative. This narrative serves as the linchpin for fostering cohesion and coherence among diverse business units, especially when considering the allocation of resources toward novel ideas, ventures, or partnerships. Once a company has delineated its overarching purpose or "why," the next imperative is establishing a clear framework around it.

It is imperative to underscore that establishing an innovation lab and merely encouraging experimentation with new technologies and services does not constitute a comprehensive strategy. True strategy entails delineating boundaries and a thesis—a statement or proposition to be supported or proven. A robust thesis comprises two essential components: a unique perspective on the trajectory of the world and which startups are poised for success within it, and a clear articulation of the types of ideas the company is best positioned to invest in based on its resources, culture, and underlying purpose.

To craft a compelling innovation thesis, organizations must address fundamental questions about their current business models, core products, emerging trends, technological advancements, market expansions, and competitive landscapes. These inquiries are the foundation for articulating a coherent and forward-looking vision guiding innovation initiatives.

A structured approach to developing an innovation thesis involves a rigorous seven-step process, as delineated by Tendayi Viki, Dan Toma, and Esther Gons in "The Corporate Startup":

Executive Workshop: Assemble top executives for a comprehensive workshop to map the company's existing business models and core market approaches using the business model canvas.

Research: Assign each executive with the task of completing all categories on the business model canvas for their respective business unit within two weeks.

Workshop: Convene a full-day workshop where executives present their findings, facilitating collaborative discussions to identify key trends, market forces, and macroeconomic factors impacting business models.

Review: Evaluate the adaptability of current business models to future environments, identifying critical gaps and potential problem areas.

Options: Explore innovation options based on identified gaps, focusing on the types of ideas, markets, and market areas conducive to innovation.

Thesis Formation: Formulate the innovation thesis by envisioning the future macroeconomic environment and describing how the company can leverage current trends to benefit across various arenas, ideas, technologies, markets, and business models. Additionally, outline areas where the company does not intend to invest.

This methodical approach ensures that a coherent structure emerges, enabling managers to articulate why and how innovation will be utilized to maintain competitiveness. While there is no one-size-fits-all approach to developing an innovation thesis, adherence to the established framework empowers organizations to navigate uncertainties and seize opportunities confidently and clearly.

We believe that the future will be…
- Our industry
- Adjacent Industries
- People/Population
- Customers
- Markets
- Technology

- Social
- Political

Now describe the trends that will be impacted by the innovation of the company:

We believe that our company can benefit from current trends by investing in…
- Arenas
- Ideas
-Technologies
-Markets
-Business Models
-Teams

Finish the thesis by describing what the company does not want to invest in.
We will not invest in…

At the end of this process, a clear structure must emerge. Managers must be able to articulate why and how they plan to use innovation to keep up. While there is no prescriptive way to develop an innovation thesis, and each company must work within its limits, it should try to stick to it as much as possible once it is developed.

5.3. Open Innovation

Open innovation within the healthcare domain, as elucidated in this comprehensive guide, delineates novel modes of collaboration among diverse stakeholders engaged in the health innovation continuum. It encompasses innovative partnerships between:

- Public sector entities, encompassing health service providers and research organizations, and private sector enterprises.
- Health service providers or research institutions and their workforce, including practitioners and researchers.

- Health service providers or research institutions and the broader spectrum of patients and citizens they serve.

Collaborative efforts in health innovation have a longstanding history, yet open innovation introduces a paradigm shift by blurring traditional boundaries between these actors. Unlike conventional models where pharmaceutical companies develop profitable products and state entities distribute outcomes for public benefit, open innovation fosters a more symbiotic relationship. Product development partnerships, for instance, allow pharmaceutical companies to deploy their expertise toward addressing neglected health challenges, often deemed unprofitable. Similarly, clinician innovator programs within public sector health organizations nurture staff innovation and entrepreneurship. Moreover, peer-research-driven approaches empower citizens to assume roles as active researchers rather than passive recipients of healthcare services.

Key features distinguishing open innovation in health include:

a) Open and collaborative generation of evidence and data.
b) Democratization of idea generation, welcoming inputs from diverse sources beyond traditional health professionals and researchers.
c) Alignment of innovation initiatives with patient needs and practitioner insights.
d) Emphasis on international collaboration, recognizing the mutual benefits of shared learning among global health systems.

Figure 3 delineates 18 prevalent types of open innovation initiatives, organized according to the stages of the innovation cycle: problem identification, invention, and adoption and diffusion. This structured framework elucidates the multifaceted nature of open innovation endeavors and serves as a roadmap for stakeholders navigating the dynamic landscape of healthcare innovation.

Stage	Types of initiative	Type of partnership	Key objective(s)		
			Increasing efficiency	Improved understanding of patient/ system needs	More democratic
Problem identification	Real-time monitoring	Public-private			
	Crowdsourcing data	Organisation-citizen			
	Peer research	Organisation-citizen			
	Online communities	Organisation-citizen			
	Participatory priority setting	Organisation-citizen			
Invention	Challenge prizes and platforms	Public-private			
	Product Development Partnerships	Public-private			
	Data sharing initiatives	Public-private			
	Accelerators	Public-private			
	Fellowships	Public-private			
	Ethnographic and design approaches	Organisation-citizen			
	Pre-commercial procurement programmes	Public-private			
	Clinician innovation programmes	Organisation-employee			
	Co-design and co-production initiatives	Organisation-citizen			
Adoption and diffusion	Online marketplaces and communities	Public-private			
	Diffusion support programmes	Public-private			
	Scouting	Organisation-employee			
	Improvement collaboratives	Organisation-employee			

Figure 3 18 types of open innovation initiatives in healthcare. Copyright: 2024 Nesta UK

In the realm of open innovation within the healthcare sector, numerous pathways exist to initiate and facilitate collaborative processes aimed at fostering invention and addressing unmet needs. These pathways encompass a spectrum of methodologies tailored to engage various stakeholders and leverage their unique perspectives and expertise. Let's delve deeper into some of the most prevalent methods for kickstarting open innovation endeavors:

Accelerators:

These specialized programs have become an effective mechanism for igniting innovation within the healthcare landscape. Accelerators nurture budding innovators and entrepreneurs by providing direct support through financial resources, mentorship, and networking opportunities. Moreover, their emphasis on team-based recruitment and cohort-based participation fosters a collaborative environment conducive to peer learning and knowledge exchange. Notably, the strategic partnerships forged by accelerators with industry stakeholders facilitate a deeper understanding of market dynamics and end-user needs, thereby enhancing the viability and scalability of innovative solutions.

Fellowships:

Health innovation fellowships offer a structured platform for individual innovators to explore and develop novel ideas aimed at addressing healthcare challenges. Unlike accelerators, fellowships typically operate on a longer timeline, allowing participants to delve deeply into problem identification and solution development. By providing stipends and access to mentorship, these programs empower innovators to navigate the intricacies of the healthcare landscape and refine their concepts based on real-world insights gleaned from clinical settings. Moreover, the interdisciplinary nature of many fellowships fosters collaboration across diverse domains, enriching the innovation process with varied perspectives and expertise.

Pre-commercial Procurement Programs:

These initiatives are pivotal in catalyzing technological innovation by facilitating collaboration between innovators and public sector entities. By supporting the research and development of nascent products and services, pre-commercial procurement programs bridge the gap between market demand and supply, particularly in areas where traditional market forces may be

insufficient to drive innovation. Through close collaboration with healthcare providers and commissioners, these programs ensure that the resulting solutions align closely with the identified needs of healthcare systems, thereby maximizing their potential for adoption and impact.

Practitioner Innovation Programs:

Recognizing the invaluable insights and frontline experiences of healthcare practitioners, innovation programs tailored to this demographic provides a platform for translating ideas into actionable solutions. By offering support through mentorship, training, and access to resources, these programs empower practitioners to overcome barriers such as time constraints and limited entrepreneurial know-how. Moreover, by fostering a culture of innovation within healthcare organizations, practitioner innovation programs stimulate bottom-up idea generation and drive continuous improvement in patient care and service delivery.

Co-design and Co-production Initiatives:

Patient engagement lies at the heart of co-design and co-production initiatives, which seek to harness patients' and citizens' experiential knowledge and insights in the innovation process. By involving patients as active partners rather than passive recipients of care, these initiatives ensure that solutions are effectively tailored to meet their needs and preferences. Moreover, by fostering a collaborative ethos that transcends traditional boundaries between healthcare providers and recipients, co-design and co-production initiatives promote empathy, inclusivity, and patient-centeredness in the design and delivery of healthcare services.

Improvement Collaboratives:

These collaborative platforms serve as dynamic hubs for driving quality improvement and innovation across healthcare organizations. By convening multidisciplinary teams from diverse settings, improvement collaboratives facilitate knowledge sharing, capacity building, and collective problem-solving. Through structured workshops, expert guidance, and peer learning opportunities, participants gain insights into best practices and emerging trends, which they can adapt and implement within their respective contexts. Moreover, the ongoing support and mentorship provided by improvement collaboratives foster a culture of continuous learning and improvement, ensuring that innovations are effectively diffused and sustained over time.

5.3.1. Setting up an Open Innovation Initiative

Open innovation initiatives are dynamic endeavors that must be tailored to specific contexts, making a singular formula for success unattainable. Instead, decision-makers can navigate the process effectively by following a structured four-step approach. Each step involves thoughtful consideration of key questions, outlined below and summarized in an annexed planning sheet.

1) Identifying Problems and Scanning

a. Identify Needs: Determine the specific problem or unmet need the initiative seeks to address within the health innovation landscape.

b. Problem Classification: Ascertain whether the identified issue represents a singular challenge or a combination of interconnected problems.

c. Evaluation of Current Efforts: Evaluate the efficacy of existing mechanisms within the health innovation system in addressing the identified problem. Analyze past and ongoing initiatives to discern their effectiveness and shortcomings.

d. Utilizing Local Assets: Explore the array of local resources and assets available that could be harnessed to support the objectives of the open innovation initiative.

e. Learning from Past Initiatives: Extract insights from previous open innovation endeavors implemented elsewhere to tackle similar challenges, thereby informing the development of the current initiative.

2) Defining an Approach

f. Establishing Objectives: Define the overarching goals and objectives the initiative aims to achieve within the context of the identified problem.

g. Selecting Methods: Determine the most suitable models or approaches of open innovation initiatives that align with the defined objectives and contextual factors.

3) Working out the Details

h. Identifying Key Partners: Identify and engage key stakeholders and partners crucial for the successful implementation of the initiative.

i. Clarifying Roles: Define the roles and responsibilities of each partner involved in the initiative, delineating their contributions and leadership roles.

j. Incentivizing Participation: Devise strategies to incentivize active participation and engagement among partners, outlining the mutual benefits and motivations for involvement.

k. Resource Allocation: Assess available funding sources and devise strategies to leverage financial resources effectively to support the initiative's objectives.

l. Team Formation: Formulate a cohesive core team responsible for orchestrating and coordinating the various aspects of the initiative's implementation.

m. Securing Support: Cultivate support and endorsement from influential individuals or organizations whose backing could enhance the credibility and visibility of the initiative.

n. Defining Outputs: Define the tangible outputs and deliverables expected from the initiative, establishing clear metrics for success and impact assessment.

o. Outcome Measurement: Establish mechanisms for measuring and evaluating the outcomes and impact of the initiative, utilizing appropriate metrics and evaluation frameworks.

4) Reflection

p. Assessment of Feasibility: Conduct a comprehensive assessment of the feasibility and viability of the planned open innovation initiative, articulating its value proposition and potential for success.

q. Anticipating Challenges: Anticipate and identify potential challenges and obstacles that may arise during the implementation process, strategizing proactive measures to overcome them effectively.

	1. What problem are you trying to solve?	2. What types of initiative could address this problem?	3. Examples
Problem identification	Monitoring of problems is too slow or expensive, or geographically uneven	Real-time monitoring	Healthmap
		Crowdsourcing data	De Grote GriepMeting
	Current processes fail to capture issues important to patients and citizens	Peer research	Community Health Agents
		Online feedback systems/ communities	Patient Opinion
		Participatory priority setting	Conselhos de Saúde
Invention	Market failure blocks development of responses to key health problems	Challenge prizes and platforms	Fighting Ebola Grand Challenge
		Product Development Partnerships	Medicines for Malaria Venture
		Data sharing initiatives	Tres Cantos Open Lab
	Entrepreneurs lack financial and informational resources to take their ideas beyond the first stage	Accelerators	Zeroto510
		Fellowships	School of International Biodesign
	Innovations on the market do not address real system and patient needs	Ethnographic and design approaches	Mayo CFI
		Pre-commercial procurement programmes	SBRI Healthcare
	The ideas and insights of practitioners are untapped	Clinician innovation programmes	Bright Ideas Fund
		Co-design and co-production initiatives	The Lambeth Collaborative
Adoption and diffusion	Innovators cannot access buyers	Online marketplaces and communities	Maternova, Patient Innovation
		Diffusion support programmes	NHS Innovation Accelerator
	Health systems are not effective in adopting and spreading innovations	Scouting	The Intrapreneur Programme
		Improvement Collaboratives	IHI initiatives

Figure 4 Examples for finding open innovation initiatives to address specific problems in healthcare, Copyright: 2024 Nesta UK

5.3 Joint Venture

After a successful open innovation strategy, some partners might show great potential. With some of them, a collaboration (commercial or otherwise) was already established, and now it makes sense to strengthen this partnership.

By entering into a JV and combining resources with another business, the business can potentially experience better growth and profitability than you or the other business could achieve individually. This is the final stage of this framework, and while highly individual, depending on the legal and economic environment the company operates in, there are some general guidelines to follow.

In the context of a JV, businesses stand to accrue manifold benefits, including access to untapped markets and expansive distribution networks, forging new business connections, assimilating specialized expertise and resources such as research and development capabilities, and bolstering financial support and purchasing prowess. Moreover, the collaborative nature of a JV fosters a dynamic exchange of ideas and strategies, enriching the innovation landscape and amplifying the potential for disruptive breakthroughs.

Notably, JVs offer a strategic advantage in navigating the intricacies of licenses and regulatory compliance, particularly pertinent for enterprises seeking entry into foreign markets. Leveraging an established partner's licenses circumvents the arduous process of securing individual licenses and fulfilling regulatory mandates, expediting market penetration and operationalization. This symbiotic approach mitigates regulatory risks and enhances market agility and responsiveness to evolving compliance standards.

Crucially, the viability of a JV hinges upon mutual benefit, necessitating equitable value proposition for all involved parties. For instance, when one entity possesses a product but lacks market presence, aligning with a partner entrenched in the target market can yield symbiotic advantages. Through the JV, the product-possessing entity gains access to existing distribution channels and clientele without requiring extensive infrastructure investments. On the other hand, the partnering entity augments its product portfolio, potentially amplifying revenue streams and bolstering customer satisfaction.

Furthermore, the strategic synergy forged through a JV extends beyond immediate commercial gains, fostering long-term collaborative relationships and laying the groundwork for sustained innovation and growth. By nurturing a culture of shared goals and mutual trust, JV partners can navigate complex market dynamics with agility and resilience, leveraging complementary strengths to capitalize on emerging opportunities and mitigate evolving challenges. This holistic approach to collaboration enhances operational efficiency and cultivates a fertile ecosystem conducive to continuous innovation and value creation.

When embarking on the initiation of a joint venture (JV) with a startup scouted as a corporate entity, it is imperative to meticulously undertake several pivotal steps to ensure the successful execution of the collaboration. These steps are grounded in strategic assessment, due diligence, clear communication, resource allocation, and continuous evaluation:

Strategic Alignment Assessment: Commence the process by conducting a comprehensive evaluation to ascertain the strategic alignment between the corporate entity and the prospective startup. This involves an in-depth analysis of core objectives, market positioning, and long-term visions to discern compatibility and synergy between both entities' missions and values. This initial assessment lays the groundwork for establishing a cohesive and mutually beneficial partnership.

Due Diligence and Risk Mitigation: Prioritize thorough due diligence to assess the viability, financial stability, operational integrity, and regulatory compliance of the startup. Scrutinize the startup's track record, market reputation, and leadership team to gauge reliability and mitigate potential risks. Additionally, identify any legal or regulatory obstacles that may hinder the JV's progress and proactively devise strategies to address them, thereby safeguarding the interests of all parties involved.

Clear Communication and Expectation Setting: Establish transparent communication channels and delineate clear expectations and objectives for the JV from its inception. Foster an environment of open dialogue and collaboration, allowing both corporate and startup entities to express their goals,

concerns, and aspirations openly. Clearly define roles, responsibilities, and decision-making processes to streamline operations and minimize conflicts throughout the partnership lifecycle.

Resource Allocation and Commitment: Allocate adequate resources, such as financial investments, human capital, and technological infrastructure, to support the JV's objectives effectively. Ensure a mutual commitment from both corporate and startup entities to allocate resources proportionately and prioritize the JV's success. Additionally, cultivate a culture of mutual accountability and dedication to drive innovation, agility, and resilience within the collaborative framework.

Continuous Evaluation and Adaptation: Implement robust mechanisms for ongoing performance evaluation and progress monitoring to facilitate timely course corrections and strategic pivots as necessary. Establish key performance indicators (KPIs) and milestones to track the JV's performance against predefined objectives and benchmarks. Embrace a culture of continuous learning and adaptation, leveraging insights gained from monitoring and evaluation to refine strategies, optimize resource allocation, and capitalize on emerging opportunities.

By rigorously adhering to these fundamental steps grounded in strategic assessment, due diligence, clear communication, resource allocation, and continuous evaluation, corporate entities can effectively navigate the complexities of initiating a joint venture with a startup. This approach enables the maximization of synergies, unlocking new avenues for innovation, growth, and value creation within the collaborative ecosystem.

6. Conclusion and Future Outlook

6.1. Critical Discussion

This paper meticulously examined how collaborations between corporates and startups can advance healthcare innovation, focusing on joint ventures as an innovation method. Different strategies, such as leveraging the agility of startups, establishing corporate accelerators, and redefining engagement models, were systematically explored to provide a comprehensive understanding of the mechanisms propelling transformation in healthcare through innovative collaboration.

The analysis of joint ventures highlights the positive impact of age similarity among organisational members on fostering a cohesive and collaborative working environment (Zajac et al., 1991). Understanding and effective communication are enhanced when people share generational perspectives, fostering innovative thinking and problem-solving. The sponsoring organisation's emphasis on innovation establishes the atmosphere for the joint venture, fostering a culture that appreciates and prioritizes imaginative solutions (Zajac et al., 1991). Participating in integrative activities is crucial for the joint venture to be fully involved in cohesive organisational efforts (Zajac et al., 1991). This helps foster synergies and efficient knowledge exchange, contributing to innovation.

Joint ventures are essential for economic growth as they establish new businesses, create jobs, and promote technological progress (Solheim-Kile & Wald, 2020). These ventures have the potential to address societal challenges, promote inclusivity, and contribute to community development through shared resources and knowledge, resulting in a positive social impact (Solheim-Kile & Wald, 2020). From an operational standpoint, joint ventures can improve efficiency by combining resources, exchanging expertise, and taking advantage of economies of scale (Harrison, 2006). Bringing physician offices together in one location enhances healthcare delivery, making the most of resources and enhancing patient care. Moreover, joint ventures have successfully achieved a reduction in staff turnover by fostering a collaborative approach and creating a work environment that is supportive and engaging (Harrison, 2006).

From a practical standpoint, organisations need to prioritise age diversity, foster a culture of innovation, and actively participate in integrative activities to fully capitalize on the advantages of

joint ventures (Zajac et al., 1991). Strategic planning is essential for centralising operations, which can lead to increased efficiency and better patient outcomes (Harrison, 2006). It is also important to align joint ventures with broader organisational goals and take a holistic approach that considers both the internal workings and external effects of joint ventures to foster innovation and achieve organisational success (Harrison, 2006).

The evaluation of corporate accelerators highlights the importance of carefully considering design dimensions such as proposition, process, people, and place when incorporating them into an innovation strategy (Kohler, 2016). Developing a unique value proposition for startups in these dimensions helps to align with corporate assets and goals (Mahmoud-Jouini et al., 2018). Managing relationships effectively involves focusing on the human element and encouraging teamwork and open lines of communication (Kohler, 2016). In addition, by involving corporate partners, startups gain access to valuable resources and networks, which enhances their overall proposition (Mahmoud-Jouini et al., 2018). Integrating the collaborative approach into the design dimensions leads to a balanced and efficient corporate acceleration strategy (Kohler, 2016). It guarantees that startups receive customised assistance and also make a significant impact on the corporation's innovation goals, fostering a mutually beneficial environment for success.

Collaboration models have evolved from traditional equity-based approaches towards shared technology (Weiblen & Chesbrough, 2015). This transformation demonstrates the successful combination of startup agility and corporate resources, resulting in a mutually beneficial relationship (Weiblen & Chesbrough, 2015). Shared technology adoption promotes innovation and enhances collaboration dynamics. This shift is significant, leading to lower organisational costs, improved operational efficiency, and increased flexibility. The approach showcases a strategic collaboration between startups and corporations, combining agility with resources to foster more efficient and flexible partnerships (Weiblen & Chesbrough, 2015).

Startup supplier programs highlight the importance of various essential factors that have practical implications for organisations (Kurpjuweit & Wagner, 2020). The process of consolidating internal startup activities entails the streamlining and optimization of in-house startup initiatives (Kurpjuweit & Wagner, 2020). It is important to develop a comprehensive plan for overseeing

internal startups, promoting teamwork, and minimizing duplication (Kurpjuweit & Wagner, 2020). The evolving nature of purchasing highlights a transformation in procurement strategies. Organisations must incorporate startup evaluations into their purchasing process, considering factors beyond the usual supplier criteria. This approach strongly emphasizes innovation and agility when choosing suppliers, which helps enhance the organisation's overall adaptability (Kurpjuweit & Wagner, 2020). Active engagement with external startups and innovation hubs is essential for promoting entrepreneurial ecosystems. Creating partnerships, fostering knowledge exchange, and leveraging external resources can greatly benefit organisations in terms of sustained innovation and competitiveness in the market. In light of these implications, it is clear that organisations must adopt a comprehensive and adaptable approach to startup collaborations, both within their structures and with external partners (Kurpjuweit & Wagner, 2020).

6.2. Future Outlook

The landscape of corporate collaboration in the healthcare sector is poised for substantial growth and transformation, ushering in an era marked by dynamic advancements and strategic synergies (Haleem et al., 2021; Johnson et al., 2021). As we navigate the evolving terrain of healthcare innovation, a profound emphasis on collaborative endeavors between established corporations and agile startups emerges as a beacon of promise. This collaborative paradigm is not merely a convergence of entities; it represents a strategic convergence with a shared vision to revolutionize healthcare through cutting-edge technologies, data-driven solutions, and an unwavering commitment to personalized medicine (Johnson et al., 2021).

Looking ahead, the collaborative efforts within the healthcare industry are steering it towards innovative solutions that transcend geographical boundaries. The surge in global partnerships reflects a collective commitment to addressing overarching health challenges through innovative means (Haleem et al., 2021). A notable trajectory on the horizon involves the ascent of digital health solutions, marked by the proliferation of wearable devices and the increasing prominence of telemedicine (Haleem et al., 2021). These transformative developments are a testament to the symbiotic relationship between corporations and startups, demonstrating the power of collective innovation in reshaping the healthcare landscape.

Within this collaborative tapestry, one key technological frontier stands out — blockchain. The integration of blockchain technology stands as a beacon of hope for significantly enhancing data security and interoperability within the healthcare domain (Reegu et al., 2021). This revolutionary approach promises greater efficiency and transparency, addressing critical data management and exchange challenges. Blockchain not only represents a technological solution but also signifies a paradigm shift in how the healthcare industry approaches data security and integrity.

Despite the undeniable potential, the healthcare industry grapples with multifaceted challenges in its pursuit of innovation (Reegu et al., 2021). Navigating intricate regulatory frameworks, assuaging concerns about data privacy, and seamlessly incorporating emerging technologies into established healthcare practices pose formidable obstacles (Reegu et al., 2021). The imperative to overcome interoperability issues remains a crucial agenda, demanding concerted efforts to facilitate seamless data exchange across diverse healthcare systems (Reegu et al., 2021).

However, viewed through a proactive lens, these challenges also serve as gateways to transformative opportunities in healthcare delivery. The industry is on the cusp of ushering in consistent data formats and compatible platforms, laying the groundwork for a more interconnected and efficient healthcare ecosystem (Reegu et al., 2021). The convergence of value-based care models and the escalating influence of health technologies present exciting prospects for sweeping changes in healthcare practices (Conicella et al., 2021). Within this crucible of challenges and opportunities, collaborations between healthcare stakeholders emerge as catalysts for innovations that enhance accessibility, affordability, and, ultimately, patient outcomes (Conicella et al., 2021).

In essence, the future outlook for innovation in the collaboration between startups and corporations in healthcare is characterized by a dynamic interplay of technological breakthroughs, regulatory navigation, and collaborative synergy. The evolving landscape promises enhanced efficiency and security in data management and a paradigm shift in healthcare delivery models, ultimately contributing to a more accessible, affordable, and patient-centric healthcare ecosystem. As we gaze into the future, the narrative of corporate collaboration in healthcare unfolds as a narrative of

collective determination to overcome challenges, leverage opportunities, and pioneer a new era in healthcare innovation.

6.3. Possible Study Limitations

This study has certain limitations that should be considered. It relied heavily on case studies, which may restrict the applicability of the findings to wider contexts. The included studies were either written in English or could be translated into English, which could have contributed to publication bias and potentially caused the study to miss out on valuable insights from non-English sources. In addition, the analysis may be limited in comprehensiveness due to the scarcity of studies that specifically examine collaborations between corporations and startups in the healthcare sector.

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7.1.Figures

7.2.Tables

8. Appendix A

Interview Transcription with Piet Verhoeve

Speaker 1: Piet Verhoeve
Speaker 2: Adrian Brodesser

Speaker 1: I started the recording, so normally it should be recording on my side.

Speaker 2: Yes, perfect. So then in this case, please just send me the recording later and then, okay, so let's start. Yeah, so again, to be very specific, the topic is developing a framework of how to create successful innovation with joint ventures between corporates and startups in the healthcare market. The questions are a little bit more general, especially the topic of joint ventures is something that I will do a lot of literature research on. If you have experience with joint ventures, helping with the development of joint ventures, of course, please feel free to also add some information about that, but it's not expected.

Speaker 1: I can also add, when I was at World Open Innovation Conference in Eindhoven last November, there was also an interesting presentation by the University of Eindhoven on a general framework for corporate versus startup cooperation. So I can send you that paper and a copy of the slides as well.

Speaker 2: Oh yeah, that would be cool. That would be very helpful. Yes, definitely. Thank you very much. Yes, that would be good. Okay, so maybe let's start. Can you give like a little bit of background? I mean, the question specifically is what company do you work for, but really what I mean is, you know, in what environment do you work for? What is your day-to-day job? What are the tasks involved, especially in the topic of innovation?

Speaker 1: Okay, so my main focus, and actually it's also my main focus throughout my entire career, has been on fostering innovation and more specifically innovation through collaboration. So setting up collaboration between different organizations in order to create new innovative solutions that can go off into markets.

Speaker 3: In my career, I have been, my main background is in electronics and ICT. And I have been active in healthcare since 2004, but my activities have never been limited to only

healthcare. I've also done it, for instance, for piano construction, for furniture, for all kinds of things, but healthcare is something that keeps coming back again to me. Also because healthcare, in my opinion, is kind of a special market.

I think you'll notice that as well already. There are a number of rules and regulations that make it that, and also the nature of healthcare makes it a different market if you compare it to, for instance, normal ICT business or app business and so on, which makes that you need to do innovation in a different way. The second thing I really like about healthcare, and it's also typical for all kinds of innovation fostering that I do, is that immediately with healthcare you are in an interdisciplinary context. You have the healthcare professionals, you have the IT guys, technology guys, the regulation makes it very interesting for me to work in.

Speaker 2: Yeah, definitely. I think also something that I always tell people, in my personal opinion, I think healthcare is so exciting because it feels like compared to, for example, to the automotive industry, there is still so much that you can do. It feels like no matter where you look at, there is still a lot of the things are still, and of course that makes sense, are still very human centric. So it's just really the doctor, the patient, which of course makes sense because it is so complex, but just in general technology, if we're not looking at, for example, specific medical devices, but just in technology to enhance the patient experience, of course in the last two years a lot of things came to market, but in general it's a very young market.

Speaker 1: And I think the human aspect at the same time is also the reason why it is slow adopting for technology, because the traditional, let's say electronics and ICT methods of trial fail fast, learn fast, go to the next version and integrate on that is in healthcare kind of impossible, because you cannot, let's say, try a pacemake and then come to the conclusion, oops, the patient has died, let's try a new one.

That's luckily not allowed on its own, which means that a lot of safety needs to be built in, hence your trial and error or your iteration phases have to be much slower.

Speaker 2: Yeah, definitely. So the next question would be very, very general, how do you define successful innovation and not in healthcare and not in joint ventures, but just in general, what is your definition of successful innovation?

Speaker 1: For me, successful innovation and I use a very generic formulation for that. For me, successful innovation is a change that brings value and can be brought sustainable to deployment, which means that deployment can be either a commercial market deployment or can be a societal deployment, which is not that commercially oriented, but it needs to be sustainable. So something that can go into solution space can be adopted and that people keep on using so that it has, that a real life cycle start, whereas sometimes you see hype's innovation, where it is very successful in the beginning and that quickly drops out or fails, or it is interesting.

A lot of people are interested, but nobody wants to invest or nobody wants to adopt. That's not my definition of successful innovation. It needs to be changed, that brings value and then has sustainable deployment.

Speaker 2: And do you think you can actually plan or really not guarantee, but can you actually, because you mentioned sustainability, that that is actually a very important part, of course, not sustainability in the context of climate change, but sustainability in the context of being able to survive on its own, I guess. So how would you say that you can plan for sustainability in the context of innovations? So, Nuu, how do you think about processes, how to implement it sustainably at the beginning when you start something new?

Speaker 1: I think a lot of the sustainability has to do with the fact that it needs to have a business moral. And I think that's something where especially healthcare innovation has gone wrong in the past in the past decades, is that due to the human-centered nature, due to the patient-oriented, due to the societal value of healthcare, there was this notion that it was not allowed to be economical. So if you aim for societal benefits, then it's, to some extent, people even said it cannot have an economical benefit. Whereas in most of the cases, you need at least some economical benefit in order to make it sustainable. Otherwise, people have to keep on paying for something. And if the value is not there, and it has an increasing cost over time, unless you have a sustainable economical model supporting the societal advantage, it will never get there. So for me, that's an important part. If you want to have change which is adopted, which is deployed in a sustainable fashion, it needs to have at least some economical business model to support and keep on using it, keep on producing it, keep on delivering the service, keep on adapting the service to future needs, or even, and especially with software, contrary to mechanical stuff, software stops working if you do not have maintenance.

Let me explain. If you make a hammer, it's a pure mechanical device. If you do not maintain it, it will keep on working for a decade, at least software. If you do not maintain the software, if you do not change the software over time, the next version of Windows or Apple OS or whatever

type of OS it runs on, could break your software. So you need the maintenance. And in order to pay the maintenance, you need the business model.

Speaker 2: And I really like that you said, you know, it always is also in the context of the economic system that you live in, because of course, you know, it medical or healthcare innovation, to some extent, you know, also needs to have an economic innovation or like impact in order to be sustainable, like you said, because otherwise people are just paying. But I think that is something that is super good to hear. And I wrote it down as well, that of course, this is important to also state that this is of course, only the case in the current system that we live in. So I think that is that is important to understand, right? It always depends on the system that of course, you try to build innovation.

Speaker 1: It depends on the system you're building on. But economic doesn't mean for me, economic model does not mean fully the full capitalistic company model. It's what I've also seen, especially in healthcare and innovation in the past 20, 30 years, is that at least in the Belgium system, there's always a third payer somewhere in at play, meaning that I pay a portion of my drugs or my medical activities. And the other portion is being paid by the government or the health insurer or combination of and so on. And to some extent, in healthcare innovation, some of the patient's centric views limits the payment notion, payment only to what the patient contribution is of the overall fee to be paid. And that generates a notion that everything should be extremely cheap, which in most cases is not the facts. Okay, maybe it's cheap for me as a patient to get a certain drug. But if the government is paying a lot of money on top of that, it's not a cheap solution in its own on the aspect. Now that being said, also one of the thresholds in healthcare and innovation is that and I still see innovative projects like that, where companies say, okay, we will build a solution. And once the solution is built and proven, we hope that the government will pay the bill. That doesn't work either. Because then you have a business model based on hope rather than on numbers and equivalents, which is not in most cases not sustainable.

Speaker 2: Yeah, you're talking about the reimbursement, especially for the now. I mean, in Germany, right, you have the DIGA, which is of course trying to do a lot of that. But I see a lot.

I totally agree. I see so many startups that really just build their product. And then when you talk about how do you want to make money?

How do you want to live? Most of them say, we just will get reimbursed. And then it's like, okay, that's not the strategy.

But yeah, all right. Since you have already seen a lot of innovation and hopefully successful innovation, successful, sustainable innovation, what would you say are the main success factors that you observed when you worked? And I mean, I don't know if you have worked with corporates and startups together. What do you see are like the main factors that have to be always on point in order for innovation to succeed in a setting between startups and corporates?

Speaker 1: What I mainly see is that, okay, first of all, there's the solution that needs to be there on its own, of course, but and the solution needs to provide value.

Otherwise, it doesn't work either. The other far most important one is the level of trust between the different organizations. You need to be able to go to a level where, okay, you still have the intellectual property rules. You have non-disclosure, you have contracts and so on. But in the end, it's organizations who sign the contract. But it's the people and the team who collaborate together. And I've never seen a contract working better than the team on its own. If the contract is good and there is no trust, it doesn't work. If the contract is badly written, but there's a lot of trust, then you can even collaborate without contracts. I wouldn't advise it, but it can be done.

Speaker 2: No, that makes sense. Maybe I can give some examples. For example, do you see how important this culture is? When you have collaboration between startups and corporates, do you see that there are specific points that need to be present in a team or in a team dynamic in order to function at this level? Do you see that there are certain things that just always repeat themselves?

Speaker 1: What I mainly see for the successful collaboration is that you need to have sufficient open mindset on both sides, assuming a two-party collaboration, but also you need to have sufficient trust and respect on both sides. So the startup world has to accept that certain stuff is different and more complex or more delaying in the corporate, whereas the corporates have to accept that and respect that sometimes startups don't follow the rules as they think, as the corporate thinks, it should be done. And I've seen it also when corporates try to build in startup culture in their organization.

That's one of the first things they need to do. They can create a virtual startup team and have these five people are now in a separate entity, but as long as those five are within the big corporate environment, it's difficult because then you need to explain to the purchase department that those five people can indeed decide to buy something with a credit card instead of having to first go for a purchased order or having a mover for a supplier and so on. So that creates a lot of friction and I've seen corporates creating such virtual startups and actually putting the teams outside of the company, which brings them closer to the startup, but still that's kind of virtual startup because you're not full skin in the game in your virtual startup. There's a big difference in being sure that your salary will be paid at the end of the month, which is that kind of virtual startup and you see it with a lot of university professors in startups as well.

They like startups, they like being the entrepreneurial type professor, but at the end of the month, their salary is guaranteed. And that's a different risk profile and it's a different mindset than if you're full in the startup and full skin in the game inside it. And I've seen it on my behalf. I've also had a period where I was partly still in an employee state and partly in starting up my business compared to the day I went fully into my business and I dropped the employee position. Within that one week, a number of decision mechanisms in my head completely shifted because all of a sudden, if you are full skin in the game, which you are typically in a startup, it also means that you either have to explain to your wife or your kids, okay, salary, rent, going to school, university, that type of stuff. It also becomes part of the risk equation at that time.

Speaker 2: Yeah, makes sense. And have you ever seen corporates actually when they make like a spin off, I guess? Have you ever seen that something like this is actually implemented so that the people who work in the spin off, because that is something I think a lot about. If you create a spin off, is it smarter to actually take, for example, the best people in your corporate environment or is it always better to hire completely new because again, it's not possible to have this culture cut, I guess.

Speaker 1: I think there are definitely corporate people with the right culture to shift into startups. That's a matter of culture, it's also a matter of personal interest and so on. There are definitely, you see it today as well, you see people doing some time in corporate and then jumping into a real spin off company or starting up their own and so on. So it works, it's possible. But you still need to be able to, if you fully go on board of a startup, you have to take all the risk with you in it. As long as you're not willing to take the full risk, I think in my opinion you cannot call yourself a startup entrepreneur.

Speaker 2: Yeah, yeah, no, that's a good point. Yeah, yeah, makes sense. And then the last question would be, have you ever worked with or in a context where, you know, the setting

startup corporate was established. And then the question is, how do you define KPIs? So what I've experienced from like a colleague who worked exactly in one of those settings, he was on the startup side, so that it was a spin off from a corporate. And he was just really miserable because of course the corporate, I mean, they were very open to this, but they tried, of course, because the startup required money every month, every year, because it was a startup, you know. And so they tried to implement some kind of KPIs and these KPIs were of course directed by the CFO of the corporate. And he tried, of course, his best to be open minded, but still he had corporate KPIs. And so the startup really struggled to meet those KPIs. And so my question would be, have you ever experienced or implemented KPIs in the context like this? And what would you say is like a middle ground where the startup of course has some KPIs that he or she has reported to, but at the other side the corporate has some kind of controlling power since they basically are the main shareholder investor.

Speaker 1: Well, it depends. In my opinion, collaboration definitely not always means that the corporate is main investor on it. I think that's one of the easiest ways to kill startups. If you go corporate as main investor and you imply all the corporate KPIs on top of the startup. Even if the corporate is just an SME or something, there's no big deal. But if you have KPIs which are mainly oriented towards going concerned running business type of KPIs, for instance, I've seen it in SMEs where they start up new activities. So not full startup on its own, but you start up a new business unit and you start measuring the new business units with the same KPIs on running break even time and so on.

As your business that is already running for a decade, you're going to kill the new initiative straight off. Because you need to take into account that it needs to modify, that it needs to shift to pivot and so on in order to get there on its own. So I think in terms of KPIs, to some extent you need KPIs in order to measure what is going on. But the key differences in an early stage, the KPIs need to mainly be there to measure what is going on and is there progress and is it going? And it should be a KPI from a measurements perspective and not from a target perspective.

That's the typical thing. There's a specific, I think it's good or slow, that states the moment a measure becomes a target, it ceases to become a good measure. Because you are then working towards the target, no matter what in view of targets. In Belgium, I found a very nice example on how KPIs can actually steer completely wrong and it's a totally different business. It's the railway system in Belgium. So railways are notorious for not running on time. So at a certain point in time, there was decided that the Belgian railway would get a KPI on that much percentage of the trains need to be on time. So the net results, what they did, they defined a KPI stating it has to leave on time at the first station and end on time at the last station on the trajectory. So for instance, it would leave on time in Cologne and arrive on time in Berlin.

That's what they measure. The net results is actually that some clever guys found out that it does not need to be on time in the ones in between. Because it's just the beginning and the ending. So what they did, they built in additional spare time in each station. So with the net results now that today, a train can leave on time in Aachen, can be in Brussels half an hour late, I can still get on time in Ostend. So from the KPI target perspective, that's great. It's on time from a customer perspective, from a value perspective for selling that train. It's bad.

And that's typically how for me, it's a good illustration. And that's the question. If a KPI becomes a stringent target, and that's what I read in your scenario on corporates and they have difficulties with it because corporates are used to having KPIs as real targets, you have bonuses and so on linked on it. And then they become strict, which is kind of difficult in especially in the early phase of startup, where you need that flexibility to adapt to pivot to to to accommodate on it. And what I see in terms of, if I look at the VC world for startups. Okay, VCs also have put in KPIs for additional investment rounds, but they are more defined on a macro business level. So either on the number of the number of customers or on a specific turnover, defined or even the team should be that size by that time, if you need it and so on. So more on a macro level, rather than on on the details where typical corporate KPIs are defined in order to measurement measure the management, the management capacity and attribute bonuses.

Speaker 2: That makes sense. Yeah, not it was a good example. Yeah, very cool. Yeah, no, no, that's very cool. I really like the train example. I think that's a that's a good one to really, because I was struggling at the beginning to understand the quote but now that makes a lot of sense. Yeah. That's very good.

Yeah, so from from my side, there are still some some minor question but I would I would skip them, because you know we're nearly out of time the main questions I've already asked you so thank you very much for this. And if possible, so the recording if you could send this to me that would be highly appreciated so I can, I can put that into text. Of course, I will send you and the my master thesis. Once it's finished, you know, so you can also take a look at it. And if you're interested, do not expect it to come in the next couple months.

I think, but you know once it's finished, I'll definitely definitely send you a copy so that you can also take a look if that's interesting to you. And, and, and yeah, so from my side. That's it.

Thank you very much for your time. We need some great insights. And glad that we recorded that we recorded this interview. I will also before I write my thesis if I had to use if I use some quotes. Of course, I will write you in order for you to say that this is okay for you.

Speaker 1: Yeah, definitely. And if you have additional questions in the meantime, you, you have the link now to book to book another session.

Speaker 2: Perfect, I will do that. Thank you very much. Then, you know, again, have a nice start into 2023 today's your first working day you said right. Yes, yes, that's have a nice first working day and we see each other in Berthaus in some context. Yes, definitely. Perfect. Thank you very much.

8. Appendix B

Interview Transcription with Heimo Hammer

Speaker 1: Adrian Brodesser
Speaker 2: Heimo Hammer

Speaker 1: So, das sollte jetzt eine Nachricht bekommen haben. Perfekt. Gut, dann drehe ich kurz mein Video ab, damit das ganze bisschen energieschonend ist. So, super. Gut, ich fange euch mit der ersten Frage an. Die ersten würde ich überspringen, was ist der Name, Position, das weiß ich ja alles. Wie würdest du erfolgreiche Innovation definieren?

Speaker 2: Also ich würde erfolgreiche Innovation so definieren, dass es da drei Komponenten gibt, das eine ist, inwieweit es eine Erneuerung meines Basisgeschäftes ist. Das kann sein produktmäßig oder technologisch. Das zweite kann sein, dass ich das Thema Innovation auch mit dem Thema Wertschöpfung neu bezeichnen würde. Das heißt, dies ist eine Wertschöpfungskategorie in meiner Unternehmung, die ich bis heute nicht hatte oder in der Form nicht hatte. Weil am Ende des Tages, es muss ja auch Innovation wertschöpfend sein. Und das dritte ist, und das ist irgendwann der Punkt, gibt es Möglichkeiten am Markt, nicht von mir heraus, neue Dinge in meine Unternehmung zu holen, weil ich glaube, dass Innovation nicht nur von innen nach außen stattfinden kann, sondern auch von außen nach innen. Und meine Erfahrung ist, dass eigentlich sehr viele Erneuerungen in bestimmten Industrien dadurch zustande kommen, dass sie von anderen Industrien sozusagen ausgelöst wurden. Also das würde ich sozusagen beantworten.

Speaker 1: Und Wert, weil du gesagt hast, Wertschöpfung muss gesteigert werden, wie würdest du dann in dem Fall Wertsteigerung sehen? Also ist es wirklich, muss es kommerziell sein in deinen Augen?

Speaker 2: Bei dem Thema, ich wollte deshalb das Ganze ein bisschen wirtschaftlich definieren, weil natürlich beim Thema Grundlagenforschung oder beim Thema, wenn man zum Beispiel eine Firma hat, die eine große R &D-Abteilung hat oder generell im Forschungsbereich unterwegs ist, dann kommt sich immer darauf an, wie die Firmenstruktur ist. Also ist es eine Firma, die zum Beispiel, das wir jetzt Pharmafirmen hernehmen, das Beispiel ist ein Extrembeispiel. Da ist natürlich die Wahrheit, zwei Geschichten. Das eine ist die sogenannte Grundlagenforschung, die sehr breit ist, wo sie natürlich mit 10 Jahresplänen Dinge entwickeln.

Und auf der anderen Seite haben sie dann halt einen Treffer in 10 Jahren, das wird dann kommerzialisiert, auf dem Rahmen einer globalen Strategie ausgeholt und das ist dann das Cashmodell in dem sie ausfahren. Das ist wie in der Pharmaindustrie so, mit den ganzen Verlauf Studien. Im Bereich der normalen produzierenden Firmen ist es so, dass die Innovation normalerweise mit neuen Modellen quasi die Verbesserung des Bestandsproduktes beinhaltet. Das ist für mich eigentlich eine, ich finde, eine Innovation, muss ich das sagen. Und das andere ist, wenn sie dann für bestimmte Zwecke neue Geräte entwickeln und diese Geräte dann am Markt bringen. Und ich glaube, in der Produktebene, von der man gerade reden, ist ja Innovation jetzt auch nicht nur, dass die Leistung des Produktes effizienter erbracht wird, sondern dass auch verschiedene andere Kriterien immer mehr eine Rolle spielen. Es gibt ja auch nachhaltige Innovationen, wo der dann Produkte herstellt, die dann halt im Ende des Tages weniger Energie verbrauchen und dadurch auch logischerweise in der ökologischen Fußballgeschichte sozusagen besser beurteilt werden. Das hängt ja ein bisschen dann von der Firmenstrategie ab. Aber im Grunde genommen muss es nicht immer mit der Wertschöpfung definiert werden.

Speaker 1: Jetzt zum Thema Innovation. Du machst ja, ich meine, du hast ja mehrere Firmen, aber du hilfst ja Unternehmen, wie wird es beispielsweise auch Lkw Walter jetzt beispielsweise beim Aufsetzen von diesen neuen Venture-Armen. Der dann auch sehr viel mit Innovation zu tun hat. Wie kommst du da oder wie hilfst du da den Kunden genau diese Fragestellung? Also wie definieren Sie erfolgreiche Innovationen? Wie hilfst du Ihnen da, diese Frage für Sie zu beantworten?

Speaker 2: Das ist leicht. Es gibt im Grunde genommen wie bei der Waltergruppe. Das ist eine sehr, sehr erfolgreiche Familienunternehmung. Und ich glaube, da muss man aufpassen, wie denn die eigene Firmenstruktur von solchen großen Firmen ist.

Das ist eine Firma mit 2,6 Milliarden Euro Umsatz in einem Transportbereich, insgesamt über 5 Milliarden Euro. Und die haben im Grunde genommen in jeder Gesellschaft, die unterhalb der Juling sitzt, sogenannte Innovationsmanager. Und das Problem der Innovationsmanager ist, dass sie oft nicht in den Arbeitsprozessen integriert sind, auch nicht unbedingt Geld verdienen, oft auf fremde Ressourcen zugreifen müssen und oft die sogenannten Projektverschlägen im WP-Skinland eingebunden sind. Und da ist es so, dass dieser Prozess, wenn solche Innovationsprojekte laufen und vorgeschlagen werden, diese Prozesse eher sehr unstrukturiert ablaufen, bis sie entstehen und dann versucht bei einer Struktur zu bewerten, was bringt mir was. Und sobald dann diese Geschichten eben Prozessverbesserungen sind oder Kerngeschäftverbesserungen sind, dann wird das auch implementiert. Aber auch Geschäftsmodellsverbesserungen gibt es da auch. Aber dass es wirklich neu ist, versuche ich dann so zu machen, dass es dann außerhalb der Bestandsorganisation gemacht wird.

Warum? Damit man ungestört und fokussiert in einem Zeitraum vor 3 Jahren, wenn man schaut, wie kann ich denn die Innovation aufsetzen? Und da ist offenstandeneckbewalter jetzt soweit gegangen, als Gruppe verstärkt, Companies zu bilden und auszugründen. Und das Zweite ist, wo quasi von innen heraus eine Firma gegründet wird, und das Zweite war dann der umgekehrte Weg, wo man eben in innovative Betriebe hinein investiert mit der Venture Company, um dann von diesen Betrieben, wo man beteiligt ist, bis zu einem Drittel, mit der RUM NOHA oder vielleicht auch Mark zurückzuholen. Und meine Beratungsleistung ist die, wo ich dann immer überlege, was ist Kerngeschäft, was ist nicht Kerngeschäft, bzw.

das ist auch eine wichtige Frage, was ist Zukunftsgeschäft und was ist kein Zukunftsgeschäft. Und da schaue ich mir immer an, nicht die Zahlentwicklung vom Haus, sondern ich schaue mir an Märkte. Und bei den Märkten schaue ich mir an, wo ist Elke Bewalter schon drinnen, wo entstehen neue Märkte und was muss Elke Bewalter tun, um in neu entstehende Märkte.

Mir ist relevant, möglichst früh reinzukommen. Und bei den Start-ups sind es so, das sind oft die neuen Märkten drinnen und dabei mit meiner Empfehlung bis zu zehn Start-ups jetzt einmal zu wählen, um relativ früh in diesen neuen Märkten dabei zu sein.

Speaker 1: Das heißt, du ist auch Elke, also jetzt beim Beispiel Elke Bewalter zu bleiben, dass du es denen auch tatsächlich, also wenn Sie sagen, Sie wollen diesen Venture am Gründen, dann werden Sie ja einen, also sich überlegt haben, wieso Sie das machen wollen und ich nehme mal an, es wird eben das Thema sein, wie können wir langfristig neue Geschäftsfelder öffnen. Und das heißt aber, in dem Fall hast du mit Ihnen zusammen gearbeitet, damit Sie überhaupt definieren, was diese Geschäftsfelder sind oder wussten Sie das schon.

Speaker 2: Es ist so, dass es so gibt, zwei Teile. Beim Thema Vero konkret. Ja. Und war das so, dass ich dermaßgeblich beteiligt war, dass das keine Teilorganisation der Gruppe wird, sondern die Elke Bewalter Gruppe hat mehrere Standbeine und ein Standbein ist eben der Transport und den zweiten Standbein ist das Thema Raum, also Containerlösungen. Und da war meine Überlegung zu sagen, lasst uns doch was das Thema digitalen Geschäftsmodelle Betrieftung, speziell das Datengeschäft, was du ja kennst durch meine Präsentation, habe ich gesagt, lasst uns doch da einen eigenen Stream aufbauen und aus dem Grund haben wir dann Vero gemeinsam gemacht. Und das ist ja auch von gestanden eine sehr gute Geschichte geworden. Bei dem Thema der Adventure-Capital-Geschichte war das so, wie schafft man es innerhalb der Firma Innovationsprojekte zu starten und zu machen? Da hat Walter entsprechend diesen Buch Corporate Robocell die Strategie verschiedene kleine Einheiten innerhalb der Firma zu machen. Das heißt, die haben diese Zellen und diese Zellen sind auch an und für sich für Dienstleistungen

und Services und damit auch für Produkte zuständig und die kümmen sich dann direkt um Kunden.

Und ab und zu kommt, dass diesen Zellen einen Vorschlag und dann überlegt man sich, kann man diesen Vorschlag umsetzen und ist der Vorschlag für die ganze Firma relevant oder aber ist das ein Vorschlag, der mit dem Kerngeschäft nicht zusammenhängt, aber für Walter wichtig ist und ausgegründet werden soll. Bei dem Thema Adventure-Capital geht Elke Bewaldler mit der sogenannten Hämt und Rock Reihenfolge vor. Jetzt hat man ja mal Adventure-Capital-Felder definiert, die nahe am Kerngeschäft sind.

Speaker 1: Noch ziehen. Und dadurch, dass du ja schon mehr solche Firmen Ausgründungen begleitet hast, aber natürlich auch Corporate Investments gibt es da, sagen wir mal, ein paar Punkte, ich muss keine konkrete Zahl jetzt sein, gibt es da ein paar Punkte, die du merkst, die sind jedes Mal die entscheidenden Faktoren, ob dieses Startup erfolgreich wird oder nicht. Was ich damit meine ist, gibt es entscheidende Faktoren bei genau dieser Schnittstelle Corporate Ventures, Corporate Startups, wo einfach in der Zusammenarbeit gewisse Punkte, diese Keyfaktoren sind, auf die du mittlerweile einfach schon so acht gibst, weil du weißt, dass wenn die nicht passen, dann ist das Startup von Anfang an schon zum Scheiternvorteil.

Speaker 2: Es gibt offen gestanden von verschiedenen Beratungsfirmen, sogenannte Keyfaktorenindicator, da es gibt hier verschiedene Firmen wie zum Beispiel McKinsey und Co. oder Oliver Weimann, die im Grunde genommen im klassischen Beratungskoffer drinnen Checklisten haben, wo sie versuchen, relativ strukturiert die Firma abzuholen, wo sozusagen ein erfolgreiches Startup hineinfallen soll. Ich persönlich glaube aber, dass das ein sehr falscher Ansatz ist, weil wir im Grunde genommen eine bestehende Organisation haben mit einer sogenannten Schablone, versuchen gern Chorwerte herauszufinden und dann all das, was dem nicht entspricht, ist quasi neu. Ich glaube, dass eine Firma neben dem, was sozusagen ihr Kern-DNA-Thema ist, immer eine Marktu-Rendierung haben muss und ich habe gelernt in meinen letzten drei Jahrzehnten als Unternehmer, dass im Grunde genommen das Thema Märkte finden, das Hauptthema ist.

Viele Firmen haben oft eine gute Produkte oder Innovations-EDE, viele Firmen, die ausgegründet werden, haben das Glück, dass sie eine potente Mutterkampagne haben, die ihnen Shared Services anbietet wie HR, das ganze Thema Organisation, das ganze Thema Real Estate, das ganze Thema Vorfinanzierung, aber im Grunde genommen ist es sehr wichtig, den richtigen Markt für sich zu finden und bei dieser Marktfinden haben diese Firmen, die ich betreut habe in den letzten Jahren, da sind jedoch sehr viele Große dabei, immer ihre Brille auf, immer ihre Brille aus ihrer Branche, immer ihre Brille, wie sie es in der Firma machen, immer ihre Brille

sozusagen ein bisschen pizter eigenen Firma gut haben, wie es spiegelt und im Grunde genommen denken die Firmen nie so, wie wenn ich jetzt ein Gründer wäre, wie könnte ich meine Grundidee der Firma auf den Markt bringen und da glaube ich ist es sehr wichtig diesen Methodenkoffer zu verlassen und das Thema Zielmark zum Beispiel von Produkten, die das oft gesehen jetzt in der Vergangenheit nur Firmen gegründet wurden und wo dann sie in einen sehr verwandten Markt hineingekommen sind und im Laufe von drei Jahren, wenn sie genügend finanzielle Mittel hatten, sind sie darauf gekommen, dass das sehr wichtig ist, ganz woanders einen Markt haben, wo sie auch gut gilt, für den es spiel oft sind, die Firmen mit einer Grundidee gestartet und haben in drei Jahren Erfolg, weil sie eben in einen anderen Markt gelandet sind, sprich wenn die Grundidee, die du hast, nicht nur eine Branche-Lösung ist, sondern eine Grundidee ist, die du aus einer Branche gegründet hast, kann es durchaus sein, dass du in einer anderen Branche schneller zum Ziel kommst. Am Beispiel der Digitalisierung, also die Transportbranche ist ja anders für sich eine, die jetzt gut digitalisiert wurde, allerdings war sie nicht die innovativste Branche von Anfang an. Und wenn du jetzt schaust, wenn du digitale Lösungen anschaust, dann ist es oft so, dass du mit einer digitalen Lösung immer genau den Zeitpunkt erreichen musst bei dem Startup, wo eine gewisse Branche sich zum Beispiel digital öffnet, digital stärker annimmt, dann bist du vom Timing her genau richtig. Und das ist glaube ich das Wichtigste, wenn du eine Firma gründest, dass das nicht nur nach dem schlechten Spruch von Victor Ego ist, nicht so stark, wenn die Idee einen Zeit gekommen ist, sondern du musst sozusagen schon einen Schritt davor haben, du musst die Idee haben, du musst mit der Idee eine Lösung erarbeiten und lustigerweise im zeitlichen Setting findet dann diese Idee den Markt, bei zu sagen, ich plane ein Produkt für den Markt von morgen, also unter uns das Gezeltengut.

Speaker 1: Ja, spannend, ja ich habe ja auch also das ja auch von dem, was ich bisher gelesen habe, das so einer der entscheidendsten, eigentlich der einer der entscheidendsten Erfolgfaktoren, ob einmal sagt jemand das Team und so, aber das ja eigentlich einer der erfolgreichsten oder der wichtigsten Vertretern, wie ich das Timing ist, dass ob eine Idee erfolgreich wird oder nicht, aber zu dem Thema hattest du das einmal, dass so eine Firma dann, weil uns bei Soma gezogen auch ähnlich, wir haben eine Vision gehabt und merken jetzt eigentlich relativ schnell, dass das was wir gebaut haben in anderen Bereichen viel spannender ist. Wir haben natürlich kein Co-Pret-Invester, das heißt wir können jetzt auch diesen Markt nachgehen. Wie würdest du dann so ein Co-Pret, also beispielsweise LKW Walter dann beraten, wenn du siehst, eins von diesen Start-ups hat vielleicht tatsächlich viel mehr Potenzial, beispielsweise im Healthcare Bereich als da, wo sie gestartet sind, sagst du dann, dadurch, dass es nicht mehr zum Unterpass ist, dass dann nicht mehr Teil des Konzeptes oder kann das dann auch wirklich offen in dem Bereich weiter wachsen?

Speaker 2: Also unter uns, ich glaube, dass das sogar, also wenn du weißt, wie Nuk hier, die ganzen Firmen oder Samsung, was die am Anfang gemacht haben, du siehst ja dann das im Laufe der Zeit, in eine Firma wird dann im Grunde genommen in irgendeiner Form Marktübertunity sehen und in deinem Bereich ist es so, also angenommen wie ihr für Healthcare perfekte Lösungen entwickelt und ihr kommt da auf, dass eure Lösungen die hattest für einen

anderen Markt geeignet sind, dann würde ich offen gestanden und mir überlegen, okay, die Firma ist noch jung, die ist doch klein, wie mache ich das?

Ich würde dann auf alle Fälle um die um die eigene Position von deiner Firma nicht zu verbessern, ich würde dann eine sogenannte Zweitmarke machen und diese Zweitmarke würde ich dann Branchen unabhängig platzieren, das heißt ich würde dann gesetzt im Fall, dass das möglich ist, sogenannte Weitlebelösungen aus deinem Konstrukt rauslösen und sie anderen Branchen anbieten. Im Grunde genommen müsst ihr Dexcodes beschäftigen und die Dexcodes haben eine einzige Aufgabe, Lösungen die ihr für den medizinischen Bereich entwickelt habt, für andere Branchen, Sklenern anschauen welche Lösungen es gibt und wenn ihr dann merkt, der der Lösungen identifiziert, wo ihr sozusagen der nächsten Schritt anbieten könnt, dann müsst ihr halt dann von euch das Seelsentsprechen diese Kunden sozusagen kontaktieren. Im Grunde genommen, wenn man Technologie hat, muss man immer schauen, dass die sozusagen auch Branchen übergreifend Möglichkeiten und Märkte hat und ich glaube das macht der gerade.

Speaker 1: Und eben im Fall von einem Corporate Adventure würdest du dann sagen, das ist definitiv etwas, also das ist eh schon vorher angesprochen, wenn man sich anschaut eben wo alle Nokia und all diese Firmen herkommen, das heißt ich nehme mal diese Antwort, dass du persönlich das nicht per se schlecht findest, wenn sich dann so ein Startup weg von der Mutter entwickelt.

Speaker 2: Überhaupt nicht, also ich glaube zum Beispiel das Thema ist ja das, das gibt ja diese schlechte Formulierung die heißt der Markt hat immer recht, der Markt ist allerdings auch dumm, der Markt kauft auch zum Beispiel alte Lösungen öfter ein, weil er sich gegenüber neuen Lösungen noch nicht durchringen kann, das ist menschlich und was bei dich betrifft zum Thema ist es sinnvoll, den Fokus zu verlassen oder den Markt zu verlassen, das muss meiner Meinung nach immer fundiert danach abgeleitet werden, ob es im Rahmen der Opportunities strategisch heißt für mich im Kernmarkt die richtige Lösung etablieren, aber geschäftsmodellmäßig musst du auch überlegen, gibt es die Möglichkeit über eine Verwendung des Know-Hows, einen zweiten Schritt, das ist bei Software-Service zum Beispiel, kann es ja dann entsprechend anbieten oder bei Weitklebellösungen bei euch bei der Frage sein, gibt es artverwandte Branchen oder andere Branchen die euer Know-How anders einsetzen können und dann musst du eben hier einen Weg finden dieses Know-How am Markt entsprechend zu verkaufen, ich würde es auch dringend anraten, weil ihr wenn ihr im medizinischen Bereich euch gut etabliert aber nicht so durchsetzt wie euch das erhofft habt, müsst ihr in irgendeiner Form Möglichkeiten am Markt gesehen haben und auch diese Möglichkeiten sozusagen zu nutzen.

Speaker 1: Wenn jetzt du im Lkw-Walter, sorry dafür, das wird jetzt eine Woche der Aufhänger, wenn du einen Co-Pret bei solchen Ausgründungen begleitest, auch wenn Team nicht das wichtigste ist oder es ist doch ein sehr sehr wichtiger Teil davon, wie suchst du das Team aus, machst du da, berätst du da, dass du sagst Teile können tatsächlich vom Co-Pret kommen, weil die einfach die Leute sind, die dieses Business am besten kennen oder sagst du gar nicht Co-Pret, weil da das Co-Pret Mindset dann mitgenommen wird nur extern, wie gehst du damit um?

Speaker 2: Ja da gibt es gerade, da gibt es eigentlich, da gibt es zwei Grundregeln, das hast du perfekt auf den Punkt gebracht. Man kriegt aus einer bestehenden Organisation die Kultur nicht raus. Das heißt, man muss, wenn man dann diese Ausgründung wacht, muss man in die Geschäftsführung des neuen, des neuen Ventures, des neuen Co-Prets unbedingt in die Geschäftsführung auch neue Leute setzen.

Das heißt, dadurch hast du einfach hier von der Steuerungs-Ebene her, von der Mensch-Mit-Ebene her, eine andere Sicht auf die Dinge. Und das Zweite ist, all das, was Richtung neuen Markt geht, auch hierfür musst du neue Leute holen, weil im Grunde genommen du sonst immer nur an die Bestandsfunden verkauft, sondern bestehenden Organisationen. Und dann würde ich mich fragen, warum habe ich überhaupt ausgegründet? Das heißt, du musst, wenn du eine aus, eine Company-Bilding-Geschichte machst, mit ein Avenger reingehst, versuchen, möglichst viel von diesem neuen Markt, von diesem neuen innovativen Produkt entstehen zu lassen. Besonst wirst du immer im gleichen Sub-Schmoll, immer die gleichen Regeln enthalten, immer die gleichen Geschwindigkeiten haben. Und das Problem ist, dass große Corporates langsam sind, hinterm neue Dinge durchzuführen, auch nicht sehr risikofreudig sind. Und das ist aber bei einem Start-up völlig anders.

Und aus dem Grund musst du auch im Start-up, das vielleicht dem Markt noch gar nicht kenne, sucht oder sich schnell anpassen muss oder schneller entwickeln muss, da musst du definitiv andere Leute dazugeben. Ob es da ein Kochkonzept gibt, wie es muss da anpelt, der Mitarbeiter von, wenn elf Mitarbeiter in diesen Teil wären, müssen sechs, mindestens extern sein und fünf von der Bestandsfirma, nur mal das Hausnummer. Ich glaube, dass im Schnitt dann die Firma erfolgreicher sein könnte, wenn von der Mitarbeiterschaft und vom Management her gefühlt mehr Mitarbeiter frisch dazukommen, als von der Bestandsorganisation.

Speaker 1: Aber das heißt, es wird wahrscheinlich immer auf den individuellen Case ankommen, das heißt, du hast nicht dieses Gefühl, es darf auf keinen Fall jemand von Corporate dabei sein und es dürfen nur Externe sein, sondern es gibt da schon einen Mittelweg, sag ich mal.

Speaker 2: Die Frage ist, welche Rolle da die Bestandsfirma hat. Hat die Bestandsfirma die Rolle zu sagen, wir haben identifiziert, dass im Rahmen von Elke Walter das Datengeschäft zum Kerngeschäft gehört, ja, wir haben identifiziert, dass das Datengeschäft von Elke Walter Transaktionsbezogen zu den eigenen Transporten ist, ja. Und dann ist die Frage, was ist die Skalierungsmöglichkeit?

Die Skalierungsmöglichkeit ist, wenn man die Daten, die man hat, den kompletten Markt anbietet, sodass jeder genau weiß, wann die Produkte ankommen und so weiter und so fort mit der Eta. Das war der Grundhyvero. Und der Grund war, dass man das deshalb so gemacht hat, dass man gesagt hat, der ganze Markt braucht perfekte Logistikdaten, die man in Real Time hat mit den entsprechenden Algorithmen, was für Lkw ist in ganz Europa und das liefert als Produkt Verro. Und deshalb sind durch in der Firma Verro eine große Anzahl von anderen Leuten angestellt, die wir dann an der Mainz-Set auch in andere Kultur pflegen und wesentlich digitaler und wesentlich dynamischer sind und auch mit anderen Textik arbeiten als die Kernkampagne.

Speaker 1: Zwei Fragen habe ich noch, dann sind wir eh schon fertig. Wie schafft man es, dass solche Firmen, das muss wir dann wie bei jedem Investor einfach eine Art von Reporting geben? Ich habe einen Freund beispielsweise, der baut gerade genauso ein Venture auf für ein sehr große kanadische Firma und der sagt dann, wird er enorm darunter leidet unter den KPIs, die sozusagen dieses Corporate ihm aufzwingen. Tatsächlich sogar so, dass er so stark an diese KPIs geknüpft ist, dass wenn er diese KPIs nicht erreicht, dass auch an sein Funding geknüpft ist. Soll heißt es, er kriegt pro Jahr zwei Millionen.

Wenn er diese KPIs nicht erreicht, dann wird das gekürzt um xy prozent und er sagt, das macht halt überhaupt keinen Sinn. Also das ist einfach so eben genauso ein Corporate denken soll, heißt wenn das Department nicht ihr Umsatzziel erreicht, dann wird es verkleinert. Das kann man aber in einem Start-up Setting natürlich nicht machen. Hast du da irgendein grobes Framework, wie du sagen würdest, wie so ein Controlling von seiner Mutter dann aussehen könnte? Es ist so, dass die

Speaker 2: Firma die Weitergruppe hat ein ganz ein großes Konzerncontrolling. Da gibt es im Grunde genommen für jeden Teil der Organisation Vorgaben. Und die Vorgaben sind halt kommerzielle Vorgaben. Und bei der Company Building Geschichte bei Vero gab es keine sofortige Ertragsvorgabe, sondern das Thema war, dass man sich entschieden hat, ein Marktrelevanz zu bekommen.

Da gibt es in verschiedenen Datenplattformen im logistischen Bereich in Europa und da wollte man mit der Datenqualität innerhalb kürzester Zeit ein Top-Templar werden. Das hat Vero geschafft. Kommerziell ist es aber so, so ehrlich muss man auch sein, dass es jährliche Budgets gibt, die von der Muttergesellschaft kommen und die natürlich auch immer wieder bewertet werden. Wie ist es ja vergangenen Jahr finanziell gelaufen? Das heißt die Dynamik der Company ist dann finanziell nicht immer am Markt angepasst, sondern die Dynamik der Company ist sehr oft investgetrieben.

Und meine Einschätzung, das ist jetzt vielleicht ein bisschen unwissenschaftlich, aber das ist meine Sicht der Dinge. Ich glaube, dass wenn du eine Firma drei Jahre hast, dann wird sie am Anfang sehr stark investgetrieben sein. Aber ab bei einem gewissen Zeitpunkt, wenn du Kunden hast, wo sie es natürlich marktgetrieben sind und eine Innovation hat sie mich dann am Markt geschafft, wenn du sozusagen aus dieser Invest-Ebene rauskommst und quasi cashflow getrieben die Firma wachsen lassen kannst und viele Firmen erträumen sich das.

Wenn du allerdings die Invest-Fase länger dauert als gedacht oder die Anforderungen in der Kunden höher sind und damit auch das Invest höher sein soll, dann kommt es dazu immer die Frage, sollen wir im nächsten Jahr das Budget erhöhen oder nicht. Das Thema Firmenprinzip, weil im Kostenbereich Kosten fortschreiben und die reduzieren wollen, ist auf die Dynamik in diesen ganzen Startups von den Hauptkernfirmen nicht immer abgebildet. Und ich habe jetzt nur gesehen, dass jetzt im Bereich von Peru da hat man sozusagen jetzt das Budget erhöht, hat auch entsprechend hier weiter skaliert, dass jetzt mehrere Produkte gibt. Man hat das allerdings gemacht, obwohl man sozusagen das Thema Profitabilität in den KPI's noch nicht eingehalten hatte. Bei anderen Firmen, wo ich in so einer Form eingebunden bin, wo es eben Startups gibt, die sind völlig anders strukturiert.

Da gibt es klipp und klar hier diverse Ziele entauf gibt es das Ziel, dass der Markt an Teil die Marktrelevance erarbeitet werden soll, wo im Extrem viel Investorengeld hineingeblasen wird, dass die Lösung, wenn es ja im Markt ist, relativ viele Marktellen nehmen erreicht oder dass in dem zweiten Schritt fangt man dann an, die ganzen Lösungen, die man ausgeholt hat, zu kapitalisieren. Das ist die meisten digital basierten Startups arbeiten, die am Anfang mit einem sogenannten Premium-Modell, wo man versucht möglichst viele Leute zur Nutzung von etwas zu bekommen. Und dann, wenn die Anzahl entsprechend hoch ist, versucht man das Ganze zu kapitalisieren.

Speaker 1: Und hattest du das schon einmal in einem von solchen Settings, dass ein Co-Bred eben wirklich gesagt hat, wir glauben nicht mehr an diese Idee oder vielleicht sogar noch schlimmer, wir glauben an die Idee, aber die Mutter hatte vielleicht ein schlechtes Geschäftsjahr

und deshalb kann dieses Startup nicht mehr finanzieren und deshalb wird sozusagen der finanzielle Hahn abgedreht. Hattest du schon mal so ein Setting?

Speaker 2: Ja, ja, ja. Also es gibt oft, es gibt oft, uns weiß gerade nicht, dass das Geschäft sehr schlecht gewesen sein, sondern es gibt oft bei großen Aktiengesellschaften das Thema, das neue Vorstand kommt. Und wenn der neue Vorstand so aufgestellt ist, dass aus dem CEO der weggeht, überlegt man sich, wie man nimmt und dann kommt sehr oft das CFO auch dran. Und wenn ein CFO relativ rasch Zahlen liefern muss, dann geht das sehr stark in die eigenen Kosten rein. Und wenn man in die eigenen Kosten reingeht, schaut das sozusagen, wer sind denn meine Attraktionen oder wer sind denn meine Kostentreiber oder wo bin ich finanziert, wo ich jetzt im Moment nichts rausziehen kann. Und dann kann es durchaus passieren, dass durch diesen Paradigmenwechsel im Vorstand auf einmal am Markt gut etablierte Startups kein Fund mehr bekommen.

Speaker 1: Ja, das habe ich von Josip aus dem MBE von der ersten Bank gehört, dass er gesagt hat, da gab es teilweise dann 100 Millionen Projekte, wo dann Vorstandswechsel war und der war dann wahrscheinlich genau das Zahlen angeschauten muss und das Projekt ist schon seit drei Jahren gelaufen und einfach gekillt von einem Tag auf den anderen.

Also es ist schon spannend, ja, wie dann dieses kurzfristige Denken dann echt, ja oder wenn das dann nicht vertraglich so festgelegt ist, dass das dann passieren muss, unabhängig von wer im Endeffekt im Chefsitzel sitzt.

Speaker 2: Also bei diesen Innovationsprojekten ist es so, dass dann diese Startups, da gibt es ja oft sehr viele Investitionen in Startups, die überbehrt, das er auch gemacht, der den eigenen Innovation Lab, da haben wir ja auch mitgemacht, da ging es um den intelligenten Waggon oder um die digitale Seidenstraße, wo dann Zugbuchungen im Güterverkehr bei World Cargo möglich waren. Und es war auch im Projekt, wo ich dabei war. Und da war es aber so, dass es am Anfang nicht gut angelaufen und die ÖBB hat dann auch einen Vorstandswechsel gehabt, dann hat man sich darüber Gedanken gemacht, ob man das machen soll und die ÖBB hat dann etwas gemacht, was ich interessant finde. Die haben dann im Grunde genommen die Zahlen des letzten Jahres einfach nur fortgeschrieben und ich habe mir gedacht, dann gut ist eine ziemlich defensive Strategie, einfach nur die Zahl vorzuschreiben und zu warten, was passiert. Die hatten dann allerdings das Glück, dass im Rahmen von Verhandlungen bis China die ganzen Eisenbahngesellschaften sich verabredet haben, Dinge, die man über Seefracht transportiert hat, auch über Railway, über Zug, über den Kontinent zu transportieren und haben sich dann verständigt und das hat dann wirklich stattgefunden.

Das gibt jetzt eine Zugverbindung, wenn ich den Krieg wäre, wo das sozusagen von China über Russland nach Europa kommst und wo sowohl die Schienenstrengende unterschiedliche Breite haben, dadurch, dass der ganze Verkehr Container passiert ist mit Terminals, gibt es eine wirkliche Verbindung von Zentral-Europa nach China über Bahn? Ja, cool.

Speaker 1: Ja, verrückt. Letzte, ich drehe noch in meine Kamera an, weil jetzt glaube ich, jetzt geht es auch um das Dritter. Ich habe eine Frage, habe ich noch. Dann geht es wieder mit Punkten aus. Hast du so etwas auch schon mal im Health Care Bereich gemacht und wenn ja, wie ist dieser Bereich anders? Oder was würdest du dann solchen Corporates vielleicht ans Herz legen, was du vielleicht LKW Walther jetzt nicht empfehlen würdest?

Speaker 2: Im Health Care Bereich gibt es ja, ich glaube, das habe ich darüber mal letztens gesprochen und habe ich einige Kunden, Projekte und Beratungsprojekte. Das heißt, wir haben für das Gesundheitsministerium das Portal Gesundheit.tv .at gemacht und über dieses Gesundheit.tv .at werden ja verschiedene digitale Produkte mit eingebunden. Zum Beispiel war das dann auch diese Corona App und die ganzen Impfpassgeschichten und auch die ganzen Tests.

Und das war dann schon interessant zu sehen, wie eigentlich ein Portal das für die Identifizierung von Menschen geeignet ist durch eine Ansammlung von auf einmal vielen, vielen Firmen, die was angeboten haben, auch das Rotecoyles, versucht haben hier seine Art Hub zu werden mit Technologiepartnern. Und habe ich gesehen, dass so eine Hubbandbindung inhaltlich gut war, aber das hat technisch am Anfang gar nicht funktioniert. Wie du weißt, sind die ganze WTKs in Horizon, irgendwie so, die seine eigene Testfirmen standen, die dann diese ganzen Covid-Tests gemacht haben. Und das war auch von gestanden eine Vollgebigung der Krise, wo da unter uns gesprochen hat, ich war ein bisschen frustriert, weil Österreich hat dann einfach Geld draus geschmissen. Es gab keine Struktur für die Daten, keine Struktur, wie es funktioniert. Sie waren auch nicht vorbereitet. Und das Zweite ist, man passiert mit dem Homeschooling.

Wie wir haben für das Wissenschafts- und Bildungsressort das Internet gemacht, wie die Lehrer, wo der Inskripten selber war, auch mit Lehrunterlagen, wo es eigene Kustoren gibt, die das bewerten. Und wo dann die Idee war, dass du dann quasi Laptop-Klassen hast. Und da gab es auch Firmen, die hier diverse Schullösungen angeboten haben. Es sind auch einiges Datapest dann zum Zug gekommen.

Also unter uns sind für mich Beispiele, wo es gut gemeint war, aber ganz schlecht funktioniert hat. Bei der WMT ist es so, auch ein Kunde von uns, die haben sich jetzt begonnen, bei Startups in der Nähe von ihrem Geschäftswelt von Krankenhäusern, Reherkliniken und Co. zu beteiligen. Und da gab es verschiedene Arten von Startups, die ausgewählt wurden.

Die Startups, die sehr stark jetzt getrieben sind, speziell, weil sie auch spektakles und Reherklinikbetreiber sind, sind Softwarelösungen, die für die Betreuung und für das Management von Reherkliniken und Krankenhäusern geeignet sind. Da haben sie sich beteiligt, sprich, die Thema Prozessoptimierungen, aber auch die Patientendaten besser zu erfassen. Auch im Rahmen von Verlaufstudien von Medikamenten, das ist ja stark bei Krebspatienten. Auf all das wir waren dabei bei der Firma Mgin eingebunden, die haben mit bestimmten Ärzten ein neues, ich sage mal für mich, banal Krebsprodukt eingeführt. Und da hat man sozusagen mit zwei Gruppen gearbeitet, der eine Gruppe ist mit dem konservativen Medikament behandelt worden, die andere mit dem neuen.

Und da hat man sozusagen im Rahmen des Verlaufstudiedes, der dann noch lange ist und auch in Österreich massiv vorgeschrieben wird, geschaut, im Gewehr das neue Produkt, das alte Ort, performt. Und da war eben sehr stark die Frage, wie werden die Daten erfasst, wenn die Personen ausgewählt? Und da haben wir für die Mgin-EM-Sentul gebaut, dass dann nun in den Krankenhäusern eingesetzt wurde. Und das war dann relativ schwierig, weil du weißt, das sind höchstsensible Daten. Und da war das Thema Datenschutz, Verschlüsselung und Co. eigentlich das Hauptthema, muss ich sagen. Und bei der Warmethiesessour, da gibt es Reherkliniken, die sehr stark auch mit der Onkologiezusammenarbeitung, speziell in der Schweiz.

Und da haben wir eben mit ein, zwei Startups auch zu tun gehabt, wo wir die Applikationen implementiert haben. Und da ging es sehr stark um das Thema, wie Patientendaten und wie Daten von einem Krankenhaus und von der Sozialversicherungsanstalt im Bebei hier eine Offenlegung der Daten, sozusagen gegenüber den Staaten zulässig ist, oder über die Daten dann doch den Patienten gehören. Und das war für mich eine hochinteressante Diskussion, dass es der Offenstand eine viele Graubereiche gibt, wem dann die Patientendaten wirklich gehören. Und das war auch der Grund, wo ich damals mit der Robin Starbucks-Verfähmung in der Görg gesprochen habe, die mit ihrem Tools versucht, jeden zum Doktor zu machen, den man die Daten hat, sozusagen über sich selber. Den Amerika ist er datenschutzrechtlicher, wie du weißt völlig anders organisiert. Und in Österreich wäre das zum Beispiel strengstens verboten gewesen, diese Onkologie-Daten auch nur ansatzweise in ihm gerne vorm Ungeschützt zu lassen.

Also es ist in Österreich nicht möglich. Und wir haben eine Online-Apotheke, das heißt, das ist die, wie viel mal die Media, die sitzen im Burgengland und wir haben im Grunde genommen und

einem anderen Namen noch 13 andere Apotheken, die haben eine Online-Apotheke gemacht und da habe ich jetzt kennengelernt, das ist eine eigene Firma dann geworden, es gibt eine reale Apotheke, eine Online-Apotheke und da was wir wissen, dass im österreichischen Apothekenmarkt ja geregelt die Preise vorherrschen, dass man gewisse Produkte und dann sozusagen verschreiben darf, wer sie zugelassen sind, auch bei den Homeopathikern ist das so. Und da gibt es jetzt eine Firma mit die Shopapotheke aus Holland, die halt international die ganzen Märkte mit ihren Produkten überrollt und weil sie eben in Holland sitzen, in ganz Europa liefern dürfen, die halt unter den Preisen der österreichischen Apotheken verkaufen. Und meine Aufgabe war es dann zu überlegen, wie man mit einer kleinen GMPH, was das in der Medienkonstrukte ja auch eine Online-Apotheke macht, aber mit zugelassernen Produkten. Das erste, was passiert ist, ist, dass die ganze, dass das ganze Produktportfolio der Online-Apotheke überprüft wurde.

Dann wurden überall Kontrollen durchgeführt, ob die Produkte zugelassen sind. Und so hat man das nicht deshalb gemacht, weil die Produkte nicht zugelassen sind, sondern weil die Apothekerkammer nicht wollte, dass eine Apotheker aus dem Burgenland ganz Österreich mit Medikamenten versorgt. Du musst wissen, dass die Apotheken haben ja quasi eine Art Bedarfsprüfung. Das heißt, da geht es um diese 5000, 6000 Haushalte in der Umgebung. Und wenn du die hast, dann darf deine Apotheker machen, musst du ansuchen und die Apothekerkammer lässt das Ganze zu. Und wenn du im Internetbereich bist, könnte jeder in Österreich sozusagen versichert ist mit seiner Sozialversicherungstummer, könnte logischerweise sein Rezept einglösen, logischerweise sein Produkt bekommen. Aber ich muss sagen, diese Online-Apotheke, die wir gebaut haben, für Homöopathik aber eine globale, ist höchst erfolgreich geworden.

Also diese Teilfirma ist super performant und super profitabel. Und bei den 13 Apotheken, die sich dann in eine ohne eine Apotheke zusammengeschlossen haben, haben wir den Umsatz der Apotheken in den letzten zwei, drei Vierteljahren verdoppelt, aber das war nicht, weil die Lösung so toll war, sondern weil immer mehr Leute in der Covid-Zeit nicht die Medikamente in der Apotheke abholen wollten, sondern weil sie die Apothekenprodukte auch der Rezeptpflichten zugestellt bekommen wollten. Und das war eben, wo eben dieser Apotheker zu mir gekommen ist und der hatte eine sehr alte Apotheke im Burgenland mit 13 Standorten und der hat einen Homöopathiehandel und dann haben wir auch noch für sich für die Homöopathie den Online-Shop gebaut, für den globalen Versand von Homöopathie-Produkten und dann haben wir diese Lösung hergenommen und haben dann diesen Online-Shop in eine zweite Firma gesteckt. Das war dann die Digitalapotheke von ihm, wo er dann über ganz Österreich eine wegsehende Produkte verkauft hat.

Speaker 1: Ja, sehr, sehr spannend. Vielen, vielen Dank.

9. Appendix C

Interview Transcription with Georg Frick

Speaker 1: Adrian Brodesser

Speaker 2: Georg Frick

Speaker 1: So it means I will translate it anyway, in a written form. That means we can do it very, very much in German. Okay. It fits. So we know each other very well. I know your name and I know your company a little bit, but it would be maybe interesting to know again, because I feel like it's in SMEs or startups. I don't know how to describe it in this case, but you have different roles, even though you often have the same name, like Manchin, Director, CEO and co. But that it somehow lives differently in the everyday life. I would be interested in what your day-to-day tasks are. Where do you have the biggest focus?

Speaker 2: Okay. So my daily tasks are those that I generally have the business leadership in the VLAPs. And I have several different tasks in one area. For example, it is mostly key accounting, customer inquisition and Yes, that's right.

Sorry, we are in a new office and everything will be fine. And one of the tasks is the development of the company. We have a company that grows strongly. That means that I have even more HR tasks, but the organization is still active. And the third is that I do active projects in the company, in innovation projects. Active employees, but that's always less.

Speaker 1: Okay. And where do you see the strategy of VLAPs? I know what you're doing, but maybe in your words, where do you want to go for a long

Speaker 2: time? We want to establish ourselves as a company builder in the new markets. That means that in Germany and Switzerland, we have more footages. We have the first contacts, the first projects running, but we want to drive more strongly. And we want to double ourselves as a company until the end of 2025. That's currently 31 people. And we believe that we are now in the size of 55 and 70 people, well-off, especially internal company building, in addition to the corporate company building's consequences. And to drive more strongly. The development of

HR projects, etc. is better in this size, because we can also implement a kind of middle management.

Speaker 1: That's interesting. We are currently 18, and I also have the feeling that it's not about the number of 18, but that it feels very easy, which is up to 10. And now I have the feeling that between 10 and 20, that's a strange number of employees, because in the end, this middle management is missing, which can be given to possible decisions. That means that in the end there is a gap between these high-level decisions and then, at the same time, the leading employee is almost directly under the command of the beginning. And that's kind of a challenge. You can imagine that it will probably get better with 30, 40, 50, of course, it has its own challenges, but that's also very much missing, that this is currently a strange intermediate phase.

Speaker 2: Yes, absolutely. So we have talked to other agencies, and they also say that the phase between 18 and 30 is a zone of death, where many employees are lost, because in the beginning you are directly the contact partner for everyone, you know that everyone does it, etc. And then you have a certain size, you get connected. And then you have to introduce new structures. And that's what I meant with the organization development.

Speaker 1: Yes, that's exciting. For us, it's just a bit like that. So we have three people right now going from us, because at the end of the day, there is a responsibility for me, because I just noticed that this gap, I haven't done that well enough, but it's definitely also a learning.

Good. The next question is, how do you get in contact with innovation at work? I mean, I think the core says, maybe what is innovation for you? How would you define innovation? And how do you see innovation in everyday life? So I wouldn't actually be in the company with you in this case, but how do you bring your partners and customers to the topic of innovation?

Speaker 2: So innovation for me is the most important thing that I think is important for problems. We are very problem-centered, right? I mean, user problems or customer problems, or social problems, I think there are new solutions. There are usually many solutions, but innovation in my case or in our case is often called new, so existing problems, new ways to find. And we differentiate between incremental, so we are the business model innovation at home, you know, between incremental innovation, that is innovation that improves or improves the existing product services, and then between radical and disruptive business model innovation. And especially for radical and disruptive business model innovation, we often need new solutions and that's what we offer as company builders.

And that's maybe the second part of the question. We usually get in touch with innovations when someone comes to us, and says, hey Georg, we have a big customer problem or a problem that is created from a new trend or from a rejection. A product idea or a service idea, and this service idea doesn't fit in our line, we need a new case for it, or we want to test and test it for a startup. And we do that as company builders for these customers who come to us. Sometimes the acquisition point is already earlier when they come to us and say, we are a production company, we have to go from plastic to other products until 2040 to increase. We are automotive suppliers, our customers break away from the industry because they don't need diesel cars anymore. We have to find new business models, and we don't want to call them product variations, we want to call them business. And we help them to find innovative processes to build these products. And innovation is also very methodical for me.

I am a fan of agile work, but for me, agile is not about working without a methodology. I think that's a misunderstanding. And we also look for internal companies. And that's the way we have a small problem-centric approach.

Speaker 1: That means, I don't know, that means you actually help half of the customers. I always call them company builders, but that means you help half of the customers who don't want to solve the problems that they have with internal companies. For example, we notice that in the last 10 years, our product has no space in the world, and then half of them are methodically established to establish that a problem-solving company can be started or found. And then half of the next step is to actually bring these to the market, be it internal or in the form of an individual, for example, company. Exactly.

Interesting. The next question is, what are the main factors? Maybe just three down, if there are so many, the biggest impact on the success of such a solution, very explicitly on the solution, but simply what do you already see in large companies, with your customers, what were these three key factors that you would call the biggest lever in the end, whether this solution works or not?

Speaker 2: Well, what I think is important is to have the right people, and in the right amount. I don't think that some entrepreneurs have the following lines, and I don't think that companies have political positions, because they have earned their merits in line and now they can build an adventure.

So the right people have to be created and they have to work on it. A second factor is that a corporate can really use its unfair advantage. That means a startup, a green-wiz startup or a spin-off from the university, starts mostly with a product. A corporate has the advantage that it has an unfair advantage, customer access, sales structures, maybe technological progress that can be used. And if this can really be raised, it has a big start-up advantage, and of course capital. That means the advantage of a corporate company building startup is that it doesn't have to pitch every year or every two years to do the same thing. And that a lot of substantial energy is needed for the founder. That would be three reasons, but I think a more important thing is a corporate company building. That it is really seen as a startup and not as a project. That means there is no project steering mechanism that someone is pulling out of the board, that thing that is pulled out of management as a project and that you can leave enough freedom. That is also a major factor.

Speaker 1: And how would you say, if you have seen the general trend, how much control or even if at all, because you said that the startup should of course use the resources that the corporate has, whether it is money or the access to network customers, how much do you see that in a two-way relationship? Not only the startup is the front, but also the corporate is the front. How do you see the necessity here? Or maybe even the opposite of the fact that the corporate is blind by controlling or other mechanisms?

Speaker 2: Yes, of course. The startup has to have a strategic fit and the goal setting of the corporate is that in the defined playing fields a diversification of the business model is based because a new business model is built. And this strategic fit and whether the startup is aimed at it has to be measured.

And what I would recommend is a steering mechanism in the sense of a strategic approach to change the running and therefore change the goalsets. And of course I have to ask, but with a certain openness, that these things can also change, yes?

Speaker 1: Yes, it makes sense. And have you ever watched that the corporate then makes a startup like this? Because it really is where the main focus is to generate new revenue streams in its existing business environment? Or maybe an example, basically the development comes, this startup is on it, as it was actually intended, for example, a big corporate in the automotive sector, which is why it is green for automotive. And this startup just comes on it. In automotive there is actually not as much potential as in healthcare, for example. Did you then observe that a corporate more tenancyel says, okay, it doesn't work in automotive, we let the startup close, I don't know why that's called closing, we end the startup or that then corporate tenancyel is really open enough and say, okay, we discovered here, there is really potential in a whole new part with

which the mother has actually nothing to do anymore and we let the startup grow in this area. Or is there any difference that you have seen?

Speaker 2: Good question. I think, Sean, I think it's often the case that the company, as I said before, is already based on the day, on topics that are used, or markets, and if it's too far away from core business, then it's difficult, because then you know, it's like a very compressed participation in a company, and you don't take it at all. And I see that as critical. I think, Sean, that in the end, in this corporate building, the existing value chain is down, or in the back, or in the middle, or something is missing, to strengthen or to extend. And we see that, and I think that's the goal. Things that are far away, are difficult to extend for the

Speaker 1: corporate. Have you ever had a case like this? The question is, I can imagine that this has never happened before, that this was the case. Have you ever had a case like this?

Speaker 2: Yes, we had a case. We had the case, where we started with a producing company, a software, so here the software was developed for machine operators, and machine operators from their own industry. And we opened the screen again, and the user interviews were over, and then we worked on this software, especially with the prototype. And then we came up with the original use case, in which one industry is not so valid, and in another industry, but much stronger, right? I mean, I'm talking about the plastic industry, and if it were metal, the use case would have been much stronger. And then the first problem was already, that this is a software startup, but we are actually a producer of plastic, and machines that produce plastic. That means we need a startup, because we have a sales process for software, and the right people. And then, if that had happened, the difficulty would have been to enter a completely new industry, and then there is one success factor, which I mentioned earlier, for Atlantecia. So, it's a strategy that you invest in, and it's really far away, and it's then rather set up, but also for other reasons. Okay, interesting. Okay. Okay.

Speaker 1: Um... Yeah, that makes sense, actually. The most important question, how do you select a team? How would you say, there are tendencies, how do you, when it comes to building a team, is that half of the corporate, half of it is completely newly strengthened, management corporate, or is there really every time, the individual use case is looked at, and what makes sense.

Speaker 2: Okay. So, we don't have a split rule of the show, but what's nice is, a knowledge, now over the years, the corporates often say, or believe, to have the right people for the start-up, then

they can stand out, they can't be in the spotlight from their line of activities, and they are not used to working with a start-up, they want to be really good people on a strategic business development level and good manager, within a company, but that they, like in a start-up, from the regular interview, to the business case, to the sales, they are not used to doing it. And that means, it's actually so red, that we, the big part of the team, we, the first step, we set ourselves as the labs, as full service providers, and then, when we start to start to outsource the thing, what does it need at the moment? Is someone with domain expertise? That means, for example, if we go back to plastic producers, or what you see in the insurance products, then of course, domain expertise is already making sense, but the person doesn't have to be fully set up, but can function as an external expert. Exactly. So, mainly external. Interesting.

Speaker 1: Okay. What is the next question? Maybe even more clear. The next question would be if the background, this culture question, if, for example, from the corporate employees would be taken with them and then maybe a few startup boys and girls would be hired, then a cultural shift would happen. If you say that you are doing it yourself in the beginning and then new people are set up, then of course it's easier. But maybe very briefly on the subject, how do you see these two cultures, this startup culture, this corporate culture, how do you approach the communication between the two? If it's not in the company, if it's said that there is a corporate, maybe not even a manager would take over the startup, which makes sense. And let's say this startup is a new unit, where new hearings happen. How do you deal with this culture, with this culture, with the cultural difference between the corporate and the startup, especially when it comes down to, for example, finding meaningful KPIs to steer a startup like that?

Speaker 2: Yes, the startup really has to be a car. I don't think it's a project part or part of a business unit, it has to be an autonomous unit, and so it has to be seen. Of course it's missing, if it's a subsidiary company and the corporate majority is actually under the company governance, right?

That's just right. And then we've done this with companies, where it's relatively complex, because they're in the public property, and there the governance rules are even stronger. That means you have to define clearly at the beginning where the company's business is from. The company's business is, for example, a company with a computer, a startup that can have its own business or it can take the business from the corporate back, because it's a company that's used by the corporate by the tech stack.

So, the company's business is a company that's used by the tech stack, because it has its own hiring policies and own salary, because it has the possibility to have it. And these things have to be defined clearly. And if the company's business is there, then it's quite clearly defined. And the

KPIs, that's the question always, or even if you understand it, here's the corporate, that at the beginning there's no return on investment KPIs on the ground, but it has to be closed to the market. So, it has to be created as a customer base. It has to be like this UAL principle, UBKT now, Revenue later. That it's also being lived. And also it has to be defined as a customer

Speaker 1: base. It's interesting, because a colleague who works in a I guess, a spin-off of a huge, huge company that is actually doing international work and he's building this business unit, it's completely remote, there are five people.

And how do you solve this? That you actually have a development unit, that is co-opered and you can somehow attack this development power, although the development power is co-opered and he always says, it's so difficult, because it's more responsible for this business and traction. That can show that they are customers. But the controlling mechanisms are so built that the person who has the say in the end whether this startup, whether this spin-off is still alive, is the CFO of the big mother. And he said, there are five such spin-offs running in parallel. And at the end of the day, they have the budget top defined and the spin-offs fight for this budget and at the end of the day he said, it will probably run out so that they will look at each other, make a cut and say, okay, that's the most successful in this, we will put the rest of the budget we still have. And he said, that's just so incredibly difficult, because this budget calculation actually works like this, so they get money and then they have to buy these development resources with a corporate, so to speak, with their own money. And he said, that's of course not difficult, because in the end you are in a beating war with your mother with the other spin-offs. And that means you get from the mother a million euros per year you have to buy your own company because they can only buy their own company and of course the one who gets more money can buy more development power, so it's somehow a strange system and he suffers a lot from it.

Speaker 2: Yes, that's not a very good idea either, because you can always take the technology from this corporate, the whole lab is there, and then you can build the tech tech out there and have a very particular tech tech and it can in any case not be the right one for the individual startup. That's the first mistake and the second mistake is that you get the resources out. What's the problem if you have good ideas that discolour? Then you stop both.

How should we have only one resource now? Maybe three of them will fly. Then it would be good that all three have the ability to scale. Then they cut themselves off.

Speaker 1: And how would you say that in this case? I think the budget is limited, or how would you say in such a use case for example, we have three spin-offs, what would you then suggest in this case? What would you then suggest in this case, so not specifically which KPIs you connect, but how would you allocate this budget to the three startups?

Speaker 2: That's difficult. You don't know if you can answer the question in a posh way. You have to look at the cases. But basically, the problem is that we are of course in the Bayer region. But I think when we know how it is for us in our complex billing project, for us it is the current project. It is for this one complex billing project that is currently in production. A budget. And we now have a specific contract. We need the same budget next year and we are talking about a larger six-point number.

And we are just going with the idea. That means in the end the topic is so important and also so tricky to really root for your own company and to keep a certain amount of importance. Without having to decide the top management and not to use someone in the middle with management who is using a budget. We are dealing with someone with management, but the budget is being divided into five different And that is also risky.

Because if you don't like it you have to buy it. That is one shot. That is one possibility. But and you only have one investor that is maybe the disadvantage of a normal startup. If a normal startup doesn't exceed one investor, then it is 10 others. And we only have one. But in this case it worked. The budget is going to be doubled and we can continue to do it.

But it also sees the importance of doing it. That means this budget was originally no year forecast planned. The internal company. Interesting. The other way is that you do the budget depth. I know that when you have your own studio. But there is a steering board where you pitch the ideas you have.

And there you get extra budget. That is very individual. I think it is a very important answer for you. But I think the business model or the potential or the cycle of the concept of how long I have to do it until I have the idea. There are two differences from startup to startup. That fixed project cycles and budgets are difficult. You put that in a cassette. It is not the individual day of the startup.

Speaker 1: I think the strategy is really going to be enough for me. We have chosen the top 5. We try to evaluate which of these 5 has the biggest potential. And they do that by testing it at the market. And because of that they want a form of controlling.

The best performance is to establish the time that the internal KPI is hitting. And then to get more resources and to grow faster. I understand the basic idea behind it. It is not a company that says we know our technology is in 5 years and it makes no sense. It is a gigantic international company. They have several cases and I understand the way they want to try to manage several ideas at the same time. But the concept is not really what they do. But I understand the approach.

Speaker 2: It is important to me that in the process you can find ideas or use-cris that you define there that there are 3 or 4 possibilities that can happen with use-cris. Number 1 is I let it be because use-cris is not valid enough. Number 2 is that I put it in the line as a new product or service. Number 3 is to build your own company. Number 4 is to get a company that is a partner. I can also invest in a company and go into a venture with it. And that is important that you understand that there is not just one way in this but it is a step forward. Yes, I will see. Yes, okay.

Speaker 1: Last question that I still have I do not know how active you are or would you say or let me formulate it differently. You have done something in healthcare or you have now what you also participate in with everything clear. What would you say is the health market or the healthcare area different compared to other markets or what would you say are characteristics that are in the healthcare market in relation to such ventures to be what are what are maybe possible different timelines that you see in comparison to other sectors or would you in healthcare there are just decided differences that are simply always noticed when you know that you are in this area

Speaker 2: Yes, yes, the clear app we are the software developers that the project for the BXUI is also from us. We also have with other we have done several projects with the farm, the contact I know a little bit to get back to the question the difference that I see here is high regulatory requirements so and with that a lot of people go high requirements on data protection and data security and also transition with sensitive data for example, everything is clear big topic is that you do not see now but the big topic I think another point is that on in stakeholder view often also great complexity because in comparison to other startups not just free in the capitalist business environment but in the public space that means you probably need PPP private public partnership models that you have to think about startups or innovators to with the legislator implement the business models and thus a approach is the difficulty that I probably at least in comparison to Europe, USA or Europe, Asia but also within Europe the business model has to

adapt to the national level because the regulatory requirements are different and what is if I make a consumer product is that relatively bad or if I make a pure software for machine operators that the regulatory is the same and that I see as the biggest point and the stakeholder it is complex, it is mostly the project where we were a lot of the stakeholders were with because often in the health sector it is a product that is not a complex product where often you get IoT with a digital bookbinding service that is still there and you have so many stakeholders even if everything is clear it is already complex and then one last thing that I really want to see in the health sector when a project like this is made often the one who is profit does not have to sell me the end user is not clear to everything the caring of the listeners and not the one who is cared for what the complexity brings into the transmission

Speaker 1: and would you say that in other parts is really less noticeable in

Speaker 2: other sectors in other sectors exactly of course the problem exists in other sectors too but in the health sector it is more difficult because you have the other members as a vulnerable target group old people who are chronically ill are often not the digital or digital access people we mainly work digital products and when you listen to user testing in marketing it is difficult but moreover when you have a cool solution the spot is always big ok ok

Speaker 1: yes it makes sense and what personally if you are in contact with the Wambi have you done something with him? no ok because we have been working with the Wammet for a long time but I think the Wammet if you do something with him that is really a you want to look at it with your expertise but I really don't know how they will decide in the early morning what they will eat in the early morning I have never experienced a company in my 2 1.5 years where they there are so many politicians that is the hierarchy they are very special with large departments they don't talk to each other and huge companies and as I said it will be exciting if you look at it with your expertise but that is really I really have to say I have seen a lot we work with the Austrian Federal Government with Metuni Wien we are basically a democracy and so something like that but something like that with the Wammet I haven't seen that in my life

Speaker 2: yes I confirm the impression I have been in conversations with them for a long time I have a good friend who works there so I don't know if I... you just pick up I

10. Appendix D

Interview Transcription with Erich Kruschitz

Speaker 1: Erich Kruschitz

Speaker 2: Adrian Brodesser

Speaker 1: You can just download it then. Okay. Click it. Recording and start. Works.

Speaker 2: Yes, perfect. Okay. Good. So I saw we have 45 minutes, so I'll try to keep this also brief. I know you're very busy, so I'll just skip the first one.

What is your name and position? I already noticed, but I think maybe the first one that is really interesting, how would you define a successful innovation, but in the context of healthcare?

Speaker 1: I thought about it this before when you were reading it, of course. For us, yeah, but this is more like the Uniqa and SanusX strategy. That's perfect. Yeah, it's probably two things. The first thing is really to solve the customer problem, but that doesn't have to be necessarily the customer problem. To be honest, of the patient or something, it could also be a customer problem in our broader ecosystem in insurance space. So if you have a customer insurance and we solve the problem, these healthcare services could be something that's really valuable for us, and they will say, oh, that was super successful. So that's the first bucket that goes for us into what we call relevance. We want to be relevant and not only for our customers, but for the people out there.

How many people do we reach? That's one success factor for us. And the other one is given by my CFO. We call it scalability, which is also actually interesting because in the first step, we want to grow. So that's for us super important. So in the first phase, it's really about top line revenue becoming an important part of the 6 billion Euro revenue group. So it is 100 million in 2025. So that's how scalable it is.

And if you manage to scale, that's the second one. If you look a little bit further, you also have to be realistic and honest. Yeah, of course, it needs to be profitable. So we shouldn't do stupid stuff

just to grow and then never be able to make it profitable. But we have these two criteria as a relevance and scalability that we look at currently.

Speaker 2: That makes sense. And so because like normally, or at least what we talked a lot in the NBA, you know, innovation only happens when you bring something to market or you actually enhance or better something. And so for you, it's actually important if understood correctly that it's not only bringing it to market, but also having, you know, the financial aspect of it, that it also needs to be scalable.

So maybe something I would be interested in. How do you define is there a line between because I know that you have like very strict, I guess you could probably don't call it sprints, but like iteration processes where you basically say, OK, we basically cut this project or we go forward with this project. How do you select in terms of which of these projects have basically the capability of becoming one of your innovation projects?

Speaker 1: Also, we develop quite a strict process, but still we are struggling to be honest, implemented all the time because always a different context. I think the easier one is how to start with something. Yeah, we have quite easy criteria. So we what we call we have hunting zones that's broader areas in the health care. We have five criteria that we define. I think you know that there are 30 ones that things like do we go into mental health? So currently we're discussing do we go into parent child? So that would be a broad area. Five categories is there at least a hundred million revenue potential? Are we good at it as only to bring something on the table? What does this mean? Yes, we can't remember, but there are five criteria for hunting zones themselves. Several customer pain points, of course, is one.

Yeah, two more here. And if we say, OK, this is the hunting zone that we want to act. And we give two people a dedicated budget and say 20,000 euros for the next three months.

So however long it takes. And then they should find the one customer pain points that you want to go into. And so and there again, we have six criteria again, probably I don't know them by heart, but there is the scalability in the at least 20 million revenue potential. And this one idea not longer than 24 months go to market.

Actually, we're thinking about shortening these to 18 months now because we want to come faster and to go to market. It should be an idea that's not commoditizing. It's also an important one because then we quickly get into something that's not having margins in the long run, as I said before. Again, do we bring something to the table as a unique thing like that? And there are six criteria and we really check it and we challenge it a lot. The team has to answer these questions. They want to come up with these ideas and we challenge it. And only if you really feel confident and say, OK, these are all fulfilled and it's the best use of our resources, we would start something new.

And when we start something new, the more complicated question is so complex question or complex complex because it's very context based. Every three months, we lock ourselves, the management blocks itself into one day into a room. We before that, we had two, three, four days with the teams. They are presenting to us what they learned in the last three months. And then actually, we based on the information that we have, we have to make a decision again, what's the best use of our resources.

Do we stop things based on the learnings? Of course, you always check how does it play into our strategic vision? Again, relevance, scalability.

We want to have this hundred million revenue in 2025. So these learnings sometimes often actually influence. OK, now we think differently than three months later. And also depends to have better ideas in the backlog than we would stop something. But stopping is super hard still. And I always tell you, we're talking still, we're seeing that could it. But yeah.

Speaker 2: No, I can imagine that's that. I mean, we don't have to go into detail there, but I guess that is something that is very difficult to really select the right, the right, I guess, in how startups or ideas I can imagine. But that's actually the perfect topic for the next question. Did you observe like main innovation success factors? Or do you say you also work quite a lot with startups, right? You don't only do internal project, you also sometimes buy external startups. And I was just very interested, especially in the process of working with external startups, what would you say are like key factors in order to really fit your innovation criteria or fit your.

And I'm not talking about like the hunting zone, the topic in itself, but rather what is it in terms of team structure, in terms of maybe financials? What would you say are the key factors in order for you, what you have observed in order for these external startups to really make a fit with Sanos X?

Speaker 1: Two perspectives from my side, the one perspective is when startups and that's happening a lot coming to me asking, hey, can we work with you? How would we kind of judge that you should work with them? And most of them come to me not because of Sanos X, but because of Monica, right? And I would say at least 90 percent of the startups when you are like some minutes talking to them, you realize all they want is access to our customers. We have like 16 billion customers and they are coming and say, OK, I want to get my product out to your 16 million customers because then I can scale. Of course, that's all of them want the same.

But I think almost none of them understands the other side. So successful is the end to me. And then they also get into a project with us if they understand when we would actually give access to our customers. So the worst thing and that happens nine out of ten times, they come and say, if you do our, for example, Mutamal analysis, like our skin thing, many of them coming here, then your customers will be healthier.

And in 15 years from now, you will have 10 million euros less claims payments. That's just that there's not that nobody can measure that. Yeah, it might be true. Yeah.

And if I go then to my health insurance board and say, hey, can you do you want to try this because you also need to buy in? Honestly speaking, it's a way too long time horizon. You cannot tell it to his investors. Yeah.

When he goes out there and to London to Rojo and say, hey, in 10 years from now, we will have nobody buy any cashier because of that and give us money. So it's way too long term. It's not measurable. But that's mostly the story. But if somebody comes and really understands and says, hey, I can give you immediate impact for your customers or at least in one year or something, which is really measurable, that's the startups actually that you start working with. And that's a handful of hundreds which are coming by.

There's nothing from my side. That's actually something I learned from the insurance guys because so many were knocking on the door and just observing when they were sending them away all the time. So that's how to become successful in the partnership. So that's the one thing. But your question, I think, also went more into the direction of when is a startup overall probably successful?

Speaker 2: Or a fit. I mean, I think Sanosix is a very unique culture and I know that's probably not the same with Unica and startup cooperation. But I was just really interested in terms of, did you observe criteria in these startups that you decided to work on because of the reasons that you just mentioned? Is there always or is there like a pattern, for example, in the team where you say they always fulfill X requirements?

Speaker 1: Yeah, okay, but then the first thing is really important, yeah, that the team understands also the other side, not as in the picture that they understand, okay, what do we want? Doesn't have to be necessarily okay only the customer, but often, for example, we have a quite successful collaboration with Wellapy, a Munich startup. They were just the perfect complementary skill.

We did not currently have a prevention check. They offer a very innovative one. They also got us some tech skills that we didn't have in the team so far. So just perfect fit and you also understood that it's a strategic partnership. Yeah, sometimes they just see the big corporate and either it's money or customers that are coming from there, but you really, you're working together now on a very, and that's the understanding of the management team, right?

You need to understand that that's important. And other than that, it's really about specific skills, I would say. If we are lacking maybe the one the other feature that we cannot bring in, they could do that. Or if they are having regular regulations and important things. Sometimes they have already the one or the other certification or the one or the other thing that we want to get as a shortcut, which sometimes in healthcare takes years. That's also an important one. Also with Wellapy, that was an important one. CE marks for blood test kits, for example, where examples will be partnered. It's both needs that are fulfilled also from our side.

Speaker 2: Very individualistic, I guess.

Speaker 1: Yeah, yeah. I would say so, yeah. Okay.

Speaker 2: And I think the next one that you already answered it quite well with like how are your scouting for startups? I guess it's two way process. I guess you always have like a field

pipeline of startups who want to work with you. And on the other side, I guess you basically really select based on your hunting zones. Is that a good summary or would you add something?

Speaker 1: Yeah, I said the one is actually just pull and push, right? Many are coming to us. That's cool because then we just have to filter. And the other one I have a very small and the eight teams are to say currently it's just Matthias and he's scanning the markets together with the PO's. And we have networks like the EIT Health and so on. We do our own startup competitions at least once. We did it in the mobility area.

So there are different instruments that we're using and then we have just a CRM where we are keeping track of all the contacts that we're having at all the companies.

Speaker 2: Okay. Great. I actually think a very interesting question would be because we're now always talking about SanusX and startups, but I guess SanusX in itself already can be seen as a startup from Uniqa. I mean, maybe I'm butchering you probably have other terms internally, but I would be very interesting, you know, how if you're allowed to talk about this, how was the decision made to actually, you know, make all these processes not in Unica internally, but rather have your own legal body to actually make all these fast innovation projects?

Speaker 1: Yeah, it's easy. And of course, I can talk about it. So actually, it was decided when you were doing our new strategy, every corporate all 10 years does a new strategy that almost you have to do it and then the MacKinsey's and PCG's and so on are coming in here. Classic money.

Yeah, collect a lot of money. Yeah, that we also do that. But this time was actually cool because Andreas R.C. also wants to do it differently. I think he did it for the third time. I was part of it for the second time now. And because he was at the, I think it been an executive education with his board one year before at Harvard Business School, and then he learned about ambidextrity. So going into a new kind of industry based on the things you were having, with a separated explore entity in one sentence, there are books about this year who are actually explaining it much better than the sentence. But that's in the nutshell what it is.

And he was really excited about it. And that said, I really want to split this Unica 3.0 strategy, this new strategy into two parts. One part exploit, getting better and insurance, a lot of things happening there.

Super important. I would say more or less the classic strategy thing. Also, MacKinsey was involved, cost topics, but also incremental innovation. So a lot of things there. But we have this separate part with explore. We have said here our explore topic is hence here because of several reasons in the macroeconomic and trends and so what's going on.

But also built on the trends that we're currently having. We said this is our topic. And then we founded our explore unit, SanusX. And then we, to a certain extent at the beginning, really followed the textbook.

So it says, spin it out, let it be super independent with regards to HIT finance, like a completely separate company, but support this explore unit with skills, know how assets that you're having in this industry. So in health care, okay, so that means I have full access to the hospitals that we're having, to the health insurance customers, to the doctors networks and so on. So that's really textbook. Then of course, we further developed it for ourselves, but that was really the beginning. So then cool stuff was also then one, when we decided on the strategy, Andreas took the top, I think 80 or something, really 80 people who flew from Vienna to Boston. And we had, I think, one and a half or two weeks at Harvard Business School, only with the professors there learning about cases on ambidexterity.

Mainly cases that did not work out. So to learn from failures. And also to build some kind of roots movement for this new strategy. And these people who came back to actually still form a group, which we call the, it's called re-inspire group before it was called HBS group, which are all around the unique group from all countries. These 80 people now changed us a little bit after two years.

But we still meet quarterly and try to think about how can we get better in executing the strategy. And that's of course not only about Explorer, not only about Sanos X, but also the exploit part. But these are also the ambassadors in the group for this new strategy. That's what we're trying to do. It sounds easy, but it's really hard because it's a very exciting thing to do in English.

Speaker 2: No, not totally. I can see that. And so how did you agree on or did you agree on like internal KPIs regarding to Unica? Or was it really, you get a certain budget and basically there's so much trust that you can do whatever you want. And 100 million by 2025, I think you said, is just your internal goal or how is that process internally?

Speaker 1: That's a good question. Don't quote me on this. But in the beginning, there was really a lot of trust. I think that was also, it sounds strange. I always say it's strange when I'm saying this because it feels so strange because it was about me as a person being head of group finance.

They somehow, and for these for several years, they somehow knew, I'm not going to do stupid stuff with any kind of money. So I think that was also to a certain extent connected to the person. And in Harvard, there were really two topics. The one was 100 million new revenues from exploration. And the other one was 100 million cost cuts in exploitation. And the groups only worked on this one and a half, two weeks. And so we had a lot of ideas how to do it and ways to do it.

But in the beginning, there was a lot of freedom and trust. And Eric just make sure you beat the team that can deliver this with the full backing, especially from the CEO. But this now evolved. For example, now in November, we have supervised report. We also part of the supervisor report, the phonica, at least once a year for three hours. And of course, we always said we need to deliver. So we need to be fast delivering and very quickly within developed KPIs, which we asked for, because otherwise we couldn't prove and they couldn't measure if you're really delivering or if you're just doing innovations do and storytelling. So now we are depending on the phase we're in with the different ventures, but we're presenting this quite closely once a month to the report and once a quarter of the supervisor report, once a year, three hours in the supervisor report.

For example, we have two scaling initiatives. They are really closely looking on how is the revenue developing, how the number of customers developing in the active aging area, how many caregivers do you have, how do you grow, how many agencies need to take over, how many families are you serving. So that's specific numbers that we are like, regularly reporting and discussing with them in ideation incubation of pharmacies. For example, the CEO gets a regular report, how many downloads we're having and how many pickups because it's a pickup solution for the click and collect we're having and what we make out of these numbers. So they are now getting more and more specific on specific KPIs on the topics that we are looking at, which is important for both sides for us to prove that we are making progress or also not only proof, but making sure and for Unica then to see what's happening to the money.

Speaker 2: Makes sense. And so if I understand correctly, the original plan was that of course you and maybe a small core group actually from Unica was the founding team, I guess, of Sanosix. But now if I understand correctly, you're only looking for not Unica employees because as you're always looking for great people, you're actually, is that intended that you don't want people from Unica, from the culture of Uniqa in Sanusx?

Speaker 1: Yeah, I don't know, to be honest. Yeah, I met bad experience. So we started with a core team from Unica. We were like eight, nine, I think. And I made it really hard to join. I said, guys, this is going to be a completely different story, a completely different way of working, culture shock, even though Unica has a cool culture and also a good work ethic. But this will be the same thing times 10.