UNIVERSITY OF LJUBLJANA
SCHOOL OF ECONOMICS AND BUSINESS

MASTER THESIS

PREPARING THE DIGITAL STRATEGY OF A SELECTED WATCHES AND JEWELLERY RETAILER

Ljubljana, April, 2024 IVANA SALDŽIEVA

AUTHORSHIP STATEMENT

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Ljubljana, April 12th, 2024

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LIST OF ABBREVIATIONS

AI – Artificial Intelligence

API – Application Programming Interface

AR – Augmented Reality

CDP – Customer Data Platform

CIO – Chief Information Officer

CRM – Customer Relationship Management

CX – Customer Experience

DIH – Digital Innovation Hub of Slovenia (sl. Digitalno inovacijsko stičišče Slovenije)

DMM – Digital Maturity Model

DT – Digital Transformation

ERP – Enterprise Resource Planning

HRM – Human Resources Management

ML – Machine Learning

POS – Point of Sale

SWOT – Strengths, Weaknesses, Opportunities and Threats

1 INTRODUCTION

Over the course of several decades, the fast-paced and ever-changing business world has made it increasingly more challenging for companies to survive and thrive. Businesses in the retail industry in particular have had to face immediate decision making challenges, owing to technological advancements and trends, globalization, changing consumer behavior, and economic, environmental and social fluctuations.

The Covid-19 pandemic has also had a severe effect on retail. The "stay at home" restrictions and social distancing policies caused a threat to the traditional shopping system, pressuring companies to close stores due to reduced foot traffic. The disruptions in supply chains necessitated efficient management in order to balance out cash flows. To address the changes in consumer shopping behaviors, which came as a result of these turbulences, businesses were expected to use omnichannel retailing, which in turn brought on issues regarding the extent to which companies engaged their customers through the use of multiple digital and physical touchpoints. For those companies that already had an established omnichannel presence there was the issue of consumer data privacy and security (Chatterjee et al., 2021).

Even before the pandemic retail was struggling due to factors such as e-commerce growth, the disengagement of store employees and the overall change of consumer preferences (Helm et al., 2020). These effects are here to stay, and together with disruptive digital technologies continually influence the concept of what a store is, how consumers buy, and the economic model for retail itself (Stephens, 2017).

Now, and unquestionably in the years that follow, retailers will need to digitally transform, leveraging the opportunity to reimagine how they operate, reshape their business models, processes and organizational structures (Hinings et al., 2018; Westerman et al., 2011). And although there is no single right way to respond to the changes that occur, nor any specific steps to take in the journey of digital transformation that would guarantee success, there are practices that can help provide a roadmap for navigating the complex and uncertain business landscape. These practices include assessing the digital maturity of a company, identifying elements of a company's business model which need to be modified and preparing a digital strategy by exploiting digital technologies to achieve long-term objectives (Correani et al., 2020).

For retailing companies which have hopped on the digital transformation bandwagon early enough, the future may be slightly brighter than for those who are just beginning their journeys. Nonetheless, every company should keep putting in continuous efforts to respond to the changes and reach its desired state of digital transformation, as only those businesses that manage to adapt, continually innovate and evolve are most likely going to be the ones that emerge as successful.

The purpose of this thesis is to help the selected watches and jewellery retailing company, Watch ID, in its continuous digital transformation efforts. Therefore, I will assess its current digital maturity and prepare the digital strategy. The results of the thesis are aimed to be used practically, on one hand by giving the company a structured overview of its present condition, and on the other by giving it recommendations for further improvement. The results of the thesis could further be used in academia to provide insights on how an existing maturity model can be used and how a digital strategy can be prepared in individual business scenarios.

The goal of this thesis are expected to be the following:

- do a literature review of the concepts of digital transformation, digital maturity, and digital strategy;
- prepare a detailed description of the selected company – organizational structure, IT solutions, SWOT analysis and competitive positioning;
- assess the as-is state of digital maturity through the use of a Digital Maturity Model;
- analyze the results of the digital maturity, and based on them
- prepare a digital strategy using a digital strategy framework proposed by DIH.

Accordingly, the research question for the thesis is: "What digital transformation efforts and initiatives can be effectively employed to prepare Watch ID's digital strategy, while addressing the company's current level of digital maturity?"

The research methodology for this thesis is mixed, but primarily qualitative. A review of existing literature, found in relevant databases accessed through the digital library of the School of Economics and Business including EBSCOHost, IEEE Xplore Digital Library, Springer Link, was performed in the first chapter for analyzing the key concepts. The literature search was done by using relevant keywords and search terms, and by consulting relevant reference lists and bibliographies to identify additional literature.

The primary data for the case study of Watch ID, the selected North Macedonian retailing company was obtained through semi-structured interviews with the company's Director of Operations (hereinafter COO), as well as through the use of a digital maturity self-assessment tool from the "Digital Maturity Model 5.0." that has been developed by VanBoskirk et al. (2017) to help organizations plot their maturity and offer strategic guidance on how to graduate to higher levels of digital maturity. Some secondary data about the company was obtained through a review of company owned past and current market research documents.

The structure of this thesis is as follows. In the first chapter, there is literature review of the concepts of digital transformation, digital maturity and digital strategy, which aim at providing a general understanding and a basis for the practical work. The first section provides definitions and a base for the concept of DT. Then, as most of the thesis revolves

around a specific case of a retailing company, there is a subsection that sheds light on what digital transformation means in the context of the retail industry, a few challenges retailers are faced with while developing a vision for digital change and the response that is necessitated by some of the latest trends in the industry. Additionally, there is a subchapter that points out several success and failure examples in the retail industry. Then there is a section providing a definition on the concept of digital maturity, and a subsection covering a few digital maturity models, including a description of the one chosen for the later assessment. The last part of the literature review is a section that provides a definition on the concept of digital strategy. The second chapter is a case study on the chosen company. The first section is the company's introduction covering its organizational structure, IT solutions in use, a SWOT analysis and a competitive positioning review in separate subsections. The second section is dedicated to the assessment of the company's digital maturity based on the chosen model.

Following the assessment of the digital maturity, in the third chapter is the preparation of the company's digital strategy. The preparation of the digital strategy includes recommendations, or identified digital transformation efforts and initiatives Watch ID can undertake, categorized in the seven areas proposed by the Digitalno Inovacijsko Stičišče (DIH) of Slovenia, including customer experience; data strategy; processes and digital solutions for business support; digital business models, products and services; strategy for the development of digital personnel and digital jobs; digital culture development strategy and cyber security. DIH's framework with the aforementioned areas is aimed at enhancing the company's competitiveness and growth prospects within the dimensions of the chosen maturity model. Lastly, there is the conclusion of the thesis as the fourth chapter, which also includes a discussion and limitations.

2 LITERATURE REVIEW

2.1 Digital transformation

The concept of digital transformation has been a popular topic of discussion for many years. Its history is traced back to the 1970s, during which time businesses began utilizing computer-aided design and manufacturing, marking the initial steps of digitalization - defined as the growing use of information and communication technology in every area of life (Castells, 2009). Subsequently, enterprise resource planning was introduced in the 1980s, followed by customer relationship management in the early 1990s. These technologies aimed to enhance efficiency and productivity by digitizing manual processes (Truong, 2023). During the late 1990s and mid-2000s when the Internet and the adoption of digital technologies had their rise in various aspects of society and business (Auriga, 2016), the emergence of e-commerce and online banking was witnessed, as well social media that revolutionized communication and information sharing (Truong, 2023). These technologies

helped businesses connect to their customers in a digital way, and as the digital landscape expanded, especially with the shift to mobile channels around the 2010s, a new spike was recorded in digital transformation (Paige, 2023).

The present post-pandemic era is a time in which digital advancements are propelled at an accelerated pace. The Covid-19 pandemic compelled companies to reconsider their approaches to customer service in a world that required minimal physical contact and embraced remote interactions (Paige, 2023). This brief evolution places a renewed emphasis on digital transformation, as businesses strive to maintain competitiveness in a global marketplace. While the concept of digital transformation itself is not new, its significance and urgency have been amplified in recent years.

Generally, digital transformation can be understood as a societal phenomenon, as well as a method for business development (Magnusson et al., 2021). From a societal standpoint, digital transformation refers to the broader changes brought by the integration of digital technologies into various aspects of society. It encompasses the adoption of digital tools and technologies across industries, the impact on individuals' daily lives, and the overall transformation of social structures and interactions. It affects how people communicate, access information, conduct transactions, and engage with the world around them. At the same time, digital transformation is also a method for business development. It involves leveraging digital technologies to improve business processes, enhance customer experiences, drive innovation, and gain a competitive edge. Companies undergo digital transformation to streamline operations, optimize efficiency, reach new markets, and create new revenue streams. It often entails rethinking business models, embracing digital channels, and embracing data-driven decision-making.

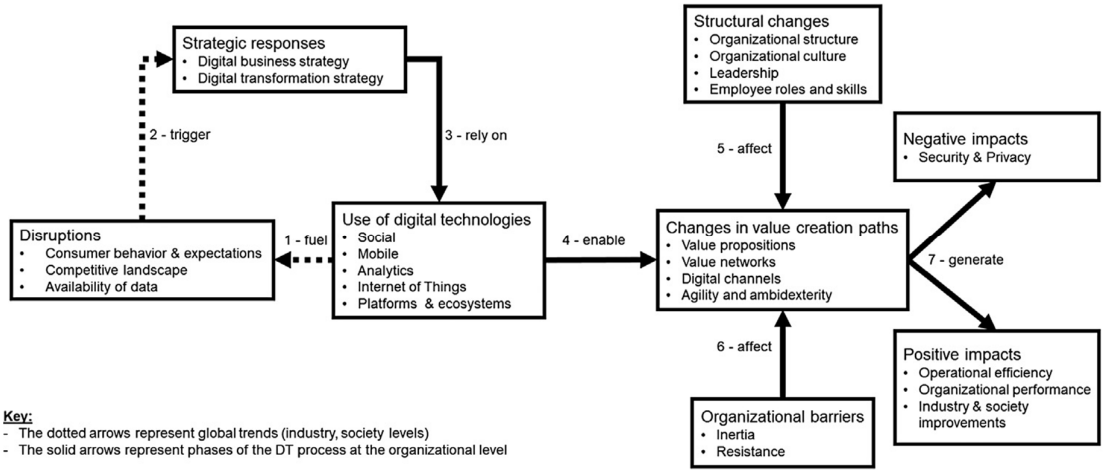
Figure 1 by Vial (2019) depicts the central role of digital technologies in the creation and reinforcement of disruptions taking place at the society and organizational levels. It shows how digital technologies fuel societal disruptions related to consumer behavior, the competitive landscape and the overall availability of data, which in turn trigger strategic responses from organizations. Digital technologies thus change the paths of value creation organizations use to stay competitive. Implementing structural changes and finding ways to overcome barriers comes in response to the transformational efforts.

This thesis focuses on digital transformation in the context of organizations which, defined in the words of Vial (2019), is “a process that aims to improve an organization by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies”.

DT represents a journey of revamping processes and rethinking how a company works, and as Peppard (2018) puts it, digital transformation elevates IT-related matters to a more strategic level. Digital transformation encompasses dimensions that manifest differently across different companies. In some, it involves embracing emerging technologies such as

the Internet of Things (Caro & Sadr, 2019), in other companies it focuses on leveraging social media platforms to engage with users, obtain feedback, and explore novel sales channels (Kaplan & Haenlein, 2010). For certain businesses, digital transformation signifies a fundamental shift in their entire business model (Crittenden et al., 2019).

Figure 1: Building blocks of the digital transformation process



Source: Vial (2019)

Digital technology serves as a catalyst for business transformation, enabling companies to achieve strategic and impactful outcomes in their digital transformation journey. Digital technologies, including but not limited to social media, mobile, analytics, embedded devices, Internet of Things (IoT), Artificial Intelligence (AI), automation applications, digital platforms, all enable major business improvements and value creation through enhanced customer experience, streamlined operations, ability to create new business models or analyze large volumes of data, and overall, transcend traditional industry boundaries and operate in new areas (Singh & Hess, 2020; Erol & Kirpik, 2022).

However, DT is not only about technology (Hinings et al., 2018). It is not the ultimate goal of digital transformation in itself, but rather a tool that facilitates and empowers the transformation process (Tekic & Koroteev, 2019). Technology in isolation represents only a fraction of the challenges that organizations need to address in order to maintain competitiveness in a digital era. Digital transformation also demands major changes in strategy, business models, processes, and organizational structures (Westerman et al., 2011).

2.1.1 Digital transformation in the retail industry

Digital transformation in the retail industry is about improving customer experience and driving growth using technology. Retailers used to rely on factors such as competitive pricing, store proximity, convenience, and product variety. These factors were once most important for generating value and fostering customer loyalty. Today they mostly rely on the integration of technologies into aspects of the business that range from customer

experience and inventory management to marketing campaigns and supply chain management to improve operational efficiency and drive a customer-centric approach (Cask, 2023). In doing so, retailers are faced with various challenges, including shifting to new ways of creating value, managing funds to enable digital transformation and navigating the implementation of different technologies (Suresh, 2023).

As the retail industry is highly competitive, efficiency and growth require not only solid business operations, but also innovation (Caro & Sadr, 2019). According to Parris et al. (2015), retailers are adopting information technology and innovative business approaches to create comprehensive omnichannel strategies that meet the needs of their customers across online, physical, and mobile shopping platforms. As omnichannel blurs the boundaries between online, physical or mobile channels that retailers are using, product information and fulfillment that were once delivered within the same channel, are now being combined through omnichannel. Different combinations of information provision and product delivery have emerged, such as showrooming (browsing at the store, but ordering online) and webrooming (searching online yet purchasing at the store) that bring a more customer-centric approach to shopping (Caro & Sadr, 2019).

Getting locked in a system that is inflexible will not allow companies to respond quickly to new opportunities or challenges (Altadonna, 2023). This is why companies need to be ready to adapt quickly to changes in the marketplace, and digital technologies enable this agility and flexibility.

Reichenbach (2022) points out some of the most important challenges that retail is facing. One of them being the adoption of digital strategies that serve younger and older populations whose needs often conflict. As younger generations are more attuned to researching products online, shopping remotely and avoiding standing in line, older generations still embrace visiting stores, comparing products and scouting for best deals in a physical manner. This poses a huge challenge for retailers to serve innovation for the younger generations, all while avoiding overburdening aging populations with too many digital practices.

One way to resolve this challenge is to make incremental changes which are simultaneously going to satisfy the identified needs of a company's consumers. The Covid-19 pandemic led the way to such changes. On one hand, it triggered major shifts in shopping behaviors, and on the other, it aggressively fueled company digitalization and the charge towards e-commerce (Nealon, 2021). These changes forced retailers to rethink how they operate, with the example of offering curbside pickup models or the so called "Buy online, pick up in store (BOPIS)" model, alternately known as "Click and Collect". This recent external factor changed the way how different demographics consume goods. Now that customers from all demographics returned to in-store shopping, retailers have to make a blend between the digital experiences customer's got accustomed to during the pandemic and existing physical experiences. This presents a good opportunity for retailing companies to make their next incremental step of improving customer service with the introduction of "phygital

experiences". "Phygital" entails blending the most effective elements from a digital strategy with the most advantageous elements from a physical strategy (Morgan, 2022).

Another challenge that retail is facing is connected to the quality, accuracy, and efficient handling of data by creating architectures that re-consider the entire flow of data through back-end systems that are in place (Reichenbach, 2022). Whether using an ERP to maintain accurate inventory levels, identify bottlenecks and inefficiencies, and ensure all employees have access to the resources they need, a Point of Sale (POS) system to enable transactions between customers and a company, a Customer Relationship Management (CRM) software to help optimize customer engagement (Baumann, 2023), or any other system, retailers should focus on the data and its efficient flow. Without a central data repository and a data centric data architecture, which can help companies make informed and data-driven decisions that in turn lead to improved efficiency, agility, and increased competitiveness (Middelbeck, 2022), the systems in place will continue to work for their specific purposes, but will not have much added value.

Other challenges pointed out by Reichenbach (2022) are in line with data-centricity, and are about better utilization of technology and data, by bringing in business intelligence to generate operational efficiencies and help in strategic decision making, as well as motivating the willingness to collaborate with outside experts which may help retailers develop data solutions that approach digital transformation from a new vantage point.

As Brown (2022) suggests in her article "The Meaning of Digital Transformation in the Retail Industry", a point has been reached where no industry can escape the need to digitally transform its products, processes, and services in order to ensure future success. This especially holds true for retail since the industry fundamentally relies on physically transferring goods directly to the consumers, unlike the entertainment, financial services, and manufacturing industries, which can more easily apply technology to their operations. To experience the texture and feel of a product through a screen is impossible (Baird, 2018), and this poses a great challenge for retailers to take note of emerging trends and technologies which are expected to have the most influence in the near future. Evans et al. (2022) point out the following trends:

- Rethinking the store – Despite the expected e-commerce growth, research suggests that consumers will still rely on physical stores to feel and interact with products in the coming years. This means that physical stores will continue to dominate global retail sales, and retailers will have to place focus on creating new, enhanced in-store experiences (Evans et al., 2022). The starting point to achieving this is through adopting comprehensive omnichannel strategies that are going to blend physical and digital. This would in turn allow for the utilization of interactive kiosks or screens in store through which people can search for desired or new products and swiftly locate them in-store; implement cashier less checkout (self-checkout) or offer accessibility to digital payment methods such as Apple or Google Pay that will increase customer's convenience;

implement voice activated in-store assistants, or in-store navigation solutions (Gottlieb, 2021; Stephens, 2021).

- Digital shopping and engagement – Given recent technological advancements and market forces, retailers must invest in technologies to enhance digital shopping and engagement. Mobile applications, whether progressive web or native, play a crucial role in facilitating online orders, wish lists, and engagement on handheld devices. Virtual Reality and Augmented Reality expand the digital shopping experience by enabling customers to virtually try on products and make informed decisions without changing their physical locations. Other essential initiatives include digital loyalty programs, last-mile delivery options, e-commerce chatbots, streamlined website checkouts, and leveraging social media for increased engagement.
- Social and environmental responsibility – With a growing demand for corporate, social, and environmental responsibility, retailers will have to adopt initiatives such as eco-friendly packaging, circular business models, ethical production practices, services for underserved demographics, and partnerships with minority-owned businesses. Demonstrating commitment to both environmental and social responsibility is crucial for meeting the expectations of conscious consumers.

Among these trends is one more aspect that should be observed, and that is enhancing employee efficiency. Implementing technologies such as smart shelving systems, Learning Management Systems (LMS) which save organizations time and employee training costs associated with traditional classroom training, or other digital platforms that automate workloads and cut down on the employee's time needed to perform certain tasks is part of digitally transforming a business and a trend that all retailers should be careful enough to follow because having satisfied customers usually starts with having satisfied employees.

2.1.2 Retail digital transformation success and failure examples

The retail landscape offers various digital transformation success and failure cases, a few of which are presented here. The examples offer insights and outcomes of adopted or neglected trends and digital technologies employed in the navigation of transformational journeys.

The first example is a US based eyewear company, "Warby Parker" that manufactures and sells quality and trendy prescription eyewear and sunglasses at accessible prices compared to competitors (Pereira, 2023). The company started out in 2010 as an e-commerce company, and has since then expanded to include approximately 150 brick-and-mortar retail locations that act as an intersection between online and offline. Their omnichannel approach allows customers to have the convenience of online browsing and ordering, as well as the opportunity for in-person interactions at physical stores (McKinnon, 2022). Ever since its establishment, the company has leveraged digital technologies to enhance customer experience and streamline operations, and today they are known as the online disruptor of a

well-established pre-existing category of products (Scott, 2022). Being marked as such is predominantly due to the digital initiatives they have taken:

- They are one of the pioneers in the direct-to-consumer model for eyewear, utilizing e-commerce platforms to reach a wide audience. The company specifically uses Oracle NetSuite Commerce that provides an e-commerce and point-of-sale (POS) solution for Warby Parker, and helps them move away from siloed online and in-store channels by seamlessly connecting all customer touchpoints (Apps Run The World, n.d.)
- They have implemented innovative technologies such as "Virtual Try-On" that allows customers to see how frames would look on their faces using their mobile devices. This initiative has been seen through Augmented Reality (AR), a technology that overlays computer-generated images onto real-world images, in this case frames onto a client's face (Marr, 2021).
- In 2021 they launched their Virtual Vision Test application, called a "telemedicine innovation". The application uses a proprietary distance estimation algorithm, and alongside Apple's Vision Framework, enables users to take an eye exam at home using their phones in order to renew glasses or lens prescriptions. These technologies measure how far a user is from their phone in real time, which in turn guarantees the reliability of the test results. In doing so, Warby Parker offers end customers a straightforward and streamlined customer experience (Warby Parker, n.d.).

Warby Parker's success in digital transformation and strategic initiatives depend on the initial implementation of an off-the-shelf SaaS-based ERP system. This system facilitated business requirement analysis through data extraction into spreadsheets. The company's ERP system was eventually supplemented by an ETL data integration tool that synchronized key tables from the ERP into a MySQL data warehouse and significantly reduced the time needed to retrieve and conduct analyses. As the data warehouse grew larger in size due to Warby Parker's expansion and the use of platforms such as Google Analytics, customer service tools, and digital marketing systems, it drove upper management to make the decision of creating a unified data model of the business. To this day Warby Parker reaps the benefit of creating the unified data model that helps organize and represent data from various sources and systems into a single, consistent, and comprehensive view, allowing them to expand data use throughout the company and gain insights into customer preferences and optimize their product offerings (CITO Research, 2015). In essence, Warby Parker's history is defined by disruptive approaches in the eyewear industry, blending online and offline retail channels, and leveraging digital technologies for an enhanced customer experience and business growth.

Another example of digital transformation success is the American retailer of outdoor equipment and sports apparel "Moosejaw". Since its establishment in 1992, Moosejaw has started operating an e-commerce platform with a user friendly interface and streamlined checkout experience, a mobile application that provides customers convenient and personalized shopping, 12 brick-and-mortar stores throughout the USA, and has achieved

omnichannel integration that enables a smooth transition between their online and offline channels. The company's robust online presence has helped them become one of the leaders in the active outdoor retail segment that achieves 80% of the company's sales through their online and mobile commerce (Wahid, 2020; Giannopoulos, 2013). The retailer has engaged in different digital initiatives:

- In 2016 they launched a Virtual Reality application that takes viewers on an outdoor adventure, such as hiking or camping, through in-app videos in which the retailer sponsors outdoor brands available in their product offer. On one hand, the VR application enables the company to distinguish itself from competitors, and on the other provides immersive experiences for consumers while showcasing products and presenting use cases of those products could be used (Digital Commerce 360, 2017)
- In 2017 Moosejaw partnered with Full Story, a company specializing in customer experience optimization through the use of a web-based digital intelligence system that enables tracking and monitoring customer activity. The use of this system enabled the customer support team to capture and analyze how customers use the e-commerce site by replaying user sessions and identifying specific struggles, leading to quick issue resolution and improved customer satisfaction. At a later point of their collaboration, Moosejaw started using Full Story's heuristics analysis, utilizing tools like "Rage Clicks", "Dead Clicks", and "Error Clicks" which discover and analyze website elements that cause friction and frustration for users, and allows the retailer to fix those website elements that seem broken or are hard to interact with (Mottl, 2017).
- In 2023 Moosejaw announced the gamification of the checkout experience through a so-called "Double or Nothing" e-commerce feature. This initiative enhances customer engagement, increases brand loyalty and drives sales by combining online shopping for outdoor products with the excitement of a casino (Chris, 2023).

The driving force of these initiatives is connected to Moosejaw's core value of bringing seamless customer experience through innovation. They are continually supported by the cultural norms and practices shared throughout the organization and the conversations about innovation among C-level management. On top of having top-down support, the company relies on their employees, who are encouraged to ask and suggest new ideas and whose engagement is constantly nurtured (Wahid, 2020).

The last example of successful digital transformation is the British cosmetics retailer "Lush", founded in 1995. The company is also implementing digital technologies that help the brand establish value for customers. Their in-house technological research and development team has created a "Lush Lens" application that provides customers with a seamless "phygital" experience through machine learning and product recognition. The application requires customers to simply point their phone cameras at an unpackaged product in a Lush store to reveal product information such as product description, ingredients, price and immersive videos that demonstrate how the product is used. By creating and implementing this tool,

Lush not only brings value to customers, but also fulfills its social and environmental responsibility which are at the core of the company's values.

Failure examples of digital transformation are just as interesting as the examples of success, offering insight into actions that should be taken from the lessons learned. Revlon, the American multinational company that manufactures and markets cosmetics, skin care, perfume, and personal care products is one such example. Through a diverse portfolio of more than 15 brands sold in more than 150 countries, the company sells its products directly to customers through retail stores and e-commerce sites as well as through mass retail channels, including prestige retailers, perfumeries, department and specialty stores, and distributors. In February 2018, the company initiated the implementation of its new SAP ERP system that was intended to substitute the existing system. At the same time they acquired the company 'Elizabeth Arden' and were trying to come up with a way to integrate existing and new operations. Shortly after the deployment of the new ERP, significant challenges related to the system's functionality emerged at Revlon's manufacturing facility, which in turn hindered the efficient production of an adequate volume of finished products. In consequence, the company was unable to meet the demands of its major retail clientele, leading to unfulfilled orders. The rollout of the ERP was a huge problem as it was not an isolated case, but an undertaking that took place across 22 countries of operation. Besides the negative return on investment in the form of lost sales, lost customer value and service, negative material effect on the executive's time and a drop of the stock price, a lawsuit was filed by investors who seeked to rectify the damages caused by the ill-prepared handling of the digital transformation efforts. In response to the consequences, with an aim to retain customer satisfaction the company tried to expedite product shipments at the time, but ended up having to pay large fees and other unanticipated expenses (Kimberling, 2021; Baumann, 2020).

Research on this specific Revlon case suggests it is crucial to conduct thorough testing of any new IT system implementation before proceeding with a full-scale deployment. Ensuring that there are efficient back-up solutions that can be activated immediately if the new system fails to deliver is another suggestion to be followed in a similar scenario. Another thing to consider is the type of rollout that is used. Instead of a broad rollout, deploying in phases allows for a more manageable troubleshooting scale and provides inputs that can be applied to subsequent phases. Equally important is communication with stakeholders about major system changes, potential risks, and strategies for risk mitigation, as well as having an in tune change management strategy that offers guidance for integrating new solutions (Rohn, 2023).

Last but not least is Toys "R" Us, a once-dominant US toy retailer, which serves as a case of digital transformation failure in retail. Established in 1948, the company faced bankruptcy and closures due to its inability to foresee trends, adapt to evolving customer behavior, and develop a digital strategy ahead of competitors. A key misstep was their reliance on Amazon for e-commerce without creating their own online store, leading to a transactional rather than

interactive customer experience. Toys "R" Us failed to understand how, when, and why customers engaged with their brand, having no direct access to customer data, both in terms of how customers made purchase decisions and consumed content (Fulkerson, 2018; Gaydos, 2018).This failure underscored the importance of transitioning to an online marketplace model, embracing unified omnichannel approaches, and leveraging physical stores for experiences, not just transactions. The company was saved from bankruptcy in 2018 by Tru Kids Inc., later acquired by WHP Global in 2021 (Sportelli, 2023).

2.2 Digital maturity

When embarking on a digital transformation journey, organizations must address the initial inquiry of where and how to begin. To accomplish this objective, it is imperative to have an understanding of the organization's current level of digital maturity, which is expected to raise awareness about the available capabilities and the possible action to be taken in given scenarios (Ochoa-Urrego & Peña-Reyes, 2021; Blatz et al., 2018). Moving forward with digital transformation initiatives without understanding the digital maturity level first, means that organizations will be more likely to face unforeseen roadblocks that can hinder their operations and cause monetary and time losses. Digital transformation and digital maturity are thus inter-related, and both have implications on business operations and efficiencies (Partners, 2023).

Digital Maturity is defined as the capacity of an organization to effectively adapt to technological changes and trends, while generating value through innovative capabilities and aligning with customer preferences, thus gaining a competitive edge over competitors (Dieffenbacher, 2022).

Based on Kane et al. (2017), digital maturity refers to an organization's systematic readiness to consistently adapt to ongoing digital changes. It does not simply entail the implementation of new technologies that help support a company’s strategy, staff, culture, technology or structures to satisfy customers, employees or any stakeholders’ needs. In an article about how to achieve digital maturity, Kane et al. (2017) place an emphasis on that *it* cannot be achieved swiftly or accidentally, rather it necessitates the gradual adoption of practices and adaptation to the changing digital landscape.

The idea of gathering understanding of the organization's current level of digital maturity pertains to the comparison between the present state of an organization or process, meaning it’s as-is level of digitalization, and a state of “perfection” or full readiness (Ochoa-Urrego & Peña-Reyes, 2021; Schumacher et al., 2016; Blatz et al., 2018). Getting an understanding of the present level of maturity is intended to encourage companies to take further action into pursuing digital initiatives or DT ambitions.

Maturity models serve as useful tools for assessing and comparing improvement processes to produce a report on the progress made in developing a specific organizational area's capability (De Bruin et al., 2005). They are an “established means to identify strengths and weaknesses of certain domains of an organization” (Lahrmann & Marx, 2010).

Even though there is a lack of comprehensiveness of the evolution and extension of maturity models, Lahrmann and Marx (2010) say that maturity models usually consist of several levels of maturity within a specific domain or industry and are applicable for both organizational assessment and development. Levels of maturity provide a framework for understanding where a company stands in its digital transformation journey. Research also suggests that organizations that forgo the measurement of their digital maturity will have to devise which maturity level they belong to themselves, based on the strategy they have chosen to follow and the requirements (costs, capabilities and benefits) described by the particular maturity level that change over time in response to changes in the business environment.

The names and characteristics of maturity levels vary depending on the source, so this chapter offers a brief overview of a few existing digital maturity models, the dimensions they cover and the levels of maturity they propose.

2.2.1 Industrie 4.0 Maturity Index

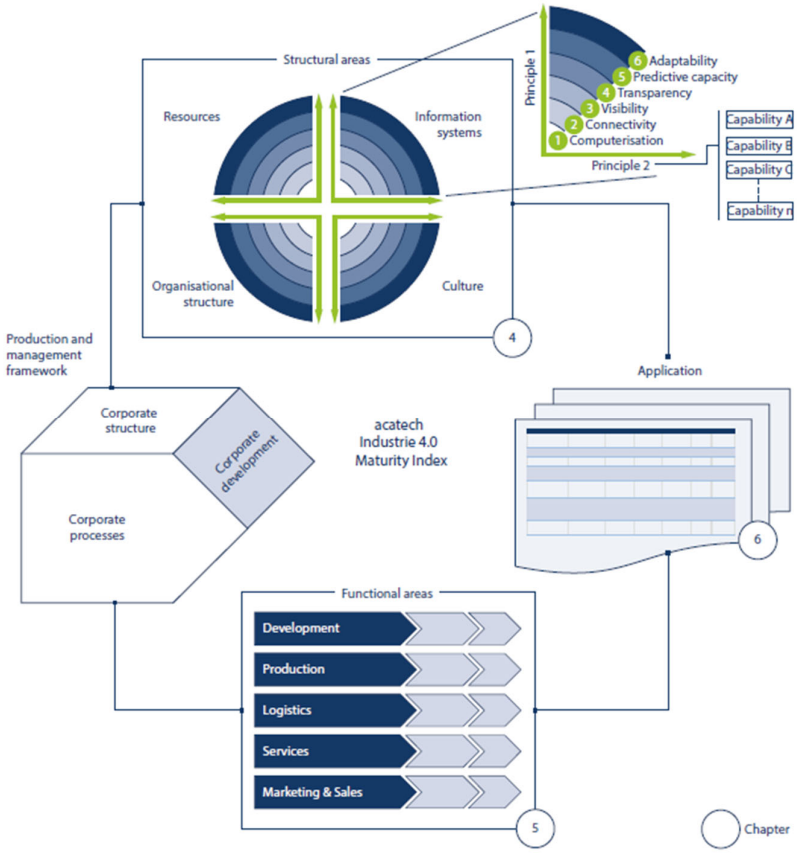
The acatech Industrie 4.0 Maturity Index is a model used to assess and measure the level of digital transformation within manufacturing organizations. It is particularly relevant in the context of Industry 4.0, which refers to the fourth industrial revolution characterized by the integration of digital technologies, the Internet of Things (IoT), artificial intelligence, and data analytics into manufacturing processes.

The Maturity Index consists of six stages: Computerization, Connectivity, Visibility, Transparency, Predictive capacity, and Adaptability, that manufacturing companies gradually move through as they upgrade their digital capabilities in the structural areas of resources, information systems, culture and organizational structure, which together make up the organization’s structure. In the acatech Industrie 4.0 Maturity Index, the capabilities within each structural area are investigated separately for each of a company’s functional areas because the maturity level of each capability can vary across different functional areas and the corresponding business processes they encompass. Figure 2 is the author's depiction of these elements.

When in use, the structural areas, functional areas and maturity stages from the acatech Industrie 4.0 Maturity Index are integrated to assess both the overall maturity of a manufacturing company and the maturity levels of its specific functional areas.

Although it offers a comprehensive methodology for companies to evaluate their progress, identify specific goals and develop suitable measures to achieve them, this maturity model is only applicable to the business processes of manufacturing companies.

Figure 2: Model design of the acatech Industrie 4.0 Maturity Index



Source: Schuh et al. (2020)

2.2.2 Deloitte's Digital Maturity Model

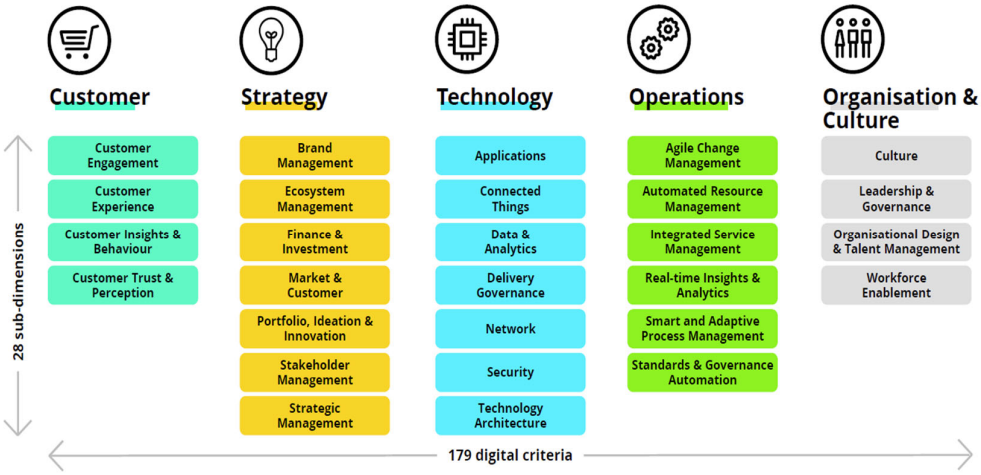
Deloitte's Digital Maturity Model is described as a valuable tool capable of offering guidelines for a clear path during a digital transformation journey. The DMM is meant to empower business leaders from the communications industry to evaluate their company's position in the transformation journey, formulate objectives and strategies for both the short and long term, and allocate resources to transformation projects that can yield substantial outcomes.

This model is considered to be pan-organizational, meaning that it helps evaluate digital capabilities across five business dimensions: Customers, Strategy, Technology, Operations, and Organization and culture, in order to create a holistic view of the digital maturity across one company. Each core dimension breaks down into a series of sub-dimensions that are

then split into individual criteria for measuring digital maturity, as presented in Figure 3 below.

Using Deloitte's DMM during a DT journey enables organizations to pinpoint shortcomings and decide which aspects require further attention. Its main objective is to assist leaders in prioritizing digital capabilities, such as strategy or people, according to their ambitions. Its first goal is to provide understanding of the current state, help in defining the ambitions for DT and identify the opportunities that will open up the path to the desired state, and from there on allow leaders to prioritize capabilities based on business objectives and put revised plans into action (Velosio, 2023).

Figure 3: Deloitte's Digital Maturity Model Sub-Dimensions



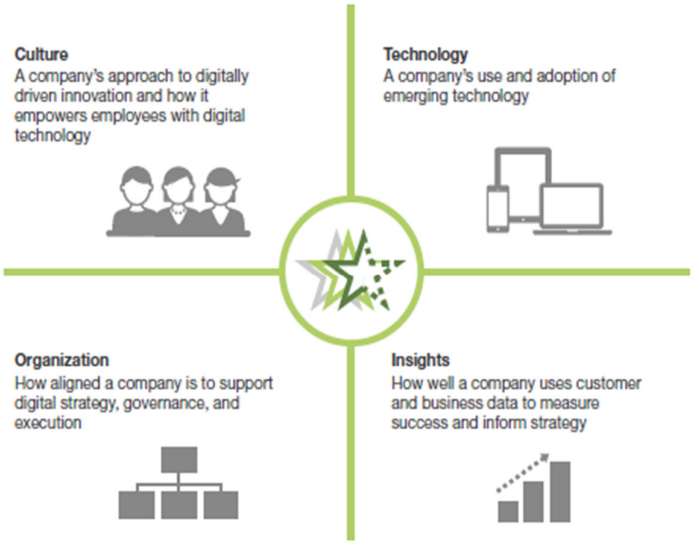
Source: Deloitte, 2018

2.2.3 Forrester's Digital Maturity Model (5.0)

Forrester's Digital Maturity Model is a tool that companies can use to evaluate the incorporation of digital elements into their operational models and their proficiency in executing digital initiatives. Since its emergence in 2007, the model has seen several iterations, the latest one being from 2017. The first version of Forrester's Digital Maturity Model (2007) was intended for marketers and e-business professionals to evaluate how well their companies have implemented digital initiatives into their operating models and how effective they were at executing these digital initiatives. The Digital Maturity Model *5.0* is a refined model, aiming to help business leaders and managers advance their company's digital savviness and practices.

The model covers four dimensions: Culture, Organization, Technology and Insights, that are presented in Figure 4. It differs from the previously described models in that it offers a self-assessment tool that companies can use to determine their digital sophistication and establish a path to improvement and is applicable among others, to the retail industry.

Figure 4: Dimensions of Forrester's Digital Maturity Model



Source: VanBoskirk et al. (2017)

The self-assessment tool is based on predefined statements for each of the four dimensions, which companies should use in order to map themselves in one of the four segments of maturity: Skeptics, Adopters, Collaborators and Differentiators. By marking the extent to which they agree with each statement and ending up with a cumulative score from a four point scale, companies can get a better understanding of the differences between less and more mature segments (VanBoskirk et al., 2017). The latest report by VanBoskirk et al., 2017 offers specific actions that companies mapped in each of the four identified segments of maturity can take in order to progress, either by emulating best practices or avoiding bad habits.

2.3 Digital strategy

Digital strategy is inherently a trans-functional strategy that explicitly recognizes the embeddedness of IT throughout the organization. Meaning that IT strategy is integrated with a company's overall business strategy, making the digital strategy emergent, iterative and influenced by evolving organizational capabilities (Bharadwaj et al., 2013, Galliers, 2011). As Matt et al. (2015) point out, digital transformation strategies possess a cross-functional nature and require synchronization with other functional and operational strategies.

Digital strategy has to be prepared, thus it involves the identification of elements of a firm's business model that must be modified according to the new strategy, along with the scope of the digital transformation (Correani et al., 2020).

Slovenia's Digital Innovation Hub (DIH) defines digital strategy as an important component of business strategy, its complement in establishing digital capabilities in companies, and a

way to establish or increase competitive advantage in the digital economy. The hub has developed a framework which consists of areas that enable companies to take a deliberate approach to digital transformation. The areas covered include (1) customer experience, (2) data strategy, (3) processes and digital solutions for business support, (4) digital business models, products and services, (5) digital personnel and digital jobs, (6) digital culture development strategy, (7) cyber security and (8) Industry 4.0 (specific for manufacturing companies).

The goal of a digital strategy is to serve as a central framework based on which the entire coordination, prioritization, and implementation of digital transformations within a firm can be integrated (Matt et al., 2015). The success of a digital strategy relies on the ability of a company to invest in digital abilities that are aligned with the overall business strategy and digital strategy based on the organizational structure, human resource, financing mechanisms and indicators for performance tracking (Catlin et al., 2015).

3 CASE STUDY

3.1 Case study design and data collection

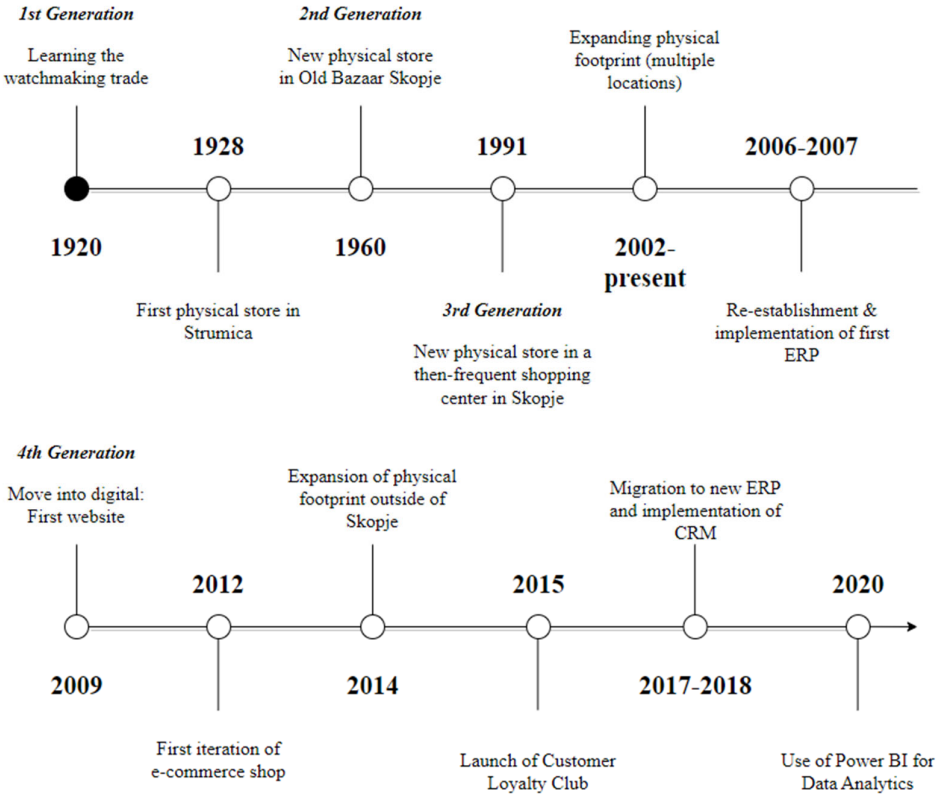
In conducting the case study of Watch ID, semi-structured interviews were employed, involving a single company representative. The participant, aged 35, has served as the Chief Operational Officer for 6 consecutive years, accumulating 16 years of tenure within the company. Two semi-structured interviews were conducted for the preparation of the SWOT analysis in 3.2, with a total duration of 3 hours and 30 minutes. Another set of two semi-structured interviews, totaling 4 hours and 40 minutes, was conducted for the digital maturity assessment in 3.3. The remaining chapters of the case study were developed through an analysis of internal company documents and a synthesis of information obtained from the interviews.

3.2 Company description

The chosen company's origins date back to the 20th century. Since 1920 the company has worked with sales, distribution and service of high quality watches within the retail industry. Figure 5 below presents the key developments the company has seen with the transition of four generations that have all followed a business model that remains somewhat the same today. The first generation began the study of the watchmaking trade focusing primarily on watch repairs; the second led the domestic expansion of the company's physical footprint into the following decades of the 20th century with the focus of selling and distribution of watches; the third managed the re-establishment of the company into the new millennium taking on the changes of the industry all while continuing the same focus of their predecessors; and the fourth generation steered the adoption and integration of digital

practices and expanded its product and service offer to satisfy market demand (Watch ID, Company Presentation, 2023).

Figure 5: Timeline of Watch ID's development



Source: Own work

The company that operates today was established in 2006, and it is currently registered as a medium-sized limited liability company. It is one of the leading watches and jewellery retailers in the fashion and accessories industry in North Macedonia operating at an omnichannel level, having an e-commerce presence, multiple brick-and-mortar (physical) stores, as well as a channel of wholesalers across the country.

The company has worked on domestic expansion and currently has 14 points of sale in the chain and 24 wholesale partners. Most of the retail stores are located in Skopje (7), the capital city, and the rest of the stores are located in other cities across the country. Four of the chain stores are located in the most frequent and busiest shopping malls in the country. The company also has its own service (repair) center. A significant part of the development of the company is dedicated to its web presence first initiated in the form of a website in 2009 and the online store and digital opportunities for purchase that first came about in 2012. The company has developed a B2B portal for e-ordering and B2C web shop that also acts as a

data harvesting platform. These are positioned as a main online channel for selling watches and jewellery in the country of operation.

Watch ID has an extensive portfolio of more than 35 different, renowned mid-range fashion watches and jewellery brands, as well as 2 high-end premium watch brands. The company strives to proactively follow consumer trends and expands its product portfolio to address the consumer needs and desires.

Today, their retail chain goes under a trademark name (kept anonymous), which according to various research reports, has achieved a high level of brand awareness on the Macedonian market, leading to strong positioning and perception among customers. From both a financial and consumer perspective, the market share on the domestic market of the company is above 55% (Watch ID, Market research report for watches and jewelry, 2022).

3.2.1 Organizational structure

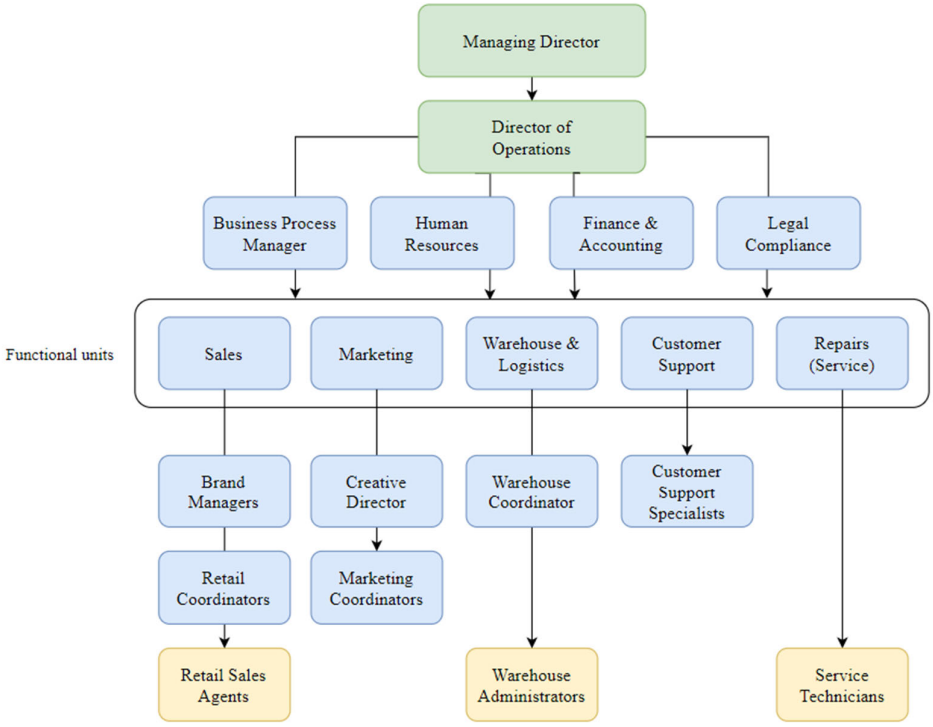
Watch ID currently employs over 60 people at different organizational levels. Senior management, as well as all functional units, also referred to as middle management, are based in Skopje, while the retail coordinators and sales agents are dispersed in the rest of the cities where the company has a physical footprint.

As shown in Figure 6, there is the Managing Director, the most senior full-time executive of the company and the Director of Operations responsible for optimizing the company's operational performance, implementing innovative policies, delegating, supervising and leading functional units. Although there are differences in these upper management roles, both senior managers work hand in hand to maintain the efficient work environment and jointly drive current and future company endeavors.

Working as separate, yet coordinated functional units are the Human Resources, Finance and Accounting and Legal Compliance, as well as the latest introduced role of Business Process Manager represented by a person that closely works with senior and middle management and operational staff to give first hand inputs of company process optimization. The rest of the company is represented by employees in the functional units of Sales, Marketing, Warehouse and Logistics, Customer Support and Service (repairs) who perform interrelated activities that contribute to selling and servicing the portfolio of high quality watches and jewellery and satisfying customer demand in a specific way.

The company is process and customer oriented, looking to circumvent siloing of operational units by having a strong customer focus and achieving this determination through the integration and connectivity among its organizational structure of functional units.

Figure 6: Organizational structure



Source: Own work

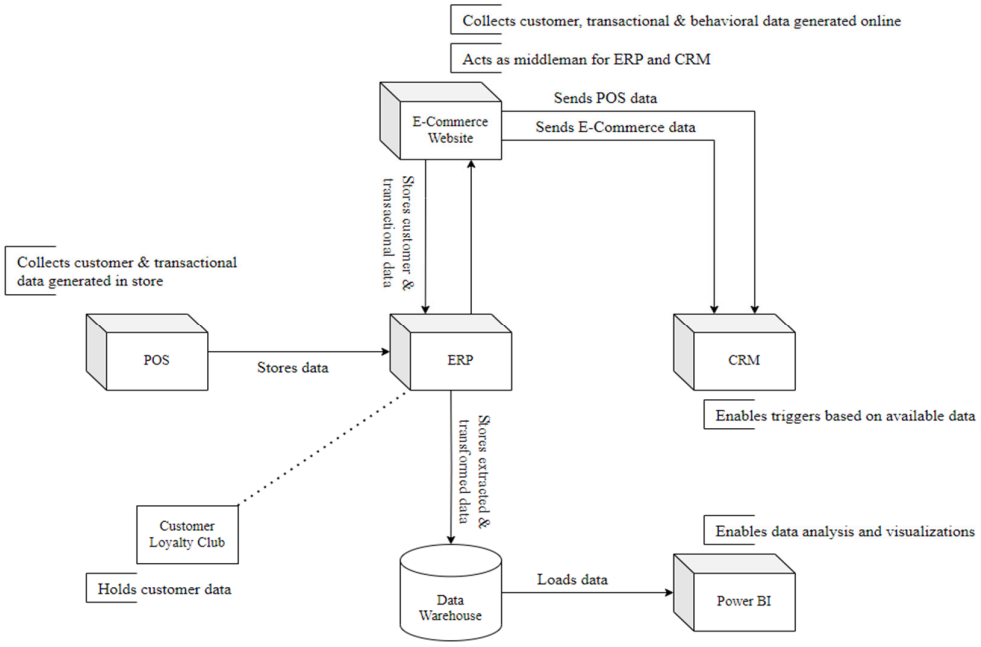
3.2.2 IT solutions

Watch ID has made extensive investments and upgrades to its technology infrastructure. Hardware, on premise and cloud servers (for cyber threat protection, authentication, storage, backup), email servers and VoIP (Voice over Internet Protocol) systems contribute to better communication, data processing, ensure data storage and backup and optimize day-to-day job performance. Besides this, the company uses a set of IT solutions that are integrated among each other to provide a seamless experience for both employees and for delivering value to customers.

Namely, the company uses a Point of Sale (POS) system, an Enterprise Resource Planning (ERP) and a Customer Relationship Management (CRM) software solutions. These, together with the e-commerce website and Customer Loyalty Club are presented in Figure 7 below. The figure depicts the specific way in which these solutions communicate and how they generate, collect and store transactional, product, customer and behavioral data.

The POS system is a combination of hardware and software that is used to facilitate sales transactions. It consists of a computer which runs the POS software, a barcode scanner, a cash register or card reader, and a receipt printer. When a customer makes a purchase in a physical store, the POS system enables existing or newly acquired Loyalty Club members to be attributed to the receipt.

Figure 7: Communication of the company's IT Solutions



Source: Own work

This functionality of the POS system was specifically tailored for the retailing company in order to streamline data collection and storage from physical stores, which still remain to be the company's most prominent channel of sales. Namely, the POS system is used to collect transactional and customer data from physical stores, which is then fed and stored into the ERP system.

The website serves both as an online catalog of the products offered, as well as an e-commerce platform that enables online purchases. It has been developed by NB Soft, a specialized e-commerce solutions developer from Serbia that creates online stores according to tailored needs. As an e-commerce platform it collects customer data (personal data such as name, email, address) for those registered in the tailor made Customer Loyalty Club, transactional data (purchase history, order details), as well as behavioral data (browsing history, cart abandonment, etc.) which it sends to both the ERP system for storage and further processing (for example, customer data is stored in the Customer Loyalty Club module of the ERP), and the CRM system. After storing the data in the ERP system, relevant customer, transactional and behavioral data are extracted and transferred to the CRM system for customer relationship management purposes. Additionally, because the website acts as a middleman for the ERP and the CRM, and because the POS is integrated with the ERP, the website collects the transactional and customer data stored in the ERP previously generated through the brick-and-mortar POS system and sends it to the CRM system allowing the CRM system to have a comprehensive view of all customer actions.

The ERP software that the company uses, “Pantheon”, is produced by the Slovenian company Data Lab. Before Pantheon was implemented, the company used another ERP solution - “Phobos”, produced by a local vendor Planet Interactive, which proved to be difficult to scale and generally inefficient for handling more complex processes and was thus replaced. Today, Pantheon stores transactional, product and customer data which it gets from both the POS system and the e-commerce website. The ERP uses the website as a middleman to communicate with the CRM system. Besides helping to collect and store data, the ERP automates and enhances inventory management, order processing, product replenishment, finance and accounting, payroll and other processes**.** The software has a reporting functionality with a plethora of embedded and custom made reports that can be used based on available data.

The Customer Loyalty Club is a segment of the ERP software. It is integrated with the POS system and as such provides streamlined data integration. The POS system captures transactional and customer data made by existing or new loyalty club members and automatically links it to the ERP, as well as the CRM software. The Customer Loyalty Club currently has around 90.000 members that are existing customers. This enables the company to track purchase behavior of its customers and identify purchase recency and frequency in addition to the multitude of correlation opportunities that can be identified as a result of Watch ID’s data harvesting efforts. This data is collected in both brick-and-mortar and online environments (Watch ID, Market research report for watches and jewelry, 2022).

The CRM, “SalesManago” is an off-the-shelf software application produced by a Polish company that carries the same name. Watch ID essentially uses SalesManago as a Customer Data Platform (CDP), or tool that enables the creation of automation rules. These automation rules are predefined sets of conditions and actions that allow for automated data processing and workflows based on certain events. Automation rules in SalesManago start with a set of conditions that define specific criteria or triggers. The conditions are based on data attributes or events within the CDP. Once the conditions are met, automation rules specify the actions to be taken. For example, one automation rule that Watch ID has created using the CDP is used to send notifications to existing Loyalty Club members reminding them to revisit a product they have previously viewed online over the website. The flow of events, conditions and actions that are specified for this automation rule called “Purchase Intention” are presented and described in more detail in Appendix 2.

Automation rules within SalesManago are configurable and allow Watch ID to define their own conditions and actions based on their specific requirements. This system produces additional value for the company's existing and potential customers.

On top of the aforementioned solutions, Power BI is used to provide data visualization, analytics, and reporting. Data from the ERP is extracted through SQL queries, transformed to meet the reporting and analysis requirements by cleaning and filtering and is loaded into Power BI. This ETL (Extract, Transform, and Load) process is performed by Data Masters,

a third-party company that also sells Power BI licenses. Once the data is connected to Power BI, the company creates interactive dashboards, reports, and visualizations. The types of insights that the company is enabled to see using Power BI are displayed in a dashboard format for, for example:

- Purchase frequency and recency – information about customer purchasing behavior, the average time that has passed since a customer's last purchase and on average how often a customer has purchased within selected filters.
- Demographic profile (persona) – detailed information about different groups of buyers or customers based on various demographic and transactional characteristics.
- Display of customer clusters on a map – dashboard based on customer's residential address or the city where they live, which enables a visual crossover of the places of residence with the places where customers shop physically and online.

Watch ID's information systems and the data it generates, stores and analyzes is essential to the value creation process. As described by Vial (2019) in Figure 1: Building blocks of the DT process, the use of digital technologies, such as the aforementioned platforms and ecosystem enable changes in value creation paths through the use of different digital channels, which in turn lead to the creation of unique value propositions.

3.2.3 SWOT analysis

A SWOT analysis was performed with a purpose to create a synthesized view of the current state of the company, taking into account the internal perspective of what Watch ID can directly influence, and the external view of what they can influence, but not directly impact. DIH also proposes conducting this analysis as it provides a look into the company's general operations and offers a basis for the exploration of the key areas that need improvement as part of the preparation of the digital strategy.

Appendix 3 is the initial questionnaire used for the semi-structured interviews with the COO. Due to the broad nature and scope of discussed topics, related questions arose throughout the interviews. The findings are concisely presented in Table 1 and described in detail below.

- Strength: Diversified digital strategy

Watch ID creates well diversified digital strategies that are hard to replicate. The COO believes that, aside from the core business of fulfilling market demand, Watch ID is guided by digital strategies that are diversified and therefore difficult to replicate by competitors. These "digital strategies" are related to using digital marketing for improving customer experience, leveraging omnichannel capabilities for customer retention and using harvested data that powers decision making in multiple fields of operation. Overall, the COO says that "Digitalization and dedication towards internal process optimization" is a key company trait.

- Strength: Broad product and service offering

Another strength is related to having a high-quality and wide range of products from different brands. Although the company is primarily a watch shop, the portfolio focus is also on jewellery, as a growing category of revenue generators. Watches as a product category have grown slowly for Watch ID, with 12% growth in fiscal year (FY) 2023 in comparison to FY2022, while the jewellery category has grown rapidly in FY2023, with 38% growth versus FY2022 (Watch ID, Market research report for watches and jewelry, 2022). In addition to watches and jewellery, the portfolio also consists of products, like small leather goods and watch collector boxes, as well as services, like watch repairs, ear piercing and watches and jewellery engraving. The broad product and service offering and their categorization allows Watch ID to generate additional revenue from the market.

- Strength: Domestically robust sales channels

Watch ID's sales channels are domestically balanced. The company operates 4 sales channels, including 14 brick-and-mortar points of sale (POS) and an online store under the trademark name; 24 wholesale partners; and direct to corporate sales. The brick-and-mortar footprint is especially good, with most stores positioned in Skopje (7), the capital city of North Macedonia, and the rest of the stores located in other cities across the country: Kumanovo (1), Gostivar (1), Tetovo (2), Ohrid (1), Struga (1) and Bitola (1). Four of the chain's points of sale are located in the most frequent and busiest shopping malls in the country. The online store is a crucial channel for the company's development and growth that offers consumers a digital platform for purchase by showcasing the entire assortment over a website and integrated web shop. The online shop fulfills customer demand and orders from all across the country. The company's wholesale partner network operates on a B2B2C model, enabling product distribution and bridging the geographical gap in areas where the company lacks its own retail footprint. Lastly, the direct corporate sales act as a B2B channel for satisfying demands of larger clients.

- Strength: Good brand awareness

In the latest Top of Mind market research, conducted in October 2023 with respondents from 4 cities in North Macedonia (Skopje, Bitola, Tetovo and Kumanovo), with differing age groups, number of family members, nationalities, social statuses and average monthly income, based on the question "When we say 'wristwatch', what is the first store that comes to mind?", the retail chain brand has found itself in the first position for general recognition among competition. 83% of the respondents have answered that Watch ID's retail chain brand is the first store in the watch segment that they think of (Watch ID, Top of Mind Research Report, 2023). Even though this number may change year in and year out, this percentage is a particularly good indication of how high the retail chain brand ranks in the consciousness of consumers.

- Strength: Data harvesting

Watch ID leverages the capabilities of its POS, ERP and CRM systems, as well as the Customer Loyalty Club to generate transactional, customer and behavioral data, and as such employs a multi-faceted approach to data harvesting. Data harvesting enables Watch ID to make informed business decisions, optimize processes, personalize customer experiences, and stay competitive in the market.

- Weakness: Internal communication

Internal communication to a certain extent is a weakness that needs improvement. The COO classifies weakness in communication in terms of:

- Flow of formal information: Things that are forgotten to be said.
- Interpersonal communication: Lack of transparency of conflicts between colleagues.
- Organizational culture communication challenges: Communication among old and new employees is difficult due to the differing organizational culture values. New employees carry organizational culture values obtained in previous companies.
- Organizational culture between head-office employees and retail employees: There is a disconnection between the two.

Table 1: SWOT findings

INTERNAL	**EXTERNAL**
Strengths ● Diversified digital strategy ● Broad product and service offering ● Domestically robust sales channels ● Good brand awareness ● Data harvesting	**Opportunities** ● Growing target market ● Focus on controlling market structure ● Proliferation of political / economic initiatives ● Geographic expansion ● Proliferation of Augmented Reality
Weaknesses ● Internal communication ● Turnaround time for product repairs ● Upgrading IT equipment and software ● Disseminating know-how and skills	**Threats** ● Increasing possibility of penetration of big marketplaces ● Shifting consumer demand ● Increasing number of direct competitors ● Proliferation of regional marketplaces and political and economic initiatives

Source: Own work

- Weakness: Turnaround time for product repairs

Another identified weakness of the company pertains to the turnaround time for product repairs. Customers have complained about the duration it takes for their products to be serviced. Although there is an automated process in place that enables the company to record all product repairs that need to be handled, avoiding to address delays in customer repair needs has the potential to impact customer satisfaction and loyalty in the long term, since timely service is a crucial aspect of maintaining a positive customer experience.

- Weakness: Updating IT equipment and software

IT equipment needs to be updated frequently in order for it to support the work of company employees, and the same goes for the IT solutions. The ERP is written in an outdated programming language (Delphi). Although the developer Data Lab has been proactive in updating their core system and migrating modules to a cloud-based platform, there exists a potential threat in translating software additions, such as the Customer Loyalty Club, to the cloud-based version of the ERP.

- Weakness: Disseminating know-how and skills

The last weakness delineated here pertains to the dissemination of know-how and skills through prioritization techniques and training. Watch ID does not currently have the sufficient mechanisms for knowledge sharing in place. Although the company holds internally organized seminars that help teach new employees, or help update old employee's knowledge on Brand training for products, In-Store Sales Algorithm and Conflict Resolution Trainings, there is no centralized place where this information can be repeatedly accessed and studied from at the employees own pace. This hinders the company's ability to leverage internal resources, and may eventually lead to the creation of knowledge silos, inconsistent decision making, and difficulty in problem solving, employee disengagement, frustration and lack of collaboration.

- Opportunity: Growing target market (within jewellery segment)

The company measures its target market by putting every competitor in their field in one place, including the company itself, and measuring the general performance this year, in comparison to the previous year. Looked at from this perspective, the COO says that the target market is growing, especially considering how the company has recently been expanding its offer through a different product category, jewellery, that has shown an exceptional increase in FY23 vs. FY22. When asked whether the target market is shifting, the COO said it probably is not, because even though segments like consumer electronics (smartwatches) are growing, Watch ID is not planning on tapping into that segment at the moment, and as such is not affected by the shift.

- Opportunity: Focus on controlling market structure (eliminating wholesale)

An opportunity for Watch ID is to take full control of the market structure, by eliminating wholesale from the distribution footprint and solely focusing on expanding its own retail chain. The domestically operated market is too small to host traditional wholesaling, additionally Watch ID would like to have better control over its brand recognition and customer relationships. What is more, controlling wholesale partners has shown to be difficult due to their lack of collaboration and disinterest. One way to solve this "pain-point" is to offer wholesale partners a franchise or pay royalties for 2-3 years in order to completely buy out their business, rebranding existing wholesale partner stores and thus absorbing them with their own retail chain.

- Opportunity: Proliferation of political / economic initiatives

An opportunity for Watch ID that comes from external events is the proliferation of regional political and economic initiatives like the Open Balkan. Although the Open Balkan initiative is unofficial, the existence of a Schengen like zone where there will be free exchange of people and goods, presents an opportunity for the company considering that Watch ID's key problem is that it is operating in a small market, and every opportunity to expand that market and exploit the leverage to force the company's diversification strategy onto new markets is seen as an opportunity.

- Opportunity: Geographic expansion

In a market like the domestic, which is small and has low purchasing power from consumers, the room for growth is quite limited. Additionally, reaching high growth rates, with the company's existing above 55% market share and 83% brand recognition is a challenge, and even maintaining the current position is somewhat of a challenge due to significant costs that are incurred by expansion activities on the domestic market. In addition, there is no guarantee that in the future, a foreign retail chain will not enter and destabilize, primarily the position of Watch ID. This is why the company has been exploring the idea of internationalization of its brand in Albania. This internationalization opportunity is the logical step of Watch ID for further growth of the company. On top of this regional expansion, there is always the opportunity to take over cities where Watch ID does not have a footprint already.

- Opportunity: Proliferation of Augmented Reality

The proliferation of AR presents an opportunity for Watch ID. The use of this technology could enhance customer experience and be a differentiating factor. By offering end customers a virtual try-on of products from the comfort of their homes or in-store using mobile apps or smart mirrors, AR enables customers to see how different pieces will look on them, assess the fit, and visualize how they complement their style. This type of Virtual try-on can increase customer engagement and drive sales by providing a more immersive and personalized shopping experience. Watch ID has already had a marketing campaign in which they created an Instagram Story filter that recognizes a person's wrist and positions a certain model of watch from one of the brands in the company portfolio.

- Threat: Potential market entry for big marketplaces

The possibility of big marketplaces like Amazon, as well as pure-play digital players and brick-and-mortar competitors entering the market is continuously increasing. This threat needs to be continuously monitored, and the company should keep focusing on differentiation, emphasize personalized service, enhance customer experiences, keep at its omnichannel approach, and leverage its existing and foster new partnerships and collaborations.

- Threat: Shifting consumer demand

Objectively, the smart segment or so called consumer electronics is Watch ID's biggest threat. The COO calls it the "big elephant in the room" seeing as how, as an industry trend, consumer electronics (wearables, smartwatches) are slowly, but surely shifting consumer demand from traditional watches. Working in a traditional industry that is facing the challenge of continuous digitalization is something that could work against Watch ID's business, and could cause irreparable disruption. For the short term, the only viable solution to this threat is to diversify into jewellery as a segment which has shown most promise in terms of market growth, as well as to try and gain access to the high-end watch segment.

- Threat: Increasing number of direct competitors

Another threat is the increasing number of direct competitors that is due to the company's internal expansion of product segments. Companies and groups operating in the similar industry, selling a variety of products or brands could become Watch ID's direct competitor seeing as how the product offer would be similar on both ends. If the company decides to let the jewellery segment grow, it would by default mean that the number of direct competitors would grow as well.

- Threat: Proliferation of regional marketplaces and political / economic initiatives

The proliferation of regional marketplaces, like Ananas (an e-commerce platform from Serbia, operating in Bosnia and Herzegovina, Macedonia, Montenegro, Croatia and Slovenia, that connects buyers and sellers through modern technology and innovation, and offers simplicity, reliability and affordability of shopping for consumers, can cause a shift in consumers shopping behavior and may cause pressure for Watch ID to explore a strategic partnerships or collaboration with said marketplace. This could in turn cause cannibalization if the marketplace becomes a preferred channel for customers, drawing sales away from Watch ID's own sales channels. Regional political and economic initiatives such as the Open Balkan Initiative can be seen both as an opportunity and a threat, seeing as how this kind of initiative can have an unfavorable effect on demand, competition and can cause a lot of industry changes.

3.2.4 Competitive positioning

The competitive positioning of Watch ID details the aspects of the company's value proposition, communication strategy, targeted market, marketing strategy, an analysis of the main competitors and the perceived and actual points of differentiation. This analysis goes in line with DIH's proposal to do an assessment of the state of the company in the field of digitization which includes an analysis of the competitive position of the company.

Watch ID's value proposition is that they are "The official distributor of the widest range of popular watch and jewellery brands in the country". Their mission is to meticulously satisfy

the tastes of the most demanding customers to which they direct their attention to, and their vision is to continue to bring value to customers through an extensive presence of sales points, as well as through their online store. The company alternately communicates two slogans “Moments for us”, and “We are always open - Shop Online”. The first one denotes that the retailer's physical and online stores are the ideal gifting destination for loved ones or for treating oneself. The latter one is a call-to-action denoting that the company's online store is always available and accessible to customers. It emphasizes the convenience and flexibility of online shopping, suggesting that customers can make purchases at any time. Using these slogans alternately is intended to encourage customers to take advantage of the company's online shopping platform.

Watch ID’s targeted market is wide. They employ a “broad market” strategy that allows the company to cater to the needs of different target audiences by offering products that fall within versatile price ranges. They employ what the COO calls a “Diversified digital strategy that is hard to replicate”. This means practicing tailored digital marketing campaigns and leveraging information systems for customer retention.

Their marketing strategy is a valued asset. They use a broad range of marketing channels, on and offline. Shop windows equipped with digital totems or various seasonal window creatives, Out Of Home (OOH) advertisements, including billboards, bus ads, in-mall digital screens, lifestyle magazines, radio, event sponsorships, brand launch events, and promotional merchandise are just part of the offline marketing initiatives that help increase brand awareness and drive in-store traffic. As part of the online, or digital marketing, there is a more robust strategy that involves the use of the company’s information systems, website and landing pages, and digital marketing channels that enable the company to connect and engage with their broad audience efficiently and effectively. Watch ID uses content marketing (blog and social media posts), Search Engine Optimization (SEO), as their long term strategy for website visibility using keyword searches, Search Engine Marketing (SEM) for paid content ranking among search engine traffic depending on competition for the keywords, Social Media marketing through Facebook, Instagram and YouTube, Spotify Ads, influencer marketing, email marketing. These channels help the company expand reach, drive traffic to their website, deepen engagement, generate leads and sales, track progress and improve marketing ROI.

Watch ID’s competitors can be categorized as direct, indirect and replacement competition in the country of operation. Direct competitors are considered to be those operating in the watches and jewellery segment, and based on availability of information can be analyzed in regard to similarity of products and services, similarity of targeted customers, distribution and promotional channels and website use. Direct competitors pose the largest threat for Watch ID and as such are the only ones taken into consideration in the following text. However, worthy of mention are the company’s indirect and replacement competitors**.** The former are companies that operate as mono-brand jewellery stores, as well as retailing companies that sell a mix of watches, jewellery, apparel and related accessories. These do

not pose a big competitor threat. The latter are represented by domestic retailing chains that, among products such as telephones, computers, laptops, cameras and home appliances in their offer, sell consumer electronics (wearables, smartwatches) that can easily take away a portion of the targeted customers. However, Watch ID currently has three main *direct* competitors:

- Competitor 1 is a domestic high-end watches and jewellery retailer that sells products of higher perceived value, brand prestige and reputation and specifically targets audiences with higher average monthly income. It has been operating on the market for 27 years, selling Swiss-made high quality watches from renowned brands. The company value proposition is that they are built on a foundation of passion, knowledge, and style, and emphasizes that their approach to selecting watches and jewellery is driven by a desire to counterbalance the mass production and instant quality prevalent in the market.
- Competitor 2 is a domestic low-end watches and jewellery retailer that positions itself as a company with a family tradition. Their vision is to be the most valued and well-known brand for the sale and distribution of watches in North Macedonia. Their value proposition is not clearly articulated, which most likely comes as a result of their limited product offer and weak points of differentiation. They do focus on providing the lowest price, which they implement by using a price manipulation scheme, where they introduce a product at a higher price point and discount it immediately after introducing it to the market, without waiting for the usual drop in demand.
- Competitor 3 is a well-established Turkish medium-to-high end watches retailer since 1994 that has penetrated the North Macedonian market in 2021. Their presence is expected to increase in the coming years. Their value proposition is that they offer premium customer experience in-store, which is allowed by their professional management approach, “never compromising on quality service” as well as bringing in the most competent employees in their field, in accordance with their corporate values of "Responsibility, Respect and Result Orientation”.

How these competitors' products, pricing, distribution and promotional channels compare to Watch ID is presented in Appendix 4: Analysis of competitors 4P’s. Found in Appendix 5, is an Analysis of the competitors' websites, which serve both as distribution and promotional channels. These analysis, together with the previously conducted IT solution and SWOT analysis helped delineate the following competitive differentiating factors for Watch ID:

- use of Customer Loyalty Club through which members acquire benefits, while the company tracks purchase behavior and attributes it to specific customers, resulting in increased customer retention, opportunities for targeted marketing, higher sales, and a competitive edge over competitors
- use of Customer Data Platform for managing customer relationships
- use of a mobile-friendly website that has:
- fast-loading webpages and gets automatic product availability updates, resulting with a “Real-Time Inventory and Product Availability” feature;

- optimized and comprehensive product descriptions (specifications) and blog posts;
- provides landing pages for users who click on online ads, and match the content and products shown in dynamic remarketing ads, which ultimately provide a seamless user experience;
- enables the use of a variety of payment methods for online purchases that increase customer convenience (Visa, MasterCard, Maestro, American Express, Iute credit);
- has a unique to competitors "Product try-on" feature for watches with a pictorial representation of a product's dimension on average size hand, and
- enables purchasing and redeeming gift vouchers online. Additionally, the website is tailor made for the retailer, meaning that its layout, features, and user-friendliness cannot be easily replicated by competitors due to the back-end technologies used for building their websites.

These practices contribute to the website's visibility through SEO. Unlike competitors, Watch ID has a strong positioning in organic, non-paid, search engine result pages (SERPs).

- Use of dynamic remarketing, which allows Watch ID to show ads that contain specific products to people who have previously visited their website and viewed those exact products on their site. To perform dynamic remarketing, Watch ID uses browsing behavior data, a structured product catalog that contains detailed information about the products in their offer, tailored remarketing lists that segment users based on behavior and Google Ads as a platform that enables the setup of advertisement campaigns.
- Use of website heatmaps and behavior analytics tools that offer visual insights into customer's interactions with the website, which helps identify engagement patterns and pain points. This data-driven approach enables Watch ID to periodically optimize the website and enhance user satisfaction and conversion rates.

To round off the differentiation factors connected to Watch ID's ecommerce presence are their awards for "Best E-commerce Shop in the category of Fashion Accessories, Beauty, Health and Care" for years 2021 and 2022, awarded by the E-commerce Association of North Macedonia.

3.3 Digital maturity assessment

Watch ID's digital maturity assessment was performed using the Digital Maturity Model 5.0 which as described serves to help companies evaluate the fusion of digital elements into their operational models as well as to evaluate their capacity in executing digital initiatives within the dimensions of:

- Culture: Approach to digitally driven innovation and how it empowers employees with digital technology
- Organization: Support of digital strategy, governance, and execution
- Technology: Use and adoption of emerging technology

- Insights: Use of customer and business data for measuring success and informing strategy.

During a semi-structured interview, the company's COO was asked to fill in the degree to which he agrees with the statements outlined in the self-assessment tool using a four point scale, where 0 = completely disagree; 1 = somewhat disagree; 2 = somewhat agree; and 3 = completely agree. Based on his answers, an aggregate score was reached. The score enabled me to map the maturity segment the company falls in (3.3.1) and structure the findings (3.3.2). The findings specify answers to a series of unstructured questions which emerged during the semi-structured interview and are in direct relation to the contents of the statements provided in the self-assessment tool.

3.3.1 Maturity segment mapping

Based on the tool's scoring system, Watch ID falls into the segment of Adopters with an aggregate of 51 points. As seen in Figure 8, companies that fall into this segment are mainly on the lower end of the digital maturity level and are characterized as "being stuck in conventional practices".

Figure 8: Maturity segments

Maturity segment	Characteristic behavior	Strategy	Score range
Differentiators	Demonstrate ad hoc excellence	Systematize best practices	75 to 84
Collaborators	Cooperative, but not insights driven	Embrace advanced analytics	57 to 74
Adopters	Stuck in conventional practices	Accelerate current digital efforts	34 to 56
Skeptics	Ignore digital	Disrupt yourself	0 to 33

Source: VanBoskirk et al. (2017)

Companies that fall into higher levels of maturity segments, such as the Collaborators and Differentiators, are characterized as being more cooperative, or demonstrative of ad hoc digital excellence, while those that fall into the segment below the Adopters, the Skeptics, are characterized as being resisting to change and tend to ignore digital initiatives.

3.3.2 Digital maturity assessment findings

The codes (ex. C1, O5, T3, I1) found at the beginning of each paragraph represent the statement from the self-assessment tool, while the number in brackets is the score filled in by Watch ID's COO. To get a better understanding of the findings, refer to the tool's statements in Appendix 6. The following findings may also be referred to as the company's current capabilities.

Dimension: Culture

C1 (3): The COO strongly believes that Watch ID's competitive strategy depends on digital initiatives, ones that are focused internally within the company, as well as externally towards clients. This is in a way proven by the company's commitment to digitalization, automation and optimization of processes performed by employees within each functional unit that in turn translate to how value is produced for the company's end customers. The following processes serve as a few examples of this:

- Automation of stock replenishment – Stock replenishment was a process that was once performed manually on a daily basis by Brand Managers. A custom stock replenishment automation module was eventually developed as an add-on to the ERP system and today it serves to automate the process of generating a list of items that need to be replenished in physical stores based on the stock-outs that occurred due to previous week's sales. The module takes into consideration all sales made the previous week, runs its logic and generates a document which specifies the products (by brand and code) that should be withdrawn from either the main warehouse or from specific physical stores that have a lower performance compared to those that need to be replenished. The document is then exported from the ERP, sent to the stores in order for Retail Sales Agents to collect the products specified in the resulting list and sort them according to the store they should ultimately be sent to. Products withdrawn from the retail chain's stores arrive in the main warehouse, and from there are distributed to the stores that are in need of replenishment.
- Pick-list – The Pick-list is another add-on to the ERP that is essentially a control document used by Warehouse Administrators, as well as Retail Sales Agents. It shows a breakdown of all items which have arrived in the main warehouse from the stock replenishment automation withdrawal and as newly imported products that each POS has to eventually receive. Before sending the goods to each POS, the Warehouse Administrator physically scans items with the help of a barcode reader to check if they have collected and sorted the correct items according to the Pick-list. The scanned items get highlighted with a green color within the digital document, leaving those which have not been collected unmarked. Once all items are in place and sent out to the physical stores, they are checked again by Retail Sales Agents to ensure nothing is missing or in excess. Once done manually (by double checking the item's unique identifier number first of the product tag and then of the document) this process was prone to a lot of human error.
- Status Change update automation for Service (Repairs) – As Watch ID offers a repairs service, they regularly receive watches for battery changes, mechanism fixes, watch strap replacements, etc. Customers drop off their products to retail stores closest to them. Retail Sales Agents then use a custom module developed as an add-on to the ERP system in which they create a service order, which specifies the product defect, contains a unique identifier, as well as a barcode used for scanning. The service order is attributed to the member of the Loyalty Club, or in case the person is not a member, with telephone

number and email address. Products which are received in store for repairs get a status "Received in store". After being sent to the main service (repair) station the service technicians scan the service order's barcode and change the status to "Received in service". Once the product has been repaired, its status is changed to "Finished" and it is sent back to the store where the item originally came from. In the store, the Retail Sales Agent scans the barcode again in order to change the status to "Finished in store". This is both an example of process automation and process optimization. Namely, before the implementation of this status change update automation, the retail sales agents in store and the Service (Repairs) technicians had to manually open up the ERP and type in the serial number of the service order to change the status of the service order, which opened up space for human error and reduced the employees time to focus on core tasks that cannot be automated.

C2 (3) & C3 (2): These above mentioned initiatives, as well as all previous software implementations are supported by the C-level executives and are generally initiated by the COO, which signals that there is "digital transformation leadership." Senior management's active participation in shaping and driving Watch ID's digital agenda indicates a commitment to leveraging digital technologies for business success and staying competitive in the evolving digital landscape. However, there is room for improvements when it comes to having the right leaders, potentially as part of middle management or from outside, who would execute the digital strategy day to day and would minimize the "bus factor" created by knowledge, know-how and capabilities being isolatedly possessed by the COO.

C4 (1): When it comes to education and training, Watch ID performs various types of activities, from an annual *"*Kick-off meeting*"* that aims to inform employees at all levels of the company about the goals, objectives, overall strategy and key initiatives planned for the upcoming year; to onboarding workshops for new Retail Sales Agents during which new employees are instructed of the "in-store sales algorithm" (a documented guideline of sales steps that each Sales Agent is supposed to follow in order to close a sale in store). Other internally organized activities for education and training that are hosted at least bi-annually include workshops on fundamentals of watch servicing, sales and negotiation skills training, conflict resolution training, brand training for products etc. There are also educational activities organized by third parties or suppliers that are attended by Sales, HR, Marketing and Finance, from which extracted knowledge is documented in a report format. However, most of these educational and training activities need to be digitalized in order to provide better structure of documented materials, ensure accessibility for all employees, provide self-paced learning and a more consistent workshop / training occurrence.

C5 (1): Watch ID's digital vision, or its definition of who they want to become considering the continuous implementation of emerging technological tools or digital initiatives is currently only being partially clearly communicated internally. Externally, towards consumers and suppliers, the digital vision is not communicated whatsoever unless explicitly asked. Senior management considers that open communication of the company's digital

vision may hinder their competitive position, however the COO believes that there is a lot of room for improvement when it comes to communicating the digital vision internally. What the company has done insofar in this regard besides having annual Kick-off meetings with the entire company, is they have started to host monthly Management Review Meetings between senior and middle management to exchange important issues.

C6 (2): In terms of financing the digitalization and automation initiatives, the implementation of old and new software solutions for business support, the company does take measured risks. They strategically evaluate the market, their own capabilities against industry trends and competitors, assess potential risks and generally balance out innovation with company stability. Although there is no fixed annual budget for innovations, there is a software improvement / development budget that is planned before the beginning of each FY, and is large enough to meet unforeseen needs.

C7 (2): In terms of prioritizing overall customer experience over the performance of individual channels (physical and online sales channels), the company implements strategies that help ensure a seamless and customer-centric experience across all channels. These strategies include having consistent and cohesive branding and messaging; price transparency; unified customer profiles for online and offline shopping that consolidate customer data and purchase history; integrated inventory management that allows real-time visibility into product availability across all channels; seamless transactions that enable customers to make purchases, returns, and exchanges across channels, including buying online and returning or exchanging at physical store; personalization of product recommendations (sending out personalized emails to loyalty club members with website links to products which those specific customers have marked as favorite or have left them in the online store's shopping cart), targeted promotions based on customer preferences and behavior (by using dynamic remarketing); an integrated Customer Loyalty Club program that rewards customers for their engagement and purchases across all channels by offering consistent discounts and benefits; omnichannel customer support that allows customers to get assistance through phone, email, social media, website chat bot all backed up by the Customer Support Specialist and Retail Sales Agents in store, and last but not least, a user-friendly mobile experience with easy navigation, that is replicated in store with attentive and well trained Retail Sales Agents. It is important to note here that improvements can and should be made to both in-store and online customer experiences.

Dimension: Organization

O1 (2): The COO states that the company's organizational structure prioritizes customer journeys over functional silos. Although silos manifest themselves, due to employees' tendency to only stick with what is their isolated work obligation or task, it is the company's imperative to mitigate them and allow for the customer journey to be in focus. Nonetheless improvements are needed.

O2 (3): It is the COO's belief that Watch ID dedicates appropriate resources to digital strategy, governance and execution. However, aside from having a large enough budget for software update / development that is aimed at improving internal or customer facing processes, and having middle management employees to follow the progress of implementation of these initiatives, the governance is solely handled by the COO.

O3 (1): When it comes to the staff that supports the critical digital functions, there is room for improvement. At present, these people are external, outsourced IT collaborators, primarily help desk employees or key account managers from the companies with which Watch ID does business (NB Soft, SalesManago, Data Lab, Data Masters). The IT collaborators may be best at what they are outsourced to do, however Watch ID could benefit from having an internal employee with IT knowledge and skills capable of understanding digital IT opportunities and limitations. This way the company would be more reliant on internal know-how.

O4 (1): Digital skills are not entirely embedded throughout the organization at present. Employees have the digital skills to use the information systems in place, yet lack skill to identify digital tools or technologies that could help them with work related challenges, or lack the flexibility to learn newly proposed tools or see the advantages of using existing ones. Employees could benefit from having their digital skills and competencies defined. This way digital competence gaps can be identified and employees could more easily be upskilled.

O5 (2): Cross-functional collaboration is encouraged by the company's organizational model. Employees from different functional units are accustomed to working together in creating value for end customers, ensuring efficient inventory management, creating effective marketing strategies, etc.

O6 (0): In terms of having defined and repeatable processes for managing digital programs, the COO states that no such activities have been performed insofar and does not believe that in the near term this would be necessary. Although, to mature Watch ID could start to define goals and KPIs and document plans, resources, execution requirements, risk management protocols, budget use and progress status, for digital projects such as software implementation, and as such create a repeatable process.

O7 (1): When it comes to vendor partners' involvement and their delivery of value that enhances Watch ID's digital competencies, it is interesting to say that aside from subsidizing marketing activities, providing access to cloud-based services that help share and manage marketing content and sharing guidelines on how to promote a particular brand's products, vendor partners (suppliers) do not provide differentiating value that enhances the digital operation of Watch ID. Suppliers do not operate any systems where orders could be placed, these activities are performed between key account managers (on the supplier's side) and Brand Managers (on Watch ID's side) over email through special excel order forms.

Dimension: Technology

T1 (3): The company understands the importance of technology in the value creation process both for the improvement of the customer experience and for improving internal operational efficiencies. When priorities shift, so does the allocation of financial resources for technology-related expenses with a data-driven justification of needs. The budget's fluidity is supported by Watch ID's proactive approach to financial management, commitment to stay informed about industry trends and market conditions. Examples of this include numerous activities for digitalization of once manual internal operational processes and continuous updates to existing or adoption and utilization of new software and tools that support business operation and enhance customer experience. The company's latest software adoption is "FledgeHR" developed by FledgeWorks, aimed at supporting the operation of the Human Resources functional unit. The software is primarily intended to digitalize and centralize the storage of employee data, including personal information, contact details, employment history; facilitate the recruitment process with resume management, highlighting promising candidates and interview scheduling; facilitating the onboarding and offboarding processes, with training and orientation scheduling and documentation management; and providing employee "self-service" with access to their personal information and the ability to submit requests.

T2 (2): The existing synergy among marketing and technology resources, including IT solutions, employees, and budget, effectively drives the current digital strategy forward. However, when it comes to collaboratively crafting the digital technology roadmap, which serves as the blueprint for the business's future, there appears to be a lack of effective collaboration. To synergize these resources further, it is required for employees handling the day to day to use a more proactive approach to utilizing existing systems, and for the company to encourage inquisitiveness, problem resolution and design thinking.

T3 (2): In terms of having a flexible, iterative and collaborative approach to technology development, the COO states that he somewhat agrees. During most technology related projects, like adding certain buttons/elements on the website, implementing digital solutions, or creating KPI, there is a testing period, during which the COO and company employees are flexible and aware that changes may need to be made in order to come to the desired outcome.

T4 (3): In terms of promoting speed and flexibility for existing technologies and information systems, the company does leverage modern architectures. They use a cloud-based CDP, business analytic tool and storage, and integrate their information systems using APIs. As such, the speed and flexibility of the systems in use is not at stake. Additionally, the company follows whether their IT solution providers keep abreast with technological developments, which if not addressed may cause future harm to the retailer.

T5 (0): The people taking care of the IT solutions and server infrastructure are the company's COO and a number of outsourced IT collaborators, meaning there are no in-house technology teams in Watch ID. Outsourced IT collaborators track system uptime and downtime using specific remote monitoring and management software tools to ensure their services contribute to guaranteed levels of reliability, but when it comes to measuring the IT collaborator's work by business outcomes, there are no measures in place. To improve, Watch ID should define business goals that need to be met, scope of work that needs to be covered, KPIs that should be tracked and communication channels over which to communicate and put these in service level agreements (SLAs) with each outsourced IT provider.

T6 (2): When it comes to steering technology design the company's customer experience assets do help. In Watch ID's case these assets are represented by customer personas segmented based on loyalty club levels, generational segments (company's wide target audience is divided into four main generations: Generation Z, Millennials, Generation X and Baby Boomers), geographic segments and behavioral segments (based on browsing history, wish list products, shopping cart abandonment). These customer assets, as well as customer data, feedback, preferences and behavioral patterns inform technology design decisions and help Watch ID create, for example, a user-friendly website design and improved e-commerce features (Loyalty club; product filtering; wish list; product try-on; real-time product availability, various online payment options) that align with customer expectations. However, customer segmentation can be improved with the use of Machine Learning.

T7 (2): Watch ID uses a variety of digital tools. For collaboration and mobility, the company relies on Google Workspace tools for email communication, hosting online meetings, planning and scheduling activities, creating surveys, quizzes and polls and collaborating on online documents. For remote access to computers, the company uses a few different available tools, which allow for work-from-home opportunities that enhance mobility, or in helping out colleagues by taking control over their devices. Employees within the functional units use different tools that aid the execution of their tasks, with the marketing unit being most highly reliant on digital tools that enhance customer experience. Some of these tools are presented and explained in Appendix 7. Yet, additional tools, software and automation solutions could be used to promote work-efficiency, centralization, mobility, innovation, collaboration and learning.

Dimension: Insights

I1 (1): Quantifiable goals for measuring the success of Watch ID's digital strategy, especially regarding the success of implemented initiatives are currently set on an ad hoc basis, after said initiatives have been implemented and when deemed necessary. Although the core functional units of sales and marketing set their own goals at the end of each fiscal year, which they strive to meet throughout the following year, these goals are related strictly to

proven operational processes, not newly implemented initiatives, nor represent the broader picture of the company.

I2 (1): When it comes to employees understanding how their performances tie to the company's digital goals, there is a big discrepancy between senior management, middle management and operational employees'. Watch ID lacks a clear definition of employee's job responsibilities and roles and tracking employee performance.

I3 (2): At present, Watch ID uses a customized survey for measuring after-purchase customer satisfaction which is distributed over email after a purchase has occurred and collected data is translated into insights, however does not use Net Promoter Score or Customer Lifetime metric.

I4 (2): Watch ID makes sure that both online and the physical stores work in a synergistic manner, especially when it comes to consistency in branding, pricing and promotions. The company has an integrated inventory management system that provides real-time visibility into product availability across channels, they make sure that detailed product specifications are on the website and presented to customers in store by knowledgeable Sales Agents. The company takes different initiatives that aim at increasing sales while providing seamless customer experience. However, tracking how customers respond to these experiences is mostly only available online. Certain processes that the company carries out online can replicated in physical stores, which although may be invisible to the customers, would value for them during certain stages of the life cycle.

I5 (2) & I6 (2): Customer insights do actively steer the company's digital strategy. Past behavioral and transactional data are turned into insights and those insights inform the creation of effective sales and marketing campaigns. Specific demographic information helps in creating compelling copy for different communication channels. Customer, transactional and product data help make better decision when curating product assortment and supply. However, at present customer insights do not entirely inform digital design and development because mechanisms do not exist for tracking everything. For instance, not all customers are being heard or given the platform to communicate their opinions. As already mentioned, Watch ID tracks customer satisfaction post-purchase, but for customer insights to fully inform digital design and development, the company should implement additional ways to measure satisfaction.

I7 (3): It is the COO's opinion that the company is reliant on the results of their existing digital programs. All lessons learned, positive and negative, feed the decision making process for the future of the company's strategy.

3.3.3 Results, discussion and limitations

The findings of the assessment give a closer look into the four dimensions for determining a company's digital maturity. The following statements represent a very general summary of the company's current capabilities:

Culture: Watch ID's competitive strategy depends on digital initiatives. C-level executives, including the Managing Director and the Director of Operations (COO) back the company's current digital strategy and take measured risk to enable innovation.

Organization: The company supports its digital strategy through dedicating appropriate financial and technological resources and continuous improvement initiatives initiated by senior management.

Technology: Watch ID has a fluid technology budget that prioritizes tech upgrades and adoption. Technology is used in the value creation process for both customer experience and internal operations. Modern architectures are leveraged to promote speed and flexibility and customer experience assets are to some extent used to steer technology design.

Insights: The company relies on customer insights and data to make decision, and feeds lessons learned back into the strategy

From the scoring, it can be concluded that statements which have received a 2 (somewhat agree) or 3 (completely agree) from the four point scale, point to Watch ID's strong suits, although in some instances the digital elements within these highest scored statements still need to be acted upon. Statements which have received a 0 (completely disagree) or 1 (somewhat disagree) score, point to areas where improvements are necessary in order to mature. Table 2 presents the results of the maturity assessment, formulated as areas where improvements are required.

Based on the cumulative score and level of maturity reached, the authors of the study advise that Adopter companies, like Watch ID, should:

- Instill digital DNA by investing in digital talent, by both hiring experts and up-skilling employees. This is seen as a critical step in advancing digital initiatives. Additionally, this action emphasizes that successful digital transformation is not solely about technology, but also involves cultural and skill set changes.
- Work outside-in by identifying customer problems and measuring how quickly digital initiatives solve identified problems. More mature companies' tend to empathize more with customers to understand their needs and collaboratively ideate solutions to address those needs.
- Hack themselves by taking inspiration from digital disruptors, adopting a "hacking" mindset to advance digital initiatives and approaching big projects by breaking them up

into smaller, more manageable parts, creating testing opportunities, and actively involving customer feedback.

Table 2: Results of maturity assessment

	Improvements required in
Culture	**D1.1** Having the right leader to execute the digital strategy and communicate the digital vision (C3 & C5)
	D1.2 Investing in digital education and training (C4)
	D1.3 In-store and online customer experiences (C7)
Organization	**D2.1** Having the right leader to be responsible for governing with the digital strategy and the work of outsourced IT collaborators that support critical digital functions (O3)
	D2.2 Defining digital skills and competencies and systematically upskilling employees (O4)
	D2.3 Encouraging cross-functional collaboration to tackle the issues of functional silos and creation of repeatable processes for managing digital programs (O1, O6)
Technology	**D3.1** Synergizing resources, including existing IT solutions, employees and budget for co-creating the digital technology roadmap (T2)
	D3.2 Define business goals that should be met by outsourced IT collaborators (T5)
	D3.3 Steering technology design with the use of customer feedback as an additional customer asset (T6)
	D3.4 Use of additional digital tools, software and automation solutions to promote work-efficiency, centralization, mobility, collaboration and learning (T7)
Insights	**D4.1** Setting clear and quantifiable goals for measuring the digital strategy (I1)
	D4.2 Defining digital competencies and standardizing job roles to understand how employee performance ties to company's digital goals (I2)
	D4.3 Implementing additional ways to collect customer data, which would in turn help measure success, steer the digital strategy, and inform digital design and development (I3, I5 & I6)
	D4.4 Create solutions that would help measure how channels work together in accomplishing a desired outcome (I4)

Source: Own work

While VanBoskirk et al. (2017) advice may be relevant in driving the company's digital maturity higher, it is important to consider that they were derived as a result from a survey study with over a thousand marketing decision makers from companies with more than a 100 employees in eight different countries back in 2017. The study's participants and research results greatly differ from the medium sized company that Watch ID is, and the qualitative nature of the assessment in this thesis. Nonetheless, the advice together with the results of the maturity assessment from Table 2, SWOT analysis and competitive analysis, are taken into consideration for preparing the Watch ID's digital strategy.

4 PREPARATION OF THE DIGITAL STRATEGY

The following chapter includes digital transformation efforts and initiatives formulated as recommendations for preparing the company's digital strategy both for the short and long term. They are categorized within the seven areas proposed by DIH. Each area from DIH's framework includes elements that should be addressed, thus some recommendations may take on a wider scope than the one identified through the maturity assessment.

4.1 Customer experience

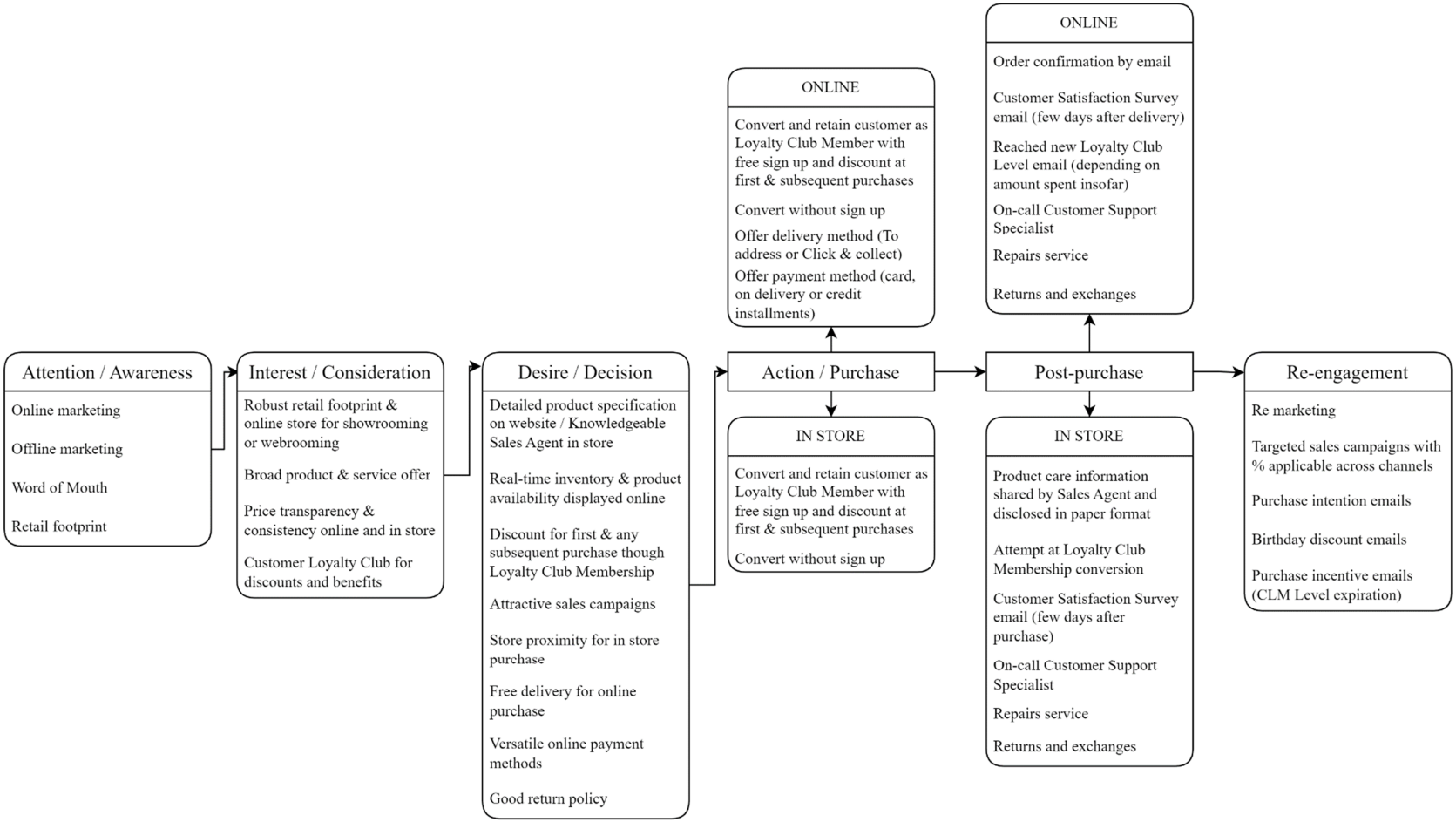
The element (based on DIH) addressed within the area of Customer Experience is related to the customer relationship life cycle. Watch ID's current customer relationship management is a combination of practices, strategies and technologies that the company uses to manage customer interactions throughout the customer relationship lifecycle, in store or online, which ultimately add value to customer experience.

The company's customer relationship life cycle goes through the Attention, Interest, Desire, Action, Post-purchase and Re-engagement stages. Figure 9 is a classification of these stages that integrate both how customers experience the big picture and how the company can see itself from the outside in. It is structured as part of the process of preparing the digital strategy and its goal is to enable visibility and transparency for internal company use.

Making the classification of life cycle stages and activities that fall under each has enabled me to identify the following suggestions for customer experience improvements and proposals on how to implement them:

- "Phygital" experiences: As physical stores are a relevant channel for Watch ID where majority of foot traffic and revenue generation occur, they can be enhanced with the addition of digital elements. Placing QR codes next to product displays in store would invite customers to scan them, which could lead to already existing pages on the company's website containing information about products, particular brands or instructions on how to maintain jewellery or watches.

Figure 9: Watch ID's Customer Relationship Life Cycle Stages



Source: Own work

This suggestions could improve the customer experience within the Interest / Consideration and Desire / Decision stages of the customer relationship life cycle. Tracking whether customers have landed on these website pages from in-store QR codes could help tailor content and provide custom marketing and sales strategies.

- Augmented Reality feature: Substituting the current "product try-on" feature – a pictorial representation of a product's dimension on average size hand – with an AR virtual try-on of watches and jewellery feature on each product page on the website can make the Desire / Decision and Action / Purchase stages more immersive, engaging, and convenient. Additionally, the integration of AR on the website would yield valuable insights into consumer behavior, contributing to the optimization of Watch ID's marketing strategies.
- Autocomplete for website search engine: The search engine on the company's website may potentially become a more powerful tool in the customer's journey than it is now, if autocomplete is added. An autocomplete feature can be designed to recognize what website visitors are looking for and provide suggestions based on what they have begun to type in on the website's search bar. This search engine could display suggestions based on product categories, brands, product attributes, past search history, search terms or other factors. Although it primarily improves a website's user experience (UX) by reducing search time, spelling errors and "no results" pages, it can improve the overall search experience in the Interest / Consideration stage of the customer life cycle making it easier for customers to find what they are looking for.
- Product Review: After each sales transaction the company could send a product review email to gather insight on customer's satisfaction with the product they have purchased. The request for a review can be as simple for the customer as adding a star or number rating for the product that takes one or two clicks, and can be supplemented by asking for an additional comment. Product reviews can then be displayed on the product's page online to enhance future customer's experience when going through the Desire / Decision stage.
- Repair Service Satisfaction Survey: After having a product repaired, a repair service satisfaction survey can be sent out to customers to help gather insights on what needs to be improved within the Action / Purchase and Post-purchase stages.
- Product Return/Exchange Survey: When a customer requests to return a product for a refund or when they request an exchange, understanding the reasons of why this has occurred can be beneficial. Including a survey in a return/exchange email that gathers data around reasons for the return/exchange can help improve the Post-purchase, Interest / Consideration and Desire / Decision stages by acting on the data insights to optimize for example, delivery service, inventory, and product specifications or return policies.
- Net Promoter Score: The NPS is a customer loyalty score derived from asking: "On a scale from 0 to 10, how likely are you to recommend this company to a friend or colleague?". It can be set up as a webpage survey accessed through a link online or as a QR code sticker on shop windows and be accessed by anyone regardless of whether they have made a purchase or not. As a customer centric metric, its goal would be to improve

overall customer satisfaction and loyalty that allows for measuring the success of a company, it can be implemented at any point in time, without a purchase transaction occurring. Thus it can remove bias from strictly positive or strictly negative experiences which occur when a customer is interacting with and of the company's sales channels.

- Same-day-delivery: Currently online purchasing requires customers to wait between 3 to 5 business days for the delivery of their product due to the existing outsourced courier's capacity and scheduling system. Providing same-day-delivery would be a big advantage in improving customer experience, especially in the Action / Purchase stage. However, Watch ID would need to consider: (1) outsourcing a new and reliable courier, preferably one that offers sustainable delivery (bike messengers); (2) where to offer this service, whether on a national scale or on a city level (probably best in the beginning due to otherwise cumbersome infrastructure requirements); (3) the order cutoff time or time of day after which same-day-delivery would no longer be eligible; before being able to make the decision. Looking at existing metrics like purchase frequency and recency, demographic profile, display of customer clusters on a map can help make this decision.

The first three suggestions aim at prioritizing the overall customer experience over the performance of individual channels by keeping balance of the features available in both online and in-store sales channels. The same-day-delivery initiative requires the utilization of existing IT solutions and metrics in place to determine the viability and need of the CX improvement initiative, which calls for a synergy among the company's resources. The initiatives related to developing and implementing different customer surveys, call for analysis of the feedback that come in response to implementing these data collection methods. By analyzing this feedback, Watch ID can steer technology design by identifying areas for enhancement, prioritize features, and ensure that technological advancements align with customer expectations, ultimately improving the overall CX.

4.2 Data strategy

As described in 3.1 Company Description, Watch ID already has an established data strategy that is carried out through the use of systems and IT solutions that regulate the generation, collection, storage, processing and analysis of transactional, product, customer and behavioral data. This data is safely stored on local and cloud servers, encrypted and with restricted access, or access that requires multi-factor authentication.

Customer's personal data, obtained through Loyalty Club application forms, is protected by the General Data Protection Regulation (GDPR). The company does not hold more customer data than needed for processing and they transparently specify the legal basis for processing personal data through their website. Watch ID also satisfies customer's rights of access, rectification, erasure, restriction of processing, objection and right to data portability. The company's GDPR cookie compliance plan consists of a cookie policy, a granular website cookie consent banner and a comprehensive cookie consent management plan which enables

website visitors and customers to choose necessary, functional, statistical and marketing cookies. Based on the latest assessment by North Macedonia's Personal Data Protection Agency, Watch ID is fully compliant with GDPR.

The direction for Watch ID's data strategy pertains to both short and long-term strategic suggestions. The short-term suggestion would be for the company to start building additional metrics in Power BI. The company primarily uses the tool to analyze specific sales and marketing metrics, but should make an effort to fully utilize its capacity and functionalities, by building more comprehensive metrics, including but not limited to:

- Customer Lifetime Value – A dashboard that would display how much revenue a customer brings over the life of the relationship. Its impact is reflected in identifying when a customer is going to become profitable and which customer to invest in. It can be viewed according to location of point of sale, city or group of cities, loyalty club level.
- Returning vs Lost Customer – A dashboard that would display the structure of returning customers and those that were lost over time, within the existing framework of purchase frequency. This dashboard could also represent the turnover generated by those customers in a given period.
- Club Membership Level and Movement – Dashboard with a visual display of movement through different levels of the Customer Loyalty Club over time by size of the population and average time spent in a certain level of the Loyalty Club.
- Net Promoter Score (NPS) – If the NPS survey is set in place as recommended in 3.1 Customer Experience, customer satisfaction can be visualized based on the likelihood of customers recommending the company, which will in turn reflect the overall customer sentiment and loyalty.
- Time-of-Day / Day-of-Week Patterns – A dashboard visualizing which time of day or day of week users are most active on the website can help schedule marketing campaigns or content delivery at optimal times.
- Revenue Growth – A dashboard where a percentage increase in overall revenue over a specific period can be visualized to reflect the success of sales and marketing efforts, as well as the overall health of the business
- Average number of online orders per day – A dashboard with a comprehensive view of the average number of online orders per day, allowing identification of trends, patterns, and actionable insights for improving e-commerce activities.

The long-term strategic recommendations for Watch ID would be to:

(1) Start collecting additional data and diversify data sources needed for improving internal and customer facing processes:

- By implementing the suggested NPS customer metric, Repair Service Satisfaction Survey, Product Return/Exchange Survey and Customer Support Survey, the company could more dedicatedly start working outside-in**,** collecting customer opinions to more

easily identify customer experience improvements that should be made to customer facing processes.

- Part of Watch ID's data strategy is tracking customer purchase intentions online by looking at customer's website activity of when they have "checked product availability" or "added product to cart". Taking action over these insights is aided by the CDP's "Purchase intention" automation rule (explained in Appendix 2) that sends notifications to customers with the purpose of re-engaging them to revisit the product they have previously searched for, but have not purchased. To build on top of the data strategy and to more easily measure how channels work together in satisfying customer needs, it would be good to replicate this "Purchase intention" process in store by changing the way how selling is conducted in physical stores and how customer data is generated by digitally recording "purchase intentions" in physical stores. This recommendation, more thoroughly explained in part 3.4 Digital business models, products and services, would have multiple beneficial effects, one of which is collecting behavioral data from in store interactions with customers, which can directly impact the company's ability to improve the re-engagement stage of the customer life cycle.
- As the company is implementing "FledgeHR", a human resources management software, they will start to systematically collect employee data from this new data source. The platform is going to act as a single source of truth that reduces data duplication, ensures consistency and quick retrieval of employee information. Data retrieved from this system can elevate the company's employee data management in terms of tracking employee retention and churn, performance, job classification etc.

(2) Appoint or hire a person, in the role of Chief Information Officer (CIO) to work alongside the COO to:

- Collaboratively set clear and quantifiable goals for measuring the digital strategy and digital initiatives, for example "Increase website traffic by 10% in the next quarter with the implementation of the AR virtual try on feature on the website"
- Define business goals that should be met by outsourced IT collaborators
- Manage the work of outsourced IT collaborators that support critical digital functions, make sure data integration services are provided by said IT collaborators and assure shared data is properly cleaned and preprocessed
- Manage data quality (accuracy, completeness, consistency) by sharing clear protocols where manual data entry is required by company employees, like in the case of registering customers in the Loyalty Club, and ensure data integrity is maintained over time and across formats
- Develop a business glossary with terms and definitions related to company specific data and business processes that can serve as a standardized reference to ensure that everyone understands and uses consistent terminology when discussing data-related matters internally. This can improve communication and promote data literacy
- Assure employees have an understanding of the company's data architecture, meaning how data is collected, stored, processed, and analyzed in Watch ID. This would lay out

the base for practicing a culture of data transparency in the workplace, providing clear communication and allowing open access to information

- Help in identifying and specifying measurable business goals for senior management and each functional unit, and documenting these into KPIs or translating them into data initiatives

(3) Use Machine Learning for customer segmentation – As Watch ID has almost all prerequisites needed for using Machine Learning, including systems for collecting data (customer, transactional, behavioral and purchase history data), data integration from different sources, a data repository, and would potentially have a CIO who would be responsible for managing data quality and integrity, it can consider utilizing machine learning for customer segmentation. The main benefits of using ML are its ability to analyze vast amounts of customer data to identify subtle patterns and relationships that may be challenging for the existing segmentation methods provided in SalesManago, adapt to changing customer behaviors and market dynamics in real-time and identify complex, non-linear relationships within data that may show interesting patterns or dependencies and help provide a deeper understanding of customer segments and their unique characteristics. Implementing ML could improve the company's marketing efforts, enabling the marketing coordinators to create more effective tailored campaigns. However, this decision should go in line with the size of the customer base, the availability of skilled resources and the complexity of the business objectives which include the goals of the marketing strategy.

4.3 Process and digital solutions for business support

Since most key processes that allow to be digitalized are already digitalized, presented here are recommendations that pertain to an identified (1) gap in the company's latest digitalization effort for the Human Resources functional unit, as well as the need to invest in digital education and training, (2) digital tool that can support a specific business process, and (3) process that could be automated in order to reduce manual labor.

As described in the maturity assessment, an initiative to digitalize the work of the HR unit is carried out through the implementation a human resources management (HRM) software. The software solution offers various modules, of which Watch ID has chosen to use only the Core HR, Recruitment and Onboarding Modules, which together enable the management of the organizational structure, job classifications, employee profiles, contracts, storage of policies and rules; resume management, highlighting promising candidates and interview scheduling; and training and orientation scheduling and documentation management. However, the company should start utilizing the software's Learning Module that enables creating digital learning courses, developing learning programs and tracking employee's progress through the complete learning process that Watch ID carries out anyhow.

Alternatively, if the Learning Module does not entirely support the company's needs, Watch ID can choose to integrate the HRM software with a dedicated Learning Management

System (LMS) such as Google Classroom, seeing as how the company already relies on Google Workspace for many other activities and the HRM can be integrated through an API. Google Classroom can serve to centralize the storing and viewing educational and training materials (like retail procedures, ethics and behavioral codex; the "in-store sales algorithm / guideline") for newly onboarded employees, or educational, support and upskilling materials (like supplier's guidelines for visual merchandising, documentation of past workshops, etc.) for existing employees. This tool would not just serve as a repository for educational materials, but could also enable seamless file sharing, digital learning, coursework tracking and employee testing, enabling live scoring as indicators of a successfully passed coursework or material. In all, Google Classroom would be beneficial to all employees, and would improve internal processes not just by allowing accessibility, flexibility, scaling and updating of educational and training content, but also a measured performance for newbies and employee satisfaction.

Using a LMS, whether through an embedded module or by integrating a dedicated LMS, would help address the issue of disseminating know-how and skills identified as a SWOT weakness, and in the maturity assessment, including the need to invest in digital education and training for providing better structure and accessibility of documented materials and providing self-paced learning for employees.

A recommendation that goes in line with the identified need to use additional digital tools to promote work-efficiency is the potential use of a dynamic content creation tool based on Artificial Intelligence. The company currently employs a Creative Director and an outsourced graphic designer. These people's roles are essential to bringing the company's brand identity and visual communication to life. However, they also spend a large amount of time and effort producing content for the company's website, social media, marketing platforms and other channels. Some of this content is highly volatile, being updated as frequently as on a weekly basis. The amount of resources, including time and compensation, that go into the production process surmount the speed at which this content is being used and becomes obsolete. Hunch Creative Studio is a digital tool, more specifically a platform that enables (1) automatic creation of static creatives based on imported brand assets such as logos, colors and fonts, and product catalogs, and (2) video creation, from said brand assets and product catalogs with animated elements, such as featured products, prices, text or catchphrases. By putting this digital tool to use, the creation of visual branding and picture/gif/video content for the channels mentioned above, would be made more efficient, quick and would alleviate the amount of resources put into the process whose output is highly volatile, while maintaining the brand's visual identity.

Aside from digitalizing the education and training process and the use of digital tools (Hunch) to support the content creation process, some processes may need to be automated. As described in the Culture dimension in 3.2.2 Digital Maturity Assessment Findings, Watch ID has automated and optimized internal processes performed by employees within the functional units of Sales, Service and Warehouse and Logistics with the Automation of stock

replenishment, Pick-list and Status change update for Service (Repairs) respectively. These processes serve as a few specific examples of the digital initiatives undertaken by Watch ID.

For the near future, my suggestion for the company would be to focus on automating the process of notifying customers of completed service orders with the use of existing digital technologies. Currently, Retail Sales Agents have the duty of calling customers over the phone to inform them that their product is finished and ready to be picked up from the nearest POS or POS where the product has initially been left for repair (depending on customer's request). Instead of doing this, the company could send out emails or instant messages as notifications on when and where to pick the product from. The company can even show the entire journey of status changes the product has been through (from "Received in store" to "Received in service" to "Finished" and finally to "Finished in store") by integrating the custom made ERP module "Status Change Update automation for Service (Repairs)" with the CDP SalesManago. After the integration is set, an automation rule can be created in SalesManago where the main event that would trigger sending notifications would be the product's "Finished in store" status. This suggestion would help (1) minimize Retail Sales Agent's manual work and improve efficiency, and (2) decrease customer's dissatisfaction regarding the time it takes for their products to be serviced (SWOT weakness) by giving them insight into the phases their product goes through, thus improving the post-purchase stage of the customer lifecycle.

4.4 Digital business models, products and services

An initiative to enhance Watch ID's products with a digital service that simultaneously can help improve customer experience and satisfaction in online shopping (as suggested in 3.1 Customer experience) is the implementation of Augmented Reality for virtual try-on of watches and jewellery on Watch ID's website. In order to set this initiative in motion, Watch ID could potentially conduct market research to identify customer preferences and expectations of virtual-try-on experiences. The company would need to partner with an existing AR provider to ensure that the technology is capable of accurately rendering and overlaying virtual images on real-world environments, such as a person's hand, neck, ear or fingers, depending on the product, watch, necklace, earring or ring. In parallel to these steps, Watch ID would need to communicate this initiative with NB Soft, the company that has developed their website to ask them to develop an integration key for the AR features into the e-commerce platform and ensure compatibility with popular web browsers and devices to maximize accessibility. If all this is feasible, Watch ID should make sure to render high-quality, realistic 3D models of each product that customers can try on virtually, or should look to source these renders from supplier brands which may already have such creatives in the suitable format. The company should make sure their website has an intuitive and user-friendly interface for the virtual try-on experience that would again be performed by NB Soft. For the AR feature to work properly on the website, AR calibration should be performed by the AR provider to ensure accurate sizing and positioning of virtual products

on the user's device. Promoting the new AR virtual try-on feature through Watch ID's existing marketing channels would emphasize the improved online shopping experience.

Another recommendation within this area is about digitalizing a part of Watch ID's business model that would change how selling is conducted in physical stores, and how customer data is generated by digitally recording "purchase intentions" in physical stores. The recommendation for Watch ID is to ultimately consider developing a tailored webportal (for example by outsourcing NB Soft), calling it for example "Product Finder", that would be accessible over a tablet or other handheld device, would be integrated with SalesManago and would contain questions that are part of the current "in-store sales algorithm" that Retail Sales Agents rely on to close a sale. By having a Retail Sales Agent use this "Product Finder" webportal during an interaction with a customer in store, they would be able to record customer's answers to questions such as "What product category are you interested in (watches or jewellery)?", "Who is this product for?", "What is the occasion", "What price category is acceptable for you?", "What physical attributes would you like the product to have (case material, strap material, color, shape)?" etc. Answers to these questions can be multiple choice, and could mimic the existing filters on the company's website.

After recording the customer's answers, the "Product Finder" would: (1) give narrowed down product recommendations based on received specifications (answers), which the Sales Agent could present physically to the customer in store; and (2) allow the sales agent to log the customer into their existing Loyalty Club Profile or create a new user profile for those customers who are not already members. Logging customers in or creating new Loyalty Club accounts would enable for the product recommendations to get attributed to the specific customer's Loyalty Club Profile. In this way, if no purchase event appears during the specific moment in store, Watch ID would be able to re-engage the customer at a later point in time, by creating an automation rule that would send a reminder email or instant message containing a short message and a link to the product/s that the customer has shown interest for but has not purchased. Appendix 8 is how I envisions the to-be process of attributing customer data to Customer Loyalty Club profiles, as part of the interaction between the customer and the sales agent, and the tailor made webportal.

This recommendation is inspired by how Watch ID tracks customer purchase intentions online and how it takes action over these behavioral insights. The recommendation acts as advice on how to create and implement a solution that would help measure how the company's online marketing and physical sales channels work together in accomplishing a desired outcome, in this case finalizing a sale and potentially achieving higher customer retention.

4.5 Strategy for the development of digital personnel and digital jobs

During the time of writing this thesis, Watch ID's HR representatives defined general competencies for the entire organization's employees in line with:

- Teamwork – Individual contribution to teamwork with active participation in achieving results, by promoting interdepartmental communication in achieving common goals.
- Accountability – Responsibility for one's own actions and their impact on the achievement of common / company goals.
- Employee care – Adaptation to colleague's actions. Awareness and understanding about a colleague's needs and the impact of their own actions on building mutual trust.
- Communication – Conveying, understanding and exchange of information (written and oral) and active involvement in the communication process.
- Leadership – Team management and equal distribution of tasks for achieving common goals. Providing support, helping, encouraging mutual cooperation and synergy.
- Continuous growth and development – Willingness and ability to develop oneself, one's own capacities and the capacities of employees for the progress of the company.

These competencies were developed with the help of a company specialized in providing solutions for human capital and organizational development and management, through a workshop, and represent a joint effort of the company's employees who collectively came up with the competencies. Within each competency there are four outlined levels, prepared for the purpose of assessing the "preparedness" or qualification of each employee. The goal is to have each employee assess themselves, and have at least one peer-reviewer colleague assess them as well, for reaching an understanding of the individual and the company's overall standings. Based on an individual's competence level for each skill, workshops for up-skilling would need to be prepared.

When it comes to digital competencies, I would recommend they be developed in a similar manner, though a collective workshop effort, and be in line with the use of the company's information systems, data for decision making, and internal procedures that require handling digital tools. They can be classified as General Level Digital Competencies, that each employee should have, and Functional Level Digital Competencies, specific to the needs of each functional unit. When developing these digital competencies, Watch ID can refer to the European multilingual classification of Skills, Competences and Occupations (ESCO), which works as a dictionary for identifying and classifying professional occupations and skills, and to the European Digital Competence Framework for Citizens (DigComp), where digital competences are divided in five areas, including (1) information and data literacy, (2) communication and collaboration, (3) digital content creation, (4) safety (digital well-being and cybersecurity competences), and (5) problem solving. Although meant for the EU's labor market, these resources can be applied in the process of development of the company's digital competences.

After having the general and digital competencies assessed, the company's HR representatives would need to (1) standardize job roles, by creating job profiles for each role, which would help with redefining the organizational structure, help in producing job performance metrics that can be utilized for tracking performance, and (2) offering chances for skill or career development.

Concerning employee experience in Watch ID, a lot of effort is being invested in maintaining quality within each stage of: recruitment, onboarding, development, retention and exit. The company has recently launched a careers website that acts as a platform for recruiting new talent by showcasing employee experiences, benefits, and how the company functions. The careers website is about to be integrated with the HRM system in order for job applications made over the careers website to be directly stored into the HRM. Watch ID should dedicate a part of its marketing budget to launch all-year-round prospecting campaigns for new hires where company benefits can be displayed over ads on the social platforms used to reach end customers, as well as other channels dedicated to scouting new talent (online job boards). These campaigns could help generate a pool of potential hires to choose from, which can in turn minimize the lengthy period of time needed for recruitment based on ad-hoc job ads. To measure the effectiveness of the proposed prospecting campaign, clear KPIs should be established, that would for example measure "sourcing", to understand which channels bring in the best candidates.

In terms of onboarding, as specified throughout the thesis, new hires get trained through onboarding workshops on retail procedures, ethics and behavioral codex, brand training for products, etc. The onboarding process can be further improved with the use of a LMS that would provide organized learning paths, self-paced learning, and improved accessibility with online access to materials from any device for new hires, as well as reduced training costs, standardized training procedures, easier management of multiple hires, analytics and employee performance tracking for Watch ID. The LMS would help in the employee development stage as well, through offering access to materials for upskilling. The development stage can be further improved with the standardization of job roles, by first assessing the general and General Level and Functional Level Digital Competencies of company employees, and then providing tailored upskilling workshops that would act as personalized development experiences. Although company employees are already engaged in conflict resolution trainings, brand seminars, industry-related and e-commerce conferences, Watch ID should more transparently inform its employees about existing and potential development resources and tools available to them, by giving them expansive lists to pick out from. This can be facilitated through the HRM system's bulletin board.

Employee retention is carried out through employee satisfaction surveys. These seek to measure an employee's connection to their work and how they think, feel, and act toward helping the company meet its goals. Aside from these, Watch ID should implement "Training (Upskilling) Feedback Surveys" after each training event, that would gather data needed for mapping an individual's growth and highlight where Watch ID could enhance learning and development more efficiently. Using the HRM system and the proposed LMS system, the company can even build an "Academy" with courses build in such a manner to produce internally approved certifications, for sales personnel for example. This could build employee experience satisfaction and can make Watch ID a strong employer brand. Retention can be improved by implementing performance metrics based on standardized job

roles. Quantifying productivity and performance can give a data-driven look into which employees deserve to be promoted.

The exit stage of the employee lifecycle at Watch ID is currently being carried out thought exit interviews, which are qualitative one-to-one interviews with selected departing employees, aimed at gathering feedback and understanding the reasons why employees are leaving. To ensure feedback is honest, interviews can be supplemented with exit surveys. These surveys can be structured in a way that can produce reasons, at scale, why people leaving the company, and can help identify trends, which would in turn enable taking action to improving the company culture, working practices and management styles.

Lastly, in the strategy for the development of digital personnel and digital jobs are the digital workplaces. Watch ID's business model is not one that requires having digital personnel and digital jobs in the context of remote work. The company's operations heavily rely on face to face interactions, personalized in store service and touch and feel of products. Nonetheless, the processes of supply, marketing and selling watches and jewellery can be done remotely. This was seen briefly during the Covid-19 pandemic in 2020/2021, when only warehouse administrators and outsourced logistics operators had to physically show up to perform their work and fulfill orders made through the company online store. It can potentially be seen again in case of another pandemic, disruptive shift in the environment or, most likely, if the company decides to change its business model. The first roles within the company that would need to be made digital are those of the Customer Support Specialists and Marketing Coordinators. To enable these roles to be performed digitally and remotely, employees would need to have access to all the systems in place for handling work, access to document management systems, communication platforms including virtual meeting platforms. This would necessitate the use of digital project management tools like Asana, Trello or Jira to streamline planning, task assignment, and progress tracking.

4.6 Digital culture development strategy

As identified from the maturity assessment, the company's current culture is about digital initiatives that drive the competitive strategy. Senior management supports these initiatives and takes measured risk to enable innovation. The COO in particular, is the driving source of all digital innovation who serves as a change agent throughout the organization. The IT solutions and digital tools in place, and the ones that are currently being implemented, are a crucial element of a digital culture since they adequately support operational and customer facing processes, and all come in as digital transformation initiatives from the COO.

However, the COO's role in driving digital innovation should be distinguished from his involvement in the management of the technical aspects in these transformational initiatives. The COO's role needs to be diversified. An appropriate person should be appointed to take over some of the responsibilities of the COO, and as such, enable the company to have proper leadership, which is another crucial element to developing a digital culture. Appointing a

Chief Information Officer, as suggested in 3.2 Data Strategy, may be a major step in achieving significant improvements and results in digital efforts and initiatives, especially since some of the core responsibilities that describe this role overlap with the company's current needs.

The person with a CIO role would be responsible for managing and developing business relationships with outsourced IT collaborators, determining and approving the need and budget for new IT solutions or solution upgrades, overseeing the implementation processes, delegating tasks to outsourced IT collaborators, managing employees who are involved in IT related projects, strategizing and creating tailor-made solutions that would cater to the company's needs. The CIO would also be responsible for data management, as suggested in 4.2. This person could formulate a comprehensive data management strategy that aligns with the overall business goals of Watch ID, identify internal and external data sources to understand the depth of available data, ensure data quality by implementing validation, cleansing and governance policies, establish security protocols, ensure the tools available for data analytics work properly and empower the company to extract insights, and facilitate access to data for timely decision-making.

By having the COO to provide digital vision and to proactively engage in problem solving processes, and a CIO to execute the digital vision and strategy, a clearer and more streamlined organization structure would be set in place.

The involvement of the company's employees in digital initiatives is as important an element as leadership is in the development of a digital culture. Involving employees in various digital initiatives, whether software implementation, feature development, etc., can help reduce resistance to change, adoption or understanding the goal of set initiatives. To stimulate involvement the COO and a newly appointed CIO could create cross-functional teams for different digital transformation initiatives, which would consist of versatile representatives that would work based on clear objectives and goals. Stimulating employees to collaborate cross-functionally could have the additional benefit of mitigating functional silos and mixing knowledge, know-how and best practices from each functional unit, helping the team leverage the knowledge of the entire group. For these teams to be effective, Watch ID should include employees whose digital competencies have been assessed as strong, and encourage the establishment of feedback loops that would enable the teams to share information, insights, and feedback across functions, thus creating repeatable processes and improvement to employee performance and outcomes.

Lastly, in the strategy for developing a digital culture are the company's values. Watch ID should identify its current values and re-define them to be more aligned with what the company will strive to achieve in its continuous journey of digital transformation. The re-defined values can be in line with:

- Innovation – Embracing a mindset that encourages innovation in digital technologies and processes.
- Agility – Being flexible and responsive to evolving shifts and innovations to the operational and strategic way the company does business in order to keep ahead of competition.
- Autonomy – Being free to use existing tools or propose the use of new digital tools or ideas to do what is right for the company and the customers.
- Collaboration – Promoting teamwork and cross-functional collaboration for effective digital initiatives
- Communication – Maintaining open communication regarding undertaken initiatives and their impacts.
- Adaptability – Being open to change, adapting quickly to market shifts and emerging technologies, and continually developing skills.
- Data-driven decision making – Valuing and leveraging data analytics to inform and drive strategic decisions
- Cyber security awareness – Instilling a sense of responsibility and awareness for cybersecurity risk.

Westerman et al. (2019) have proposed some of these values in their article "Building digital-ready culture in traditional organizations" that Watch ID should consider recognizing and adopting in an effort to contribute to the success of future digital initiatives. To make sure the re-defined values are being adopted and lived by, they need to be used in practice, and best if they come from senior management.

4.7 **Cyber security**

Watch ID has various company assets that need to be protected against cyber security risks, including customer, financial, employee data, files and intellectual property and IT solutions. Table 3 presents the most common cyber threats in the retail industry, the effects that these threats may cause on a company like Watch ID and common measures used to mitigate said threats.

Security measures can help Watch ID defeat cyber-attacks, which if left untreated could have devastating effects on operational processes and on the financial standing of the company that could lead to customer distrust and legal challenges.

Watch ID currently does have some measures in place, including performing regular data backups, which in case of compromised data and information security will allow business continuity; keeping operating system, web browsers and antiviruses updated to the latest available versions; using an email service provider which provides various security features to safeguard users (encryption, two-factor authentication, security warnings, security checkups, updates); having a segmented server-based network which facilitates internal communication, hosts applications, databases, files or authenticate and authorize individual

Table 3: Cyber security threats, effects and mitigation measures

Threat	Effect	Mitigation measure
Ransomware: Malicious software that encrypts data and demands a ransom.	Loss of sensitive data, operational disruption, financial losses, and potential reputational damage.	1. Regularly backup critical data and store it offline.
		2. Implement anti-ransomware tools and software.
		3. Educate employees on recognizing and avoiding phishing attacks.
Third-party supplier attacks: Cyber-attacks targeting vulnerabilities in third-party suppliers (outsourced IT collaborators) to infiltrate Watch ID's network, compromising data and operations.	Compromise of data integrity, service disruption, and reputational damage due to third-party vulnerabilities.	1. Assess third-party vendor's security practices.
		2. Include security requirements in vendor contracts.
		3. Monitor and audit third-party access to systems.
Insider Threats: Malicious or negligent actions by employees.	Unauthorized access, data theft, sabotage, and potential harm to the organization from within.	1. Implement strict access controls and least privilege principles.
		2. Monitor employee activities and conduct regular training.
Bot Attacks: Automated programs that perform malicious activities.	Disruption of online services, account takeover, and potential data breaches due to automated malicious activities.	1. Implement bot detection tools and CAPTCHAs.
		2. Regularly update and patch web applications.
POS Malware: Malware designed to steal payment card information.	Compromise of customer payment data, financial losses, and reputational damage.	1. Use end-to-end encryption for payment transactions.
		2. Implement point-to-point encryption in POS systems.
Phishing Attacks: Deceptive emails or messages to trick users into revealing info.	Unauthorized access to sensitive information, account takeover, and potential data breaches.	1. Conduct regular phishing awareness training for employees.
		2. Use email filtering and authentication technologies.

(Table continues)

Table 4: Cyber security threats, effects and mitigation measures

(Continued)

Threat	Effect	Mitigation measure
E-commerce Fraud: Unauthorized access or manipulation of online transactions.	Financial losses, reputational damage, and potential legal consequences from fraudulent transactions.	1. Implement secure payment gateways and multi-factor authentication.
		2. Monitor transaction patterns for anomalies.
Data Breach: Unauthorized access leading to exposure of sensitive data.	Compromise of customer and business data, legal consequences, financial losses, and reputational damage.	1. Encrypt sensitive data and implement access controls.
		2. Develop an incident response plan for quick and effective response.

Source: Own work

access which include security measures as access control, firewalls and encryption; collaborating with a bank that employ the Payment Card Industry Data Security Standard (PCI-DSS), a comprehensive set of security standards designed to safeguard the sensitive payment card data of customers during transactions.

Nonetheless, the company should raise cyber security awareness by educating its employees on the common cyber security threats and develop necessary competencies to master cyber security internally. To help build this capacity in employees, align with best practices and mitigate cybersecurity risks, adopting a commonly accepted framework, for example the National Institute of Standards and Technology (NIST) framework may be very helpful. The framework offers a set of voluntary guidelines, standards and best practices for managing and improving an organization's cybersecurity risk management processes. Although not industry specific, the NIST framework is applicable to organizations of all sizes and adaptable to different organizational structures and industries.

5 CONCLUSION

The digital maturity assessment of Watch ID helped me produce a report on the company's current capabilities within the four dimensions of culture, organization, technology and insights Based on the scoring from Forrester's self-assessment tool, I was able to identify that Watch ID has a low, yet not the lowest level of digital maturity, being mapped as an Adopter company and described as being stuck in conventional practices. In addition to the report of current capabilities, the main findings from the maturity assessment enabled me to identify specific improvement areas, which if acted upon, are expected to help the company graduate to a higher level of digital maturity.

By translating these identified improvement areas into more actionable steps, and structuring them as recommendations, or digital transformation efforts and initiatives within the seven areas of DIH's framework for preparing a digital strategy, I was able to come to a conclusion that Watch ID should make modifications prominently to the cultural and organizational dimensions, but also to the technology and insights dimensions. In essence, this process assisted me in formulating an answer to the research question "What digital transformation efforts and initiatives can be effectively employed to prepare Watch ID's digital strategy, while addressing the company's current level of digital maturity?".

The digital strategy implies that Watch ID should appoint a person in the role of Chief Information Officer (CIO) with IT knowledge and skills capable of understanding digital IT opportunities and limitations, who would work alongside the COO, taking over some of his existing responsibilities, thus alleviating the dependency of the company on the COO. The digital strategy points to the responsibilities that the CIO would need to carry as part of their role. This strategic decision necessitates both an organizational and cultural shift which would directly influence the maturation of the technology and insights dimensions.

The digital strategy also implies that the company should start utilizing a Learning Management System to digitalize existing educational materials and facilitate training of employees thus providing better structure and accessibility of documented materials, self-paced learning for employees and enabling a more systematic way of up-skilling employees. Additionally, to bring in better organizational structure, the digital strategy implies that Watch ID should develop and classify employee's digital competencies that pertain to the use of information systems, data for decision making, internal procedures that require handling digital tools, as well as competencies to handle cyber security threats. Developing and classifying these competencies would lead to identifying knowledge gaps and further upskilling opportunities. If implemented, this strategic recommendation would lead to an easier standardization of job roles, which will in turn help employees understand how their performance ties to the company's digital goals. The digital strategy implies to another organizational shift related to involving employees in digital initiatives by stimulating cross-functional collaboration in order to tackle involuntary creation of functional silos and to enable the creation of repeatable processes. These technological and organizational changes will help in advancing the company's digital initiatives.

What is more, the digital strategy suggests the company should blend digital elements in their robust physical points of sale, implement broader customer feedback mechanisms through diverse surveys and invest in Augmented Reality, which altogether would improve the overall customer experience and have an effect on the customer lifecycle journey. The company should use the recommended surveys as additional customer feedback mechanisms and additional sources for data collection. The feedback, or data, from which could help measure success, identify where improvements should be made, pointing to future technology design and how the digital strategy should be steered. This part of the digital

strategy where technology and insights mix, calls for working outside in, identifying where the customer's problems lie and acting according to their needs.

Another set of recommendations in the digital strategy suggest the company should start to fully utilize the capabilities of IT solutions already in place, including the analytics tool by building more comprehensive metrics that would incorporate data-driven insights into decision-making, and the HRM system, which if equipped with a Learning Module or integrated with a LMS would enable a smoother employee experience in all stages, help train employees at scale, automate training feedback and manage data in an easier manner.

Furthermore, the digital strategy calls for employing digital tools, such as Hunch Creative Studio, and automation solutions, related to notifying customers of completed service orders which would make the work of certain functional units more efficient. Lastly, the digital strategy suggest changing how selling is conducted in physical stores through a tailor made webportal, "Product Finder", which would help generate customer behavioral data from in store interactions and measure how the company's online marketing and physical sales channels work together in accomplishing a desired outcome.

As for how these recommendations are to be implemented, I would like to point out that the existing capabilities, improvement areas and corresponding recommendations are highly interrelated, necessitating from the company to first establish one recommendation that would in turn lead to another. This is not to say that the recommendations are mutually exclusive, yet that in case a timetable is required for their implementation, some would gain priority, but would not exclude the implementation of other recommendations. The ones which are summarized here in the conclusion represent exactly those that are considered to be of high priority.

It is also important to mention the limitations of this research. The primary qualitative data obtained through semi-structured interviews with the selected company's COO may have introduced subjectivity and bias to the research. The respondent may have tailored his responses based on his perceived expectations, thus leading to preconceptions in my way of interpreting the data. Additionally, although I was allowed to record the interviews for personal use, I did not receive permission to transcribe and add them as part of the thesis, thus influencing the transparency of reporting.

Additionally, because this thesis focuses on a single case and respondent, the findings lack generalizability, making it difficult to apply the results to other companies. However, I strongly believe that the results of the thesis are invaluable to Watch ID, providing insights into the modifications that should occur in order to mature and continue with future digital transformations**.**

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APPENDICES

Appendix 1: Summary in Slovene

Magistrsko delo se osredotoča na pripravo strategije digitalizacije za severno makedonsko podjetje, katerega dejavnost je prodaja ur in nakita. Namen magistrskega deka je pomagati podjetju pri njegovih nenehnih prizadevanjih za digitalno preobrazbo z odgovorom na raziskovalno vprašanje »Katera prizadevanja in pobude za digitalno preobrazbo je mogoče učinkovito uporabiti za pripravo digitalne strategije Watch ID, hkrati pa obravnavati trenutno raven zrelosti digitalizacije podjetja?".

Raziskovalna metodologija te naloge je mešana. V prvem poglavju je bil opravljen pregled obstoječe literature za analizo ključnih konceptov digitalne preobrazbe, zrelosti digitalizacije in strategije digitalizacije. Iskanje literature je potekalo z uporabo ustreznih ključnih besed v zbirkah člankov, do katerih dostopamo prek digitalne knjižnice Ekonomske fakultete, in s pregledovanjem ustreznih referenčnih seznamov za identifikacijo dodatne literature. V drugem poglavju, študiji primera, se raziskovalna metodologija nadaljuje s pregledom preteklih in trenutnih dokumentov tržne raziskave izbranega podjetja za opis zgodovine podjetja, organizacijske strukture in informacijskih rešitev v uporabi. Kvalitativne primarne podatke sem pridobila preko polstrukturiranih intervjujev za analizo SWOT in konkurenčno pozicioniranje podjetja. Oceno zrelosti digitalizacije podjetja sem naredila z uporabo Forresterjevega orodja za samoocenjevanje Digital Maturity Model 5.0 (VanBoskirk et al., 2017). Priprava digitalne strategije v tretjem poglavju je potekala s pomočjo metodologije DIH Slovenija, ki je razdeljena na sedem področij, s priporočili, ki se močno opirajo na rezultate ocene zrelosti digitalizacije v prejšnjem poglavju.

Pregled literature kaže, da digitalna preobrazba predstavlja potovanje, ki informatiko povzdigne na bolj strateško raven (Peppard, 2018). Zahteva ne le spremembe digitalnih tehnologij (Hinings et al., 2018), temveč tudi velike spremembe v strategiji, poslovnih modelih, procesih in organizacijskih strukturah (Westerman et al., 2011). V maloprodaji gre pri digitalni preobrazbi predvsem za izboljšanje uporabniške izkušnje, povečanje učinkovitosti zaposlenih, spodbujanje rasti z uporabo tehnologije, sledenje trendom in iskanje izzivov, ki se nenehno pojavljajo, ter odzivanje nanje (Evans et al., 2022; Reichenbach, 2022; Cask, 2023). Podjetja pa ne vedo vedno, kako odgovoriti na izzive, niti kdaj in kako začeti.

Da bi se podjetja podala na pot digitalne preobrazbe, bi morala pridobiti razumevanje svoje trenutne stopnje zrelosti digitalizacije, ki naj bi povečala zavedanje o razpoložljivih zmogljivostih in ukrepih, ki jih je treba izvesti v posebnih scenarijih (Ochoa-Urrego & Peña-Reyes, 2021; Blatz et al., 2018). Tu nastopi koncept zrelosti digitalizacije, ki predstavlja sistematično pripravljenost ali sposobnost organizacije, da se dosledno prilagaja nenehnim digitalnim spremembam (Kane, 2017). Za oceno tega so bili razviti modeli zrelosti kot uporabna orodja za razumevanje zrelosti digitalizacije podjetja. Obstajajo različni modeli, ki so sestavljeni iz več stopenj zrelosti, ciljajo na različne panoge in so uporabni tako za organizacijsko oceno kot za razvoj (Lahrmann & Marx, 2010), kar v praksi vodi do priprave

strategije digitalizacije. Ta strategija izrecno priznava vpetost informatike v celotno organizacijo in integrira informatiko s celotno poslovno strategijo podjetja (Bharadwaj et al., 2013, Galliers, 2011). Pri tem je treba strategijo digitalizacije pripraviti s pomočjo identifikacije elementov poslovnega modela podjetja in ugotoviti, kako je mogoče te elemente spremeniti (Correani et al., 2020).

Rezultati magistrskega dela so povezani predvsem z oceno zrelosti digitalizacije podjetja, kjer je na podlagi štirih dimenzij - kulture, organizacije, tehnologije in vpogledov - v Forresterjevem orodju za samoocenjevanje ugotovljeno, da je v podjetju Watch ID zrelost digitalizacije razmeroma nizka. Avtorji modela v takšnem primeru svetujejo, naj podjetje vcepi digitalno DNK ter se zgleduje po konkurenčnih podjetjih na visoki stopnji zrelosti digitalizacije. Ocena zrelosti digitalizacije je pomagala pri pripravi poročila o razpoložljivih zmogljivostih organizacije in pri prepoznavanju področij izboljšav.

Ugotovljena področja izboljšav so nato pomagala oblikovati prizadevanja in pobude za digitalno preobrazbo ter jih strukturirati skladno z metodologijo DIH za pripravo strategije digitalizacije. Strategije digitalizacije podjetja Watch ID predvideva, da bi moralo podjetje imenovati direktorja informatike, ki bo odgovoren za izvajanje strategije digitalizacije. Njegove naloge bodo koordinacija dela zunanjih izvajalcev na področju IT, opredelitev digitalnih kompetenc zaposlenih, organizacija ustreznih izobraževanj za zaposlene, povečevanje razumevanja zaposlenih, kako je njihovo delo povezano s cilji podjetja na področju digitalizacije in spodbujanje več sodelovanja med oddelki. Razen tega je potrebno začeti v celoti izkoriščati zmogljivosti obstoječih sistemov, uporabljati dodatne mehanizme za povratne informacije strank, ki bi lahko pomagale usmerjati prihodnje izboljšave na področju digitalizacije, uvesti več avtomatizacije procesov, ki bo povečala učinkovitost procesov, izboljšati izkušnjo strank ter uporabiti te rešitve tudi za pridobivanje povratne informacije od strank. Strategija digitalizacije predlaga uvedbo orodij obogatene resničnosti na spletni strani podjetja ter nenazadnje spremembe načina izvajanja prodaje v fizičnih trgovinah prek po meri narejene rešitve »Product Finder«, ki bi nato pomagala izmeriti, kako distribucijski kanali sodelujejo pri doseganju želenega rezultata.

Skratka, izvajanje strategije digitalizacije vključuje prepoznavanje povezav med obstoječimi zmogljivostmi, področji izboljšav in ustreznimi priporočili, kar pomeni, da mora Watch ID najprej izvesti spremembe, predvidene v enem priporočilu, potem pa se lotiti izvajanja naslednjega priporočila. Čeprav se medsebojno ne izključujejo, imajo lahko nekatera priporočila prednost, ne da bi izključila druga, je za izvedbo potreben časovni razpored. Vsekakor pa naj bi priporočila v strategiji digitalizacije dvignila zrelost digitalizacije podjetja in ga pripravila na prihodnje poti digitalne preobrazbe.

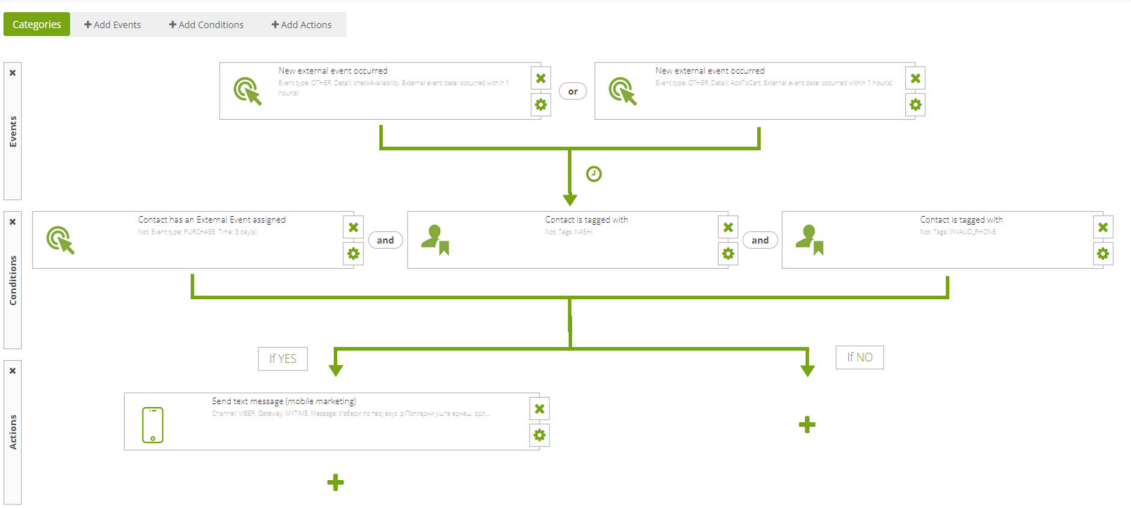
Appendix 2: Explanation of "Purchase Intention" automation rule from Watch ID's Customer Data Platform (SalesManago)

Watch ID has created an automation rule called "Purchase Intention" within SalesMango. The events that set the subsequent conditions and actions in this automation rule are the customers' website activity of either (1) checking a products availability (when a customer has pressed the "Check Availability" button on the product page) or (2) adding a product to cart (when a customer has pressed "Add to cart" button on the product page).

These events trigger the action of sending a text message to the customer with tailored text and link to the product the customer has viewed during their session on the website, under the condition that the customer has not purchased the product within 3 days of the last activity, and under the condition that the customer has a phone number listed as part of their personal information within their Loyalty Club profile.

With this specific automaton rule the company sends notifications to the customers with the purpose of re-engaging them to revisit the product they have previously searched for.

The following screenshot represents the flow of events, conditions and actions of the above specified automation rule "Purchase Intention" within SalesManago's interface:



Source: Screen print from SalesManago automation rule module

Appendix 3: SWOT Matrix Questionnaire

INTERNAL	EXTERNAL
Strengths 1. What do you do well? Do you have strong brand awareness? Customer Loyalty? 2. What do customers say you do well? 3. What do employees say you do well? 4. What is your Unique Selling Proposition? 5. What are your supplier relationships like? 6. What skills do you have that your competitors don't? 7. What proprietary assets (intellectual property or all information having to do with clients/customers) do you have? 8. Do your profit margins compare to industry benchmarks? 9. What traits or abilities do you have that will help you reach future success?	**Opportunities** 1. Do your competitors have any weaknesses you could benefit from? 2. Is the target market growing or shifting in your favor? 3. Is there an untapped pain point or niche market? 4. Are there any upcoming events you could benefit from? 5. Are there geographic expansion opportunities? 6. Are there potential new sources of financing? 7. Industry or economic trends that could benefit you? 8. Social trends that could benefit you? 9. Any new technology that could benefit you?
Weaknesses 1. What areas of your business need improvement? 2. What do your customers frequently complain about? 3. What do your employees frequently complain about? 4. Which objections are hard to address? 5. Are you new or not well known? 6. Do you have any limitations in distribution? 7. Are any resources or equipment you are using outdated or old? 8. Are you lacking in any staff, skills (traits and abilities) or training? 9. Do you suffer from any cash flow problems? Debt?	**Threats** 1. New competitors or expansion in existing competitors? 2. Is the target market shifting or shrinking? 3. Could any indirect competitors become direct competitors? 4. Are there any industry or economic trends that could work against you? 5. Are there any social trends that could work against you? 6. Is there any new technology that could work against you? Is changing technology a threat? 7. What market trends affect you in a negative way (demand, competition, industry changes)?

Appendix 4: Analysis of competitor's 4Ps

	Watch ID	***Competitor 1***	***Competitor 2***	***Competitor 3***
Product and Service	**Products**: Watches; Jewellery; Watch Straps; Small leather goods; Keychains; Pens; Collector's boxes; Gift vouchers; **Services**: Ear piercing; Product engraving; Watch repairs;	**Products**: Watches; Jewellery; Watch Straps; Small leather goods; Keychains; Gift vouchers; **Services**: Product engraving; Watch repairs; Luxury packaging;	**Products**: Watches; Jewellery;	**Products**: Watches;
Price	Middle to High end	High end	Low end	Middle to High end
Place (Distribution Channels)	14 POS; Online store	4 POS; Online store	7 POS; Online store	3 POS; Online store (Newly opened)
Promotion	Website; Social Media; OOH; Influencer Marketing	Website; Social Media; OOH; Influencer Marketing	Website; Social Media; OOH; Influencer Marketing	Website; Social Media; OOH; Influencer Marketing

Source: Own work

Appendix 5: Competitor website analysis

	Watch ID	Competitor 1	Competitor 2	Competitor 3
Website Design				
• User friendliness	Subject to more in-depth analysis	Subject to more in-depth analysis	Subject to more in-depth analysis	Subject to more in-depth analysis
• Mobile responsiveness	Page is usable on mobile (Google Mobile-friendly Test)	Page is usable on mobile (Google Mobile-friendly Test)	Page is not usable on mobile - Clickable elements too close together. Content wider than screen (Google Mobile-friendly Test)	Page is usable on mobile (Google Mobile-friendly Test)
Product Catalog				
• Product categorization	Clear product categorization by brand and gender in navigational menu	Difficult to locate products button on page. Categorization by brand	Clear product categorization by brand and gender in navigational menu	Clear product categorization by brand and gender in navigational menu
• Availability of product specifications	Yes, overall. Detailed for all product categories	Yes, overall. Detailed for watches. Limited for other product categories	No.	Limited, overall.
• Availability of product images	Yes.	Yes.	Yes.	Not all products have images.
E-commerce Features				
• E-commerce enabled by:	NB SHOP eCommerce system	WooCommerce - eCommerce plugin for WordPress	WooCommerce - eCommerce plugin for WordPress	Shopify – eCommerce plugin
• Availability of shopping cart functionality	Available.	Available.	Available.	Available.
• Checkout process (Simple/Complicated)	Simple.	Simple.	Simple.	Simple.
• Payment options	Variety of payment methods (Payment on delivery, Buy now pay later (BNPL) payment plan or online using Visa, MasterCard, Maestro, American Express)	Variety of payment methods (Payment on delivery, Buy now pay later (BNPL) payment plan or online using Diners Club, Visa, MasterCard, Maestro, American Express,)	Variety of payment methods (Payment on delivery or online using Visa, MasterCard, Diners club)	Payment on Delivery
• Wish list / Save for later features	Available.	Available.	Available.	Not available.

(Table continues)

Appendix 5: Competitor website analysis

(Continued)

	Watch ID	Competitor 1	Competitor 2	Competitor 3
Content and Information				
● Blog section	Yes.	Yes.	No.	No.
● Product guides and educational content	No.	Yes.	No.	No.
● Customer reviews and ratings	Feature available, but not in use.	No.	No.	No.
● About us and contact information	Yes.	Yes.	Yes.	Yes.
Search Functionality				
● Search bar visibility and usability	Visible. Responsive to alphanumeric characters	Visible. Responsive to alphanumeric characters	Visible. Responsive ONLY to numeric characters	Visible. Responsive to alphanumeric characters
● Filters	Filters available: Brand, Gender, Style type, Discount (yes/no), Watch case size, Watch function, Watch material, Strap material, Watch case color, Clock face color, Strap color, Waterproof, Mechanism type, Watch case shape, Jewelry material, Jewelry color, Availability, Price.	Filters available: Price, Gender, Brand, Watch case material, Strap material, Type of mechanism, Waterproof	Filters available: Price and Brand	Filters available: Price ONLY
● Sorting options	Sorting available: Lowest price first, Highest price first, Recommended, Latest, Largest discount first, Smallest discount first, and Number of products per page (12, 24, 36, 48)	Sorting available: By popularity, Latest products, Price from low to high, Price from high to low	Sorting available: By popularity, Latest products, Price from low to high, Price from high to low	Sorting available: Best selling, Alphabetically, Price from low to high, Price from high to low, Date, old new, Date new old
● Search suggestions or auto-complete options	No.	No.	No.	Auto-complete option

(Table continues)

Appendix 5: Competitor website analysis

(Continued)

	Watch ID	Competitor 1	Competitor 2	Competitor 3
Customer Support				
• Live chat availability	Yes.	Yes.	No.	No.
• FAQ section	Yes.	No.	FAQ page not responsive	No.
• Return and exchange policies	Available. Dedicated page on website with detailed information.	Available. Dedicated page on website with detailed information.	No information provided on website.	No information provided on website.
Shipping and Delivery				
• Shipping options and costs	Free delivery over 600MKD spent, 100MKD for purchases under 600MKD.	Free delivery over 2000MKD spent, 200MKD for purchases under 2000MKD.	Free delivery over 1000MKD spent, 150MKD for purchases under 1000MKD.	Shipping cost is calculated as a percentage of the products price (5.5%)
• Estimated delivery times	3-5 workdays	5 workdays	5 workdays	N/A
• Tracking information availability	Available.	Unavailable.	Unavailable.	Unavailable.
Customer Experience				
• Personalization features (recommended products)	Available. Similar product recommendation and Recently viewed products.	Available. Similar product recommendation.	No.	Available. Similar product recommendation.
• Loyalty programs and discounts	Available. Plethora of benefits described in detail on dedicated page.	Available. Plethora of benefits described in detail on dedicated page.	No.	No.
• User reviews and testimonials	Feature available, but not in use.	No.	No.	No.
• Social media integration	Yes. Products, through product pages can be shared as a link through Facebook, Instagram, Viber, WhatsApp and email.	Yes. Products, through product pages can be shared as a link through Facebook, Twitter, Instagram and Pinterest.	No.	No.
Security and Trustworthiness				
• SSL certificate and secure connection	Yes.	Yes.	Yes.	No.
• Trust badges and certifications	No.	No.	No.	No.
• Privacy policy and data protection	Yes.	Yes.	No.	No.

(Table continues)

Appendix 5: Competitor website analysis

(Continued)

	Watch ID	Competitor 1	Competitor 2	Competitor 3
Analytics and Tracking tools				
	Sales Manago, Hotjar Heatmaps, Google Analytics, Facebook Pixel, Facebook Signal, Facebook Domain Insights, Facebook Conversion Tracking (Data source: Builtwith.com)	Google Analytics, Facebook conversion tracking, Facebook Pixel, Facebook Signal (Data source: Builtwith.com)	Google Analytics (Data source: Builtwith.com)	No.
Social Media Presence				
● Social media buttons on page	Yes.	Yes.	No.	Yes.
● Activity and engagement on social platforms	Yes. Daily content sharing on Facebook and Instagram with embedded links that lead to product pages on the company's website.	Yes. Daily content sharing on Facebook and Instagram. No links to the company's website provided.	Yes. Daily content sharing on Facebook and Instagram with embedded links that lead to product pages on the company's website.	Yes. Weekly content sharing on Facebook and Instagram. No links to the company's website provided.
Mobile App Availability (yes/no)				
	No.	No.	No.	No.
Legal Compliance				
	GDPR	GDPR	GDPR	GDPR
Innovative or Differentiating Features				
	● Loyalty club with benefits ● Product try-on feature with pictorial representation of product dimension on average size hand ● Purchasing and redeeming gift vouchers online ● Real-Time Inventory and Availability ● Chatbot	● Loyalty club with benefits ● Chatbot ● Localized website	Unknown	Unknown
Customer Feedback				
	Satisfaction Surveys sent to Loyalty Club members through email after purchase	N/A	N/A	N/A

Source: Own work

Appendix 6: Forrester's Digital Maturity 5.0 self-assessment tool with scores and codes

The following tables split in the dimensions of Culture, Organization, Technology and Insights represent the self-assessment tool developed by Forrester. Each table contains statements. The numbers on the left hand side of each statement represent the COO's answers to the question: "How much do you agree with each of the following statements?" and correspond with the four point scale: 0 = completely disagree; 1 = somewhat disagree; 2 = somewhat agree; 3 = completely agree. On the right hand side, the self-assessment tool was modified to contain codes which serve to connect the statement to the descriptive findings in section 2.2.2. The number in brackets next to the name of each dimension (ex. Culture (14)) represents a sum of the statement scores from the particular dimension.

Culture (14)

3	We believe that our competitive strategy depends on digital.	C1
3	Our board and our C-level executives back our digital strategy.	C2
2	We have the right leaders to execute on our digital strategy day to day.	C3
1	We invest in targeted digital education and training at all levels of our organization.	C4
1	We clearly communicate our digital vision both internally and externally.	C5
2	We take measured risks in order to enable innovation.	C6
2	We prioritize overall customer experience over the performance of any individual channel.	C7

Organization (10)

2	Our organization structure prioritizes customer journeys over functional silos.	O1
3	We dedicate appropriate resources to digital strategy, governance, and execution.	O2
1	The staff supporting our critical digital functions are best in class.	O3
1	We have digital skills embedded throughout our organization.	O4
2	Our organization model encourages cross-functional collaboration.	O5
0	We have defined and repeatable processes for managing digital programs.	O6
1	Our vendor partners deliver value that enhances our digital competencies.	O7

Technology (14)

3	Our technology budget is fluid to allow for shifting priorities.	T1
2	Our marketing and technology resources work together to co-create our digital technology road map.	T2
2	We have a flexible, iterative, and collaborative approach to technology development.	T3
3	We leverage modern architectures (APIs, cloud, etc.) to promote speed and flexibility	T4
0	We measure our technology teams by business outcomes, not just system uptime.	T5
2	We use customer experience assets, like personas and journey maps, to steer our technology design.	T6
2	We use digital tools to promote employee innovation, collaboration, and mobility.	T7

Insights (13)

1	We have clear and quantifiable goals for measuring the success of our digital strategy.	I1
1	Every employee understands how her performances ties to corporate digital goals.	I2
2	We use customer-centric metrics like Net Promoter Score or lifetime value to measure success.	I3
2	We measure how channels work together to accomplish a desired outcome.	I4
2	Customer insights actively steer our digital strategy.	I5
2	Customer insights inform digital design and development.	I6
3	We feed lessons learned from digital programs back into our strategy.	I7

Total score: 51

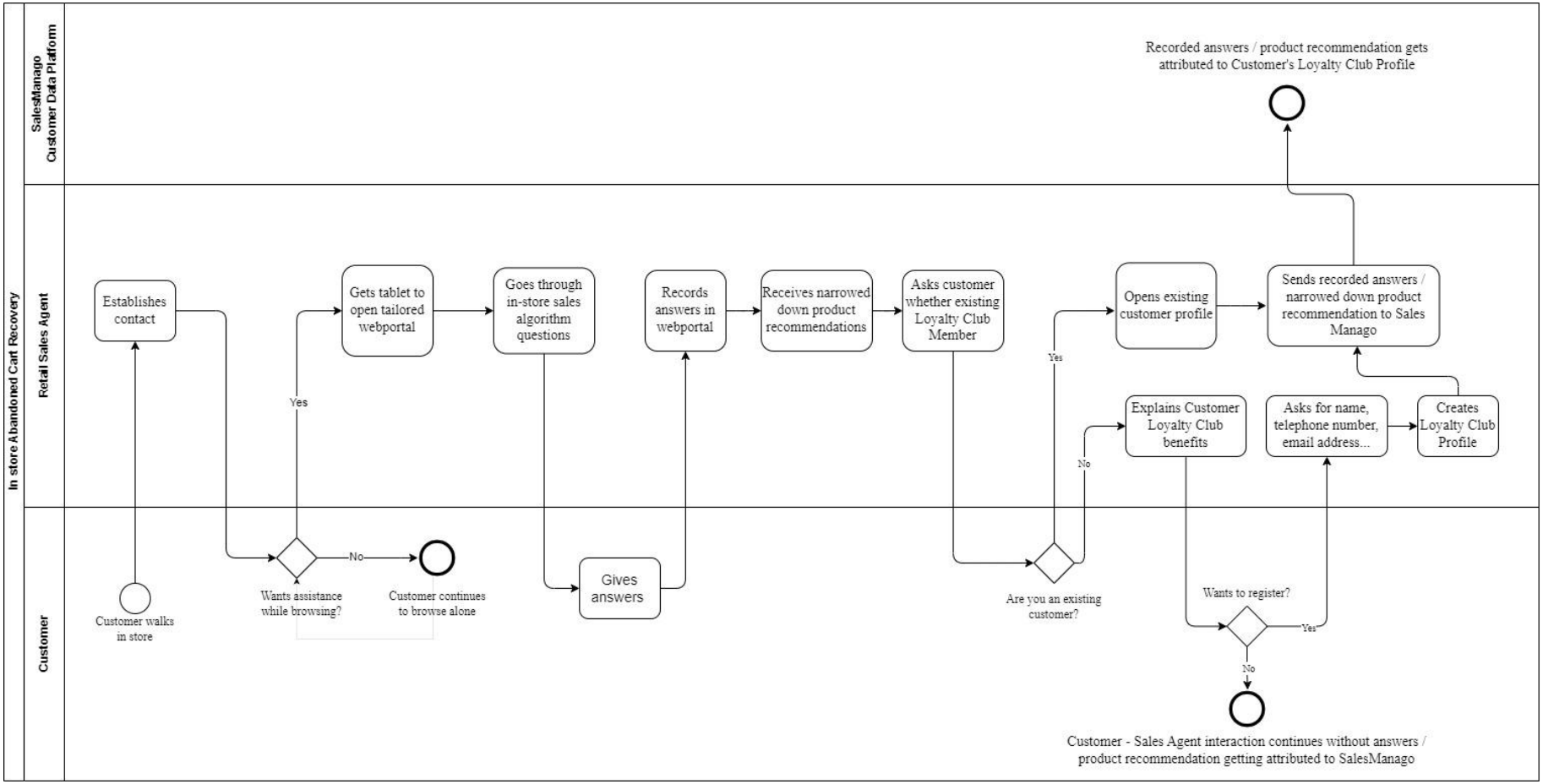
Source: Adapted from Forrester's Digital Maturity Model 5.0 Self-assessment tool

Appendix 7: Digital tools used by the marketing functional unit

Digital tool	Use
Google Analytics	For tracking and analyzing user interactions on company website, such as website traffic and user behavior;
Google Ads	For creating and displaying ads on Google's search engine and advertising network, based on keyword bids, where ads appear in search results or on websites when users search for or view content related to those keywords;
Facebook Ads	For creating targeted ads for Facebook and Instagram using targeting options based on user demographics and interests;
Google Ad Manager	For managing and optimizing the company's advertising inventory;
Google Display Network (GDN)	For displaying ads on Google's wide network of websites, YouTube and mobile applications to reach a broader audience beyond search results, yet based on targeting criteria;
Facebook Creator Studio	For publishing, scheduling, and managing content across the company's Facebook and Instagram accounts in one single place;
Linktree	Link-in-bio solution for creating a personalized and customizable page that houses all the important links that Watch ID shares with their audience.
Hotjar	A behavior analytics tool based on heat maps that offers visual insights into customer's interactions with the company's website that helps identify engagement patterns and pain points
Xibo	An open-source digital signage software solution that allows the marketing coordinators to remotely schedule and deliver multimedia content to digital displays set up at the company's point of sale.
T2M	A URL shortener service for transforming lengthy destination URLs into customizable and personalized short links with a branded domain, for tagging specific campaigns in emails or SMS campaigns
InfoBip	A programmable communications platform that offers a service that is integrated with Watch ID's CDP platform and helps to connect and engage customers more easily over customer preferred communication platforms.

Source: Own work

Appendix 8: To-be process of attributing customer data to Customer Loyalty Club Profiles through the "Product Finder" webportal



Source: Own work