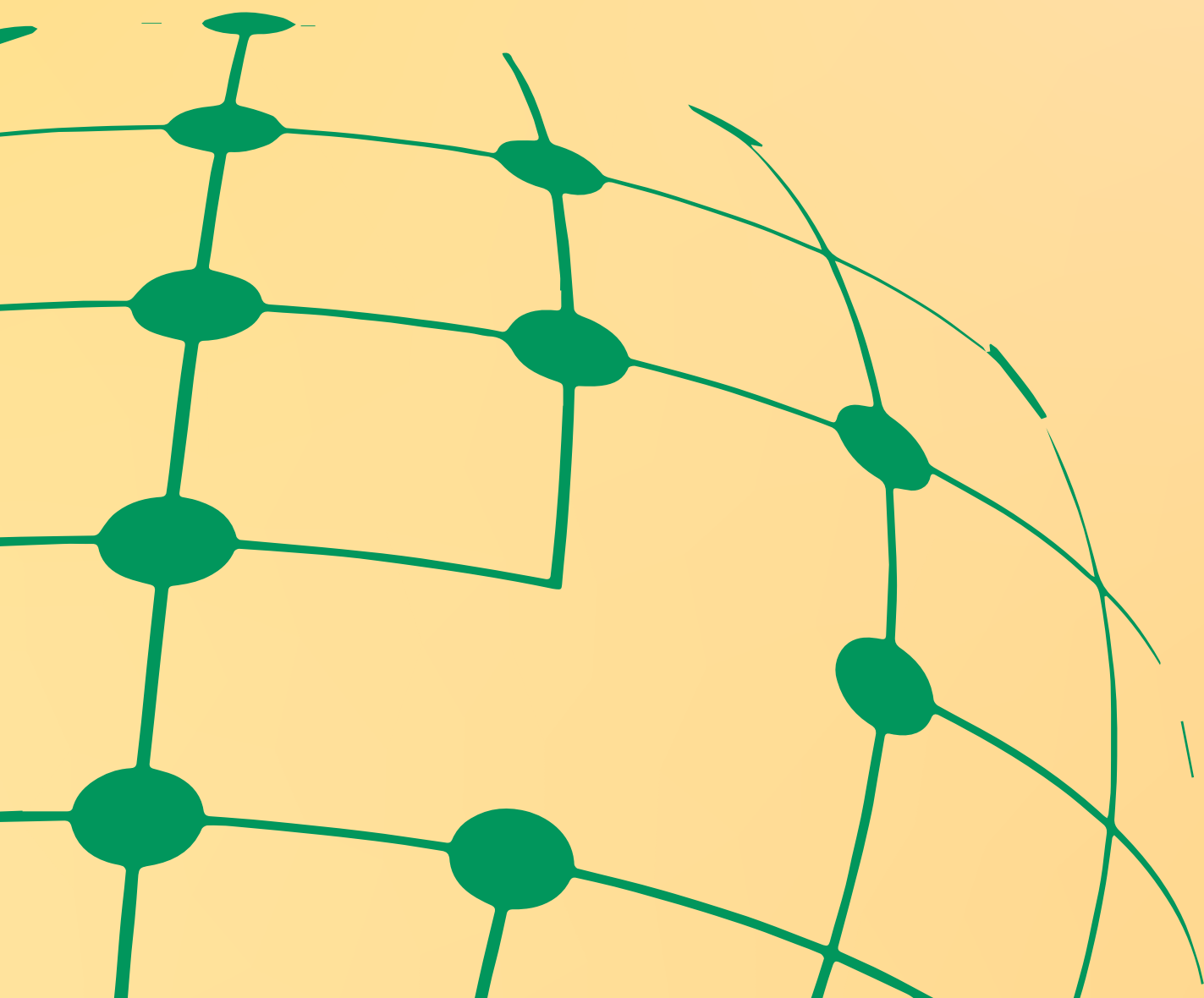




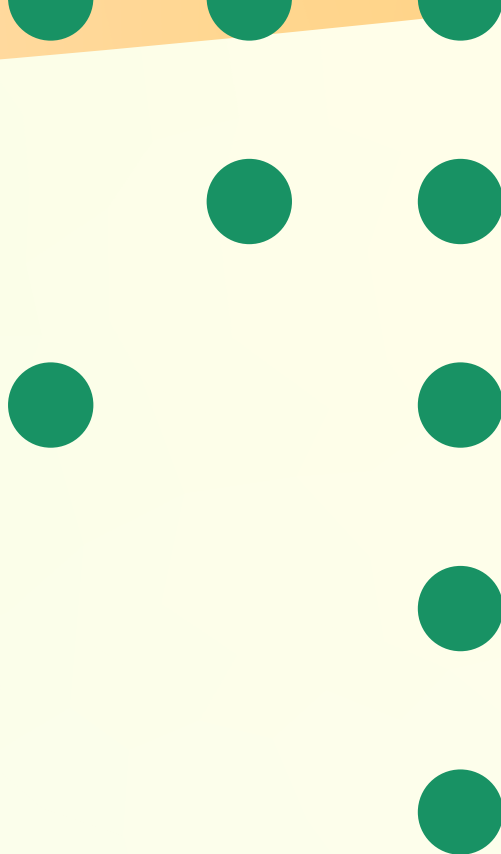
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the European Union

Digitalization of the Retail Sector – Concepts, Methods, Practical Application

Handbook



Content



Introduction

The retail industry has undergone significant transformation in recent years, largely driven by the rise of digitalization. The integration of technology and digital tools into traditional retail practices has revolutionized the way businesses operate and interact with customers. Consumers are increasingly turning to online platforms and mobile devices to discover, research, and purchase products. As a result, retailers must adapt their strategies to stay relevant and competitive in this digital landscape. Embracing digitalization not only allows retailers to meet the evolving needs and expectations of their customers but also enables them to streamline operations, enhance efficiency, and drive growth.

The Handbook **Digitalization of the Retail Sector - Concepts, Methods, Practical Application** is aimed to equip retailers with the knowledge and tools necessary to embark on a successful digital transformation journey. It serves as a guide for current and future industry professionals, seeking to embrace and harness the power of digitalization.

The content of the handbook focuses on crucial aspects of digitalization, providing insights, practical tools, and real-world examples to help retailers successfully navigate digital transformation. The handbook provides an understanding of the concept of digitalisation, its significance in the EU context, and analyses the policy drivers of digitalisation. It explores the added values that digitalization has brought to companies in the retail sector and showcases the strategies and tools that retailers can employ to perform the required verifications of each solution they want to implement to digitize their company. Case studies and real-world examples from successful digital transformations in the retail sector are incorporated to illustrate the potential benefits, challenges, and outcomes of digitalization.

The last chapter of the handbook offers a practical template for retail store owners to self-diagnose areas of improvement within their establishments. It helps owners reflect on the operations of traditional and digitalized businesses, prompting them to consider necessary future implementations. While seeking external assistance is valuable, this chapter provides a starting point for owners to draw initial conclusions and take steps towards digitalization. It encourages a step-by-step approach and serves as a practical and simple tool to initiate the digital transformation in the retail sector.

The Purpose Of The Handbook

This Handbook is developed within the Erasmus+ project '**DIGI-TAIL- Fostering the Digitalization in the Retail Sector**' by project partners in Spain, Slovenia, Portugal, and The Netherlands with the purpose to provide a comprehensive resource for retailers, business owners, and professionals in the retail industry who are looking to understand and implement digitalization strategies effectively. The handbook aims to fulfill the following purposes: Enhance readers' knowledge and understanding of the key concepts related to digitalization in the retail sector. Offer practical guidance on how to implement digitalization strategies in the retail sector. Empower readers to apply the concepts they learn in real-world scenarios. Give readers' competitive advantage to achieve sustainable growth in an increasingly digital world.

The handbook provides tailored guidance and knowledge to retail company owners, HR staff, managers, Key Account Managers (KAMs), and VET learners that address their specific roles and responsibilities in the digitalization of the retail sector.

For retail company owners, the handbook equips them with the knowledge to make informed decisions about incorporating digital strategies into their business operations, and helps them identify opportunities for growth, optimize their digital presence, and align their business strategies with evolving consumer preferences in the digital age.

HR staff and managers can gain an insight on how to integrate digitalization into HR processes and performance management, as well as understanding of the skills required for digital roles, effective training methods and employee engagement in a digitalized retail organization.

The handbook addresses Key Account Managers (KAMs) by highlighting the impact of digitalization for leveraging digital tools to enhance customer relationships. It explores how digitalization can improve communication, personalization, and data-driven decision-making, and how to adapt existing strategies to meet the changing expectations of digitally empowered customers.

The handbook serves as a resource for VET learners seeking to enter or advance their careers in the retail sector. It offers foundational knowledge of digitalization concepts, methods, and practical applications specific to the retail industry. The handbook equips them with the skills and knowledge needed to thrive in a digitally transformed retail environment.

Chapter 1

DIGITALISATION IN EU SCENARIO (POLICY DRIVERS)

Introduction, objective, topics

In recent years, the European Union (EU) has placed significant emphasis on digitalisation as a primary factor of economic growth, innovation, and competitiveness. To achieve these goals, the EU has implemented several policy drivers to promote digitalisation, including the Digital single market strategy, the European data strategy and the Horizon Europe.

These policies are aimed at creating a single market for digital goods and services, developing new digital technologies, promoting data sharing, and ensuring that digital technologies are used in a way that benefits society and the environment. In this context, it is essential to understand the policy drivers of digitalisation in the EU scenario to comprehend the ongoing digital transformation and its implications for businesses, governments, and citizens.

Objective

This chapter provides an understanding of the concept of digitalisation, its significance in the EU context, and analyses the policy drivers of digitalisation. Moreover, this chapter aids in the exploration of the impact of digitalisation on various aspects of society and examines the opportunities and challenges arising from the ongoing digital transformation.

In this chapter, critical thinking and analytical skills are used to assess the effectiveness of policy drivers of digitalisation in the EU and their implications for different stakeholders, enhancing the readers ability to communicate effectively about digitalisation and its policy drivers.

Topics

Topic 1: Introduction to digitalisation in the EU context

Topic 1 covers the definition of major terms, the significance of digitalisation for the EU economy and society, and the implications of digitalisation for the retail sector. The challenges and risks associated with digitalisation, such as data privacy and security concerns, and the need for effective digital skills training for employees, are also covered in this topic.

Topic 2: The EU policy drivers

Topic 2 focuses on the policies and initiatives of the EU that are driving digitalisation in the retail sector. Specifically, this topic covers the objectives, measures and impact of major policy drivers, such as the Digital single market strategy, the European data strategy and Horizon Europe.

Topic 3: Opportunities and challenges of digitalisation in the EU

Topic 3 aims to provide insights into the potential benefits and risks associated with digitalisation in the retail sector. The impact of digitalisation in the retail sector is addressed in the following areas: customer engagement, marketing, supply chain management and sustainability.

Topic 1: Introduction to digitalisation in the EU context

In recent years, digitalisation has become the decisive driver of economic and social transformation, reshaping the way businesses operate and society functions. In the EU, digitalisation has been identified as a critical priority, enhancing competitiveness, innovation, and social welfare.

Sub-topic 1: Definitions and major terms

To understand digitalisation in the EU context, it is important to define its major terms and related concepts. We can define digitalisation as the process of using digital technologies to transform business operations, products, and services. This process involves the integration of digital technologies into business processes, such as e-commerce, mobile apps, and digital payments.

Digitalisation can also refer to the use of digital technologies to create new business models, products, and services.

Other major terms related to digitalisation include digital transformation, which refers to the comprehensive use of digital technologies to transform an entire business or industry, and Industry 4.0, which is a term used to describe the fourth industrial revolution that is characterised by the integration of digital technologies into manufacturing and industrial processes.

Summary: Definitions and major terms related to digitalisation are important to understand the process and the technologies used to transform business operations, products, and services ; Development Goals, such as quality education, decent work and economic growth, and sustainable cities and communities.

Sub-topic 2: Significance of digitalisation for the EU economy and society

As a critical priority for the EU, digitalisation has the potential to enhance competitiveness, innovation, and social welfare and has been identified as a key driver of economic growth, productivity, and job creation. The EU has set ambitious targets for digitalisation, including the Digital single market strategy.

Digitalisation can improve access to services and information, enhance social inclusion, promote sustainability and contribute to the achievement of the United Nations Sustainable Development Goals, such as quality education, decent work and economic growth, and sustainable cities and communities.

Digital technologies can also improve efficiency in various sectors of the EU economy: cloud computing, big data analytics, and the Internet of Things, for example, can help businesses to streamline their operations, make better decisions, and reduce costs. This can contribute to the competitiveness of EU businesses in the global marketplace.

Moreover, digital technologies can enhance the quality of life of EU citizens: telemedicine can enable remote consultations with doctors, while online learning platforms can provide access to education for people who live in remote areas. Digital technologies can also promote sustainable development in the EU, such as by enabling the efficient use of resources and reducing environmental impact.

Summary: Digitalisation is a critical priority for the EU, as it has the potential to enhance the regions competitiveness, innovation, and social welfare. The EU has set ambitious targets for digitalisation, including the Digital single market strategy, and digitalisation is critical for enhancing social welfare in the EU.

Sub-topic 3: Data privacy and security concerns

In the digital age, data has become a valuable asset for businesses, and protecting it is critical for maintaining customer trust and brand reputation. Data privacy and security concerns are at the forefront of digitalisation in the EU and retail companies need to comply with the General data protection regulation (GDPR).

This regulation applies since May 2018 and sets out strict rules on how businesses collect, store, and process personal data. It applies to any company that handles EU citizens data, regardless of the company's location.

GDPR enforcement has led to increased awareness of data privacy and security concerns, and companies that fail to comply with the regulation can face substantial fines.

The EU has also taken steps to enhance cybersecurity and protect critical infrastructure from cyber threats. The European Commission has launched the EU Cybersecurity Strategy, which aims to create a safe and secure digital environment for EU citizens and businesses. The strategy includes measures to increase resilience, promote innovation, and support capacity building across the EU.

Summary: Retail companies need to comply with the General Data Protection Regulation (GDPR) and protect valuable customer data. EU's efforts to enhance cybersecurity and protect critical infrastructure through the EU Cybersecurity Strategy create a safe and secure digital environment for EU citizens and businesses.

Sub-topic 4: The importance of digital skills for employees

Digital skills are becoming increasingly important for employees in the EU digitalisation process.

Employees with digital skills are better equipped to use digital tools and technologies, such as data analytics, automation, and artificial intelligence, to increase productivity and efficiency in their work.

In today's job market, many jobs require digital skills, and employers are actively seeking candidates who possess them. Employees with digital skills are more likely to be hired and are often paid more than those without them. This means that developing digital skills can improve employability and lead to better career prospects.

The EU has recognised the importance of digital skills for employees and has taken steps to promote digital skills training: the European Commission has launched the Digital Skills and Jobs Coalition, which aims to address the digital skills gap in the EU.

The coalition brings together public and private actors to promote digital skills training, provide information on digital skills demand, and support the recognition of digital skills across Europe.

The EU also funds digital skills initiatives through various programmes, such as the Erasmus+ programme.

Summary: Digital skills are essential for employees in the EU's digitalisation process, as they enable workers to use digital tools and technologies, increase productivity, and improve their employability. The EU recognises the importance of digital skills and has launched the Digital Skills and Jobs Coalition, which promotes digital skills training and supports the recognition of digital skills across Europe. The EU also funds digital skills initiatives through various programmes, such as the Erasmus+ programme.



Shaping Europe's digital future. Ursula von der Leyen explains EU digital future
www.youtube.com/watch?v=Jl7WxBgtf9o

Topic 2: The EU policy drivers

The EU has implemented several policies and initiatives to drive digitalisation in the retail sector. These policy drivers aim to create a common digital market, increase innovation, and enhance competitiveness, while ensuring data privacy and security. This topic covers the objectives, measures, and impact of the major EU policy drivers in the retail sector.

Sub-topic 1: The Digital single market strategy

The Digital single market strategy is one of the key policy drivers of the EU for digitalisation. Its objective is to create a single digital market where people and businesses can easily and fairly access and trade goods and services online. It comprises three pillars: improving access to digital goods and services, creating the right conditions for digital networks and services to flourish, and maximising the growth potential of the digital economy. The strategy aims to benefit businesses, consumers, and the EU economy.

By promoting the removal of barriers to cross-border e-commerce and harmonising consumer protection laws, the strategy has facilitated the growth of online retail across Europe. This has enabled retailers to expand their customer base and increase sales through online channels. Additionally, the strategy has encouraged the development of innovative technologies and digital solutions for retail, such as mobile payments and personalised shopping experiences.

Summary: The Digital single market strategy aims to create a fair single digital market in the EU. It facilitates cross-border e-commerce, harmonises consumer protection laws and encourages innovation, benefiting businesses, consumers and the EU economy. It has allowed retailers to expand their customer base, increase sales through online channels, and promote innovative technologies and digital solutions.

Sub-topic 2: European data strategy

The European data strategy is a comprehensive framework that aims to create a single market for data in the EU. Its objective is to promote the use of data while ensuring data privacy and security.

The strategy includes measures to increase data availability, create common data spaces, and foster data innovation. It also emphasises the importance of ethical data use and the need for a human-centric approach to data. The strategy has implications for the retail sector, as retail companies can benefit from data-driven insights to improve their business operations.

The strategy's impact on the retail sector can be seen in the increased availability of data for retailers to use in making better business decisions, such as optimising supply chain management, improving customer service and tailoring marketing strategies. Additionally, the strategy promotes the use of artificial intelligence (AI) and machine learning technologies in retail, which can help businesses analyse customer data and provide personalised recommendations to customers.

Summary: The European data strategy promotes data use while ensuring privacy and security. It increases data availability, emphasises ethical use, and benefits retail through insights and AI use.

Sub-topic 3: Horizon Europe

This is the research and innovation programme of the EU for the period 2021-2027. It is the successor to Horizon 2020, the previous EU framework programme for research and innovation.

Horizon Europe has a budget of approximately €95.5 billion and aims to support research and innovation activities in Europe to address global challenges, foster industrial competitiveness, and create economic growth and job opportunities. The programme supports a range of research and innovation areas, including health, digital technologies, climate change, and energy.

In the retail sector, Horizon Europe can support research and innovation projects aimed at developing new technologies, products, and services that can improve the retail experience for consumers and make retail operations more efficient and sustainable.

Summary: Horizon Europe is the EU's research and innovation programme, aiming to support projects addressing global challenges and fostering industrial competitiveness.

Sub-topic 4: Other EU policy drivers

The European alliance for industrial data, edge and cloud, the EU Green Deal, and the General Data Protection Regulation are other important EU policy drivers regarding digitalisation. These initiatives focus on enhancing data privacy and security, promoting innovation and addressing environmental concerns, among others.

Overall, the EU policy drivers aim to create a supportive environment for digitalisation in the retail sector, promote innovation and competitiveness while ensuring data privacy and security, and address environmental concerns. Retail companies can benefit from these policies and initiatives to drive their digital transformation and improve their business operations.



The European declaration on digital rights and principles
www.youtube.com/watch?v=cOIKo8TGPYw

Topic 3: Opportunities and challenges of digitalisation in the EU

Sub-topic 1: Customer engagement

The way retailers interact with customers has been transformed by digitalisation, which offers new opportunities for engagement and improved customer experiences. With online platforms and social media, retailers can easily reach customers from all over the world, creating an avenue for international growth. However, there are also challenges such as managing customer expectations and maintaining customer trust when it comes to data privacy and security.

Key points:

Digitalisation provides new opportunities for retailers to reach a wider customer base. Retailers need to manage customer expectations and maintain their trust regarding data privacy and security. Using data analytics and personalisation can enhance the customer experience.

Sub-topic 2: Marketing

Digitalisation provides new channels for retailers to reach their target audience, including email, social media and online advertising. These channels offer a cost-effective way to increase brand awareness and drive sales. However, the downside is the risk of ad fatigue and the need for retailers to stay relevant with their marketing strategies.

Key points:

Digital marketing offers cost-effective ways to increase brand awareness and drive sales. Retailers need to ensure their marketing strategies stay relevant to avoid ad fatigue. The use of data analytics and AI can enhance the effectiveness of marketing strategies.

Sub-topic 3: Supply chain management and sustainability

The disruption of traditional supply chain management practices provides new opportunities for efficiency and cost reduction. The use of advanced technologies such as blockchain can enhance supply chain transparency, traceability and reduce wastage. Digitalisation can also help retailers to achieve sustainability goals by reducing the environmental impact of their operations, including energy consumption and waste management.

Key points:

Digitalisation offers new opportunities for supply chain efficiency and cost reduction. Blockchain technology can enhance supply chain transparency and traceability. Digitalisation can help retailers achieve sustainability goals by reducing their environmental impact.

Summary: Digitalisation offers numerous opportunities for retailers to improve customer engagement, marketing, supply chain management and sustainability. However, there are also challenges such as managing customer expectations, maintaining trust, and staying relevant with marketing strategies. By embracing digitalisation and effectively managing the challenges, retailers can enhance their business operations and remain competitive in the marketplace.



EU data sovereignty: opportunities and challenges

www.youtube.com/watch?v=TtxJaUFx71o

Chapter 2

THE ADDED VALUE OF DIGITALIZATION IN THE RETAIL SECTOR COMPANIES

Introduction, objective, topics

Digitalization has revolutionized industries around the world, and retail is no exception. The integration of digital technologies and processes into retail operations has brought a host of benefits and added value to businesses. From improving the customer experience to increasing operational efficiency, digitalization has become a critical component for success in modern retail.

This transformation has given retailers the ability to use digital tools and platforms to their advantage to reach a wider audience, gain valuable insights, and optimize various aspects of their business. In this article, we will explore the benefits and added value of digitalization in retail and how it has changed the way businesses operate and interact with customers. Digital transformation enables retailers to unlock new opportunities, gain a competitive advantage and manage the ever-changing demands of the digital age.

Objective

The objective of this chapter is to explore the added values that digitalization has brought to companies in the retail sector. We will delve into four key topics that highlight the benefits of digitalization.

Topics

Topic 1: Enhanced Customer Experience (CX)

Topic 1 focuses on how digitalization has improved customer experiences through personalized interactions, convenience, simplicity etc.

Topic 2: Data-Driven Insights

Topic 2 examines how digitalization has empowered retailers to leverage data and gain valuable insights into customer behaviour, market trends, and demand forecasting. Topic highlights the importance of data-driven decision making and the impact it has on improving operational efficiency and meeting customer expectations.

Topic 3: Streamlined Operations and Cost Savings

Topic 3 explores how digitalization has enabled retailers to automate processes, optimize supply chain management, improve order fulfilment, and reduce operational costs.

Topic 4: Innovation and Competitive Advantage

Topic 4 showcases how digitalization has fostered innovation in the retail sector, enabling retailers to differentiate themselves and gain a competitive edge.

Topic 1: Enhanced Customer Experience (CX)

One of the most significant benefits of digitalization in the retail sector is the ability to provide an enhanced customer experience. Digital tools and platforms have revolutionized how customers interact with retailers, offering convenience, personalization, and seamless shopping experiences.

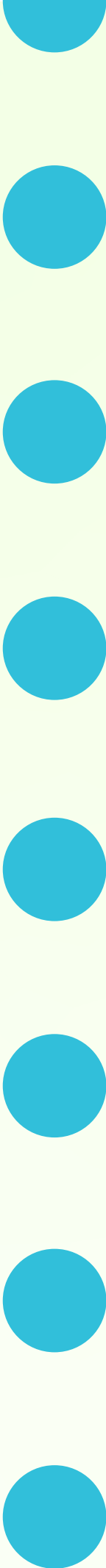
Digitalization has improved customer experiences in following areas:

- Purchase convenience
- Personalization
- Simplicity and ease of use
- Service convenience
- Reachability
- Channel flexibility



Customer Experience

source: <https://www.ttec.com/articles/digital-customer-experience-strategy-six-key-areas-focus-your-efforts>



Purchase convenience: Digitalization has made shopping more convenient than ever before. Customers can browse products, compare prices, and make purchases from the comfort of their homes or on the go. Online platforms and mobile apps have eliminated the limitations of physical store hours and geographical boundaries, allowing customers to shop whenever and wherever they want. This convenience has significantly transformed the retail experience, making it more accessible and accommodating to customers' busy lifestyles.

Personalization: Digital technologies enable retailers to gather and analyse vast amounts of customer data, including browsing history, purchase behaviour, and preferences. This data-driven approach allows companies to offer personalized recommendations, targeted promotions, and tailored shopping experiences. By understanding individual customer needs and preferences, retailers can provide relevant product suggestions, personalized marketing messages, and even customized product configurations. This level of personalization fosters a deeper connection between customers and brands, increasing engagement and loyalty.

Simplicity and ease of use: Digitalization has bridged the gap between online and offline channels, creating seamless omnichannel experiences for customers. Retailers can integrate their physical stores with online platforms, allowing customers to research products online and make purchases in-store, or vice versa. Click-and-collect options, where customers can order online and pick up their purchases in-store, have become popular, offering a blend of convenience and immediacy. Additionally, digital tools such as virtual reality and augmented reality enable customers to visualize products and try them out virtually, enhancing the shopping experience.

Service convenience: Digitalization has transformed customer service in the retail sector. Chatbots and AI-powered virtual assistants provide instant support and answers to customer queries, even outside of traditional business hours. Retailers can also utilize social media platforms and online review systems to address customer concerns, gather feedback, and provide timely responses. This real-time communication and support build trust and satisfaction among customers, ultimately enhancing their overall experience.

Reachability: One of the key benefits of digitalization in the retail sector is the expanded reach it offers to companies, which in turn positively impacts customer experience. Digital tools and platforms have broken down geographical barriers, allowing retailers to connect with customers far beyond their physical store locations.

Channel flexibility: Retailers establish their presence across various channels, including online platforms, mobile apps, and physical stores. This multi-channel presence allows customers to interact with the retailer through their preferred channel. Integration of these channels creates an omnichannel experience, enabling customers to seamlessly transition between online and offline touchpoints. To ensure a unified customer experience, retailers enable cross-channel communication, ensuring that customer information, preferences, and purchase history are accessible across all touchpoints. This facilitates personalized interactions regardless of the channel the customer chooses.

Topic 2: Data-Driven Insights

Digitalization generates vast amounts of data that retailers can leverage for strategic decision-making. By analysing customer behaviour, preferences, and purchasing patterns, companies can gain valuable insights into market trends, demand forecasting, and inventory management. Data-driven insights enable retailers to optimize operations, streamline supply chains, and make informed business decisions.

Synergy of data-driven digitalization and customer experience

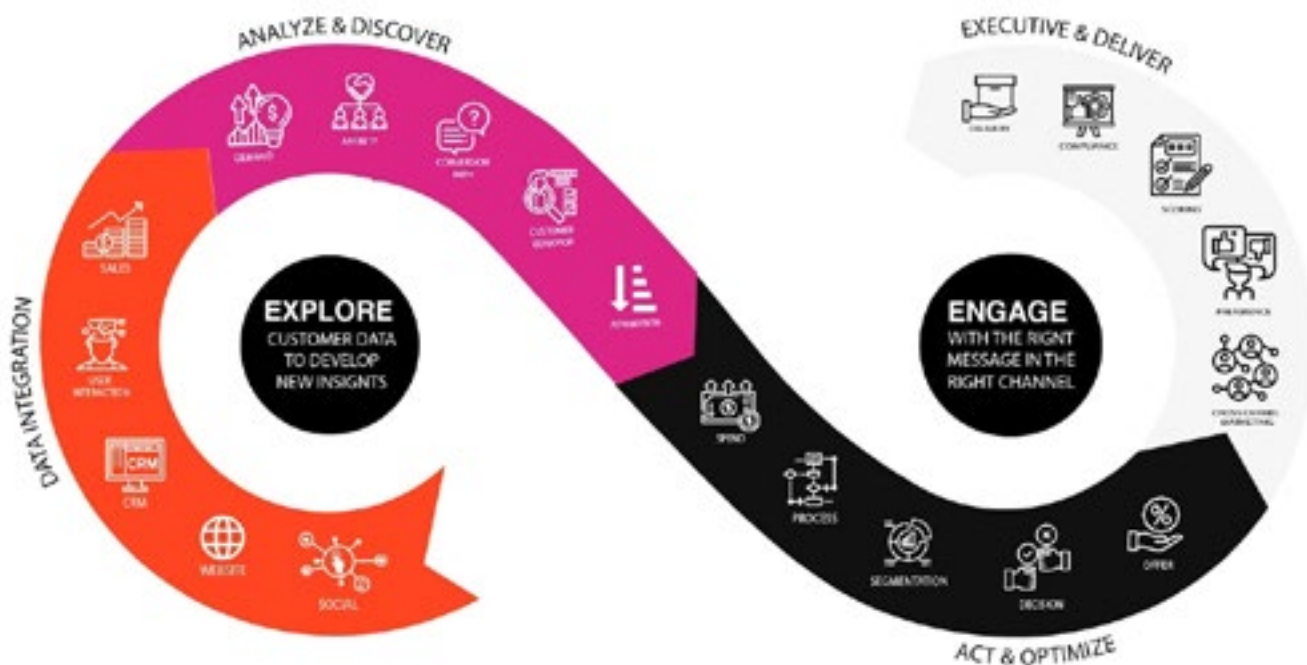
Customer segmentation and personalization are enhanced through data analysis, allowing retailers to segment their customer base based on demographics, behaviour, and preferences. This enables retailers to tailor marketing campaigns and personalized offers to specific customer groups, creating more targeted and relevant experiences. Data-driven customer segmentation and personalization drive customer engagement, loyalty, and ultimately, higher sales. Pricing and competitive analysis are also significantly improved through data-driven insights. By collecting data on competitor pricing, promotions, and market dynamics, retailers can inform their own pricing decisions, remain competitive, maximize profitability, and ensure their pricing aligns with market demands. Data-driven insights enable retailers to monitor pricing trends and optimize pricing strategies effectively.

Better understanding and optimizing physical aspects

Optimizing inventory management and supply chain operations is a crucial aspect of retail, and data-driven insights play a significant role in this domain. By analysing historical sales data, seasonal variations, and customer demand patterns, retailers can forecast product demand accurately. This allows for streamlined inventory levels, reduced carrying costs, and prevention of overstocking or stockouts. Furthermore, data-driven insights facilitate efficient supply chain management, improving logistics and reducing lead times. In the physical retail environment, data-driven insights can enhance store layout and visual merchandising. By analysing customer foot traffic, browsing patterns, and sales data, retailers can optimize store layouts and product placements. This allows retailers to understand customer behaviour, identify popular areas within the store, and strategically position products for maximum visibility and sales. Utilizing data-driven insights creates more engaging and customer-centric in-store experiences.

Future proofing and marketing strategies with data-driven aspects

Data-driven insights also enable retailers to leverage predictive analytics for future planning. By identifying patterns and correlations in historical data, retailers can make accurate predictions about future trends, consumer behaviour, and market opportunities. This empowers retailers to stay ahead of the competition, anticipate customer needs, and develop strategies to capitalize on emerging trends or mitigate potential risks. Data has a profound impact on marketing effectiveness and campaign optimization. Digitalization provides retailers with extensive data on the performance of marketing campaigns, customer engagement, and conversion rates. By analysing this data, retailers can measure the effectiveness of marketing initiatives, identify successful strategies, and optimize campaigns for better results. This leads to more efficient allocation of marketing budgets, targeting the right audience, and refining messaging and promotions to improve customer response rates.



Data driven process

source: <https://smartboost.com/blog/what-is-data-driven-marketing>

Topic 3: Streamlined Operations and Cost Savings

Digital tools and technologies automate various retail processes, leading to improved operational efficiency and cost savings. Automated inventory management, online payment systems, and digital supply chain solutions reduce manual labour, minimize errors, and optimize resource allocation. These streamlined operations result in cost savings and increased profitability.

Automated Processes:

Save time and reduce errors by automating manual tasks.

Inventory management systems automatically update stock levels, trigger reordering, and generate purchase orders.

Streamline operations, minimize human intervention, and increase productivity, resulting in reduced labour costs.

Efficient Supply Chain Management:

Utilize digital technologies to optimize supply chain processes.

Advanced analytics and real-time data improve demand forecasting, inventory planning, and logistics management.

Accurate demand forecasting and optimized inventory levels minimize stockouts, excess inventory, and associated costs.



Supply chain

source: <https://rtintel.com/6-keys-to-improving-supply-chain-efficiency/>

Improved Order Fulfilment:

Digitalization facilitates efficient order fulfilment processes, reducing operational costs.

Implement technologies like barcode scanning, RFID, and automated picking systems. Faster and more accurate order processing reduces errors and minimizes labour costs. Digital platforms and e-commerce solutions streamline order management and ensure seamless integration between online and offline channels.

Enhanced Data Analytics:

Access vast amounts of data and leverage effective data analytics for operational optimization and cost reduction.

Analyse sales, customer behaviour, and operational performance data.

Identify inefficiencies, areas for improvement, and cost-saving opportunities.

Make informed decisions about inventory assortment and pricing strategies based on customer preferences and purchase patterns.

Cloud Computing and Scalability:

Adopt cloud-based solutions for streamlined operations and cost savings.

Efficient data storage, real-time information access, and seamless system integration.

Eliminate the need for extensive on-premises infrastructure, reducing hardware and maintenance costs.

Scale operations rapidly and cost-effectively to meet fluctuating demand.

Optimized Marketing Spend:

Leverage digitalization for precise and measurable marketing capabilities.

Target specific customer segments with personalized messages through digital marketing channels.

Achieve higher conversion rates and reduce marketing costs.

Utilize performance tracking and analytics to measure the effectiveness of marketing campaigns and optimize spending.

Topic 4: Innovation and Competitive Advantage



Innovation and competitive advantage go hand in hand in the digitalization of the retail sector.

Digitalization has provided retailers with a plethora of tools and technologies that foster innovation, enabling them to differentiate themselves from competitors and gain a strong competitive edge in the market.



One area of innovation is product innovation. With digitalization, retailers can create and introduce new products or enhance existing ones to meet evolving customer demands. They can leverage technology to develop innovative features, incorporate sustainability practices, or introduce novel concepts that cater to niche markets. For example, retailers can introduce smart products that are connected to the internet, allowing customers to have enhanced functionality and convenience in their everyday lives.



Personalized customer experiences have become a crucial aspect of innovation in the retail sector. Digitalization allows retailers to collect and analyse vast amounts of customer data, enabling them to personalize interactions, recommendations, and offerings. By utilizing customer insights, retailers can provide tailored shopping experiences, personalized promotions, and targeted marketing campaigns. This level of personalization enhances customer engagement, loyalty, and satisfaction, setting retailers apart from their competitors.



Augmented reality (AR) is another innovative aspect of digitalization in the retail sector. By leveraging AR technology, retailers can provide immersive and interactive experiences for customers. AR can be used to visualize products in real-world environments, allowing customers to virtually try on clothing, visualize furniture in their homes, or see how a new paint colour would look on their walls. Such experiences not only enhance the customer journey but also provide a unique and memorable shopping experience that sets retailers apart from their competitors.



Data-driven decision making is a fundamental aspect of innovation enabled by digitalization. Retailers can collect and analyse data from various sources, such as customer behaviour, market trends, and operational performance. By leveraging advanced analytics and artificial intelligence, retailers can derive valuable insights and make informed decisions about inventory management, pricing strategies, marketing campaigns, and more. Data-driven decision making allows retailers to stay agile, respond to market dynamics, and gain a competitive advantage by making data-backed decisions that drive business growth.



Chapter 3

PRACTICAL TOOLS AND MATERIAL FOR PLANNING AND IMPLEMENTATION OF DIGITALIZATION IN RETAIL SECTOR COMPANIES

Introduction, objective, topics

The availability of practical tools and materials for planning and implementing digitalization in the retail sector is crucial for companies aiming to thrive in today's digital age. Firstly, these tools provide a structured approach to the digital transformation process. They offer frameworks, methodologies, and best practices that guide businesses in assessing their current digital readiness, identifying areas for improvement, and formulating a comprehensive digitalization strategy. Such practical tools help companies understand the specific steps involved in implementing digital initiatives, breaking down the complex process into manageable stages. By following a systematic approach, businesses can minimize risks, allocate resources efficiently, and ensure a smooth transition to a digital-driven operation.

Practical tools and materials for digitalization in the retail sector provide valuable insights and knowledge sharing. They offer industry-specific expertise, case studies, and real-life examples that demonstrate successful digital transformations in similar retail businesses. These resources enable companies to learn from the experiences of others, understand the challenges and opportunities in the digital realm, and adapt proven strategies to their own unique context. This knowledge-sharing aspect helps companies avoid common pitfalls and make informed decisions when it comes to selecting and implementing digital technologies, such as e-commerce platforms, customer relationship management systems, inventory management solutions, and data analytics tools. Having access to practical tools and materials accelerates the learning curve and empowers businesses to leverage digitalization for competitive advantage.

Objective

The main objective of this chapter is to showcase the tools as to the managers or managers of SMEs to have the ability to perform the required verifications of each solution they want to implement to digitize their company.

Topics

TOPIC 1: WEBSITE AND INTERNET PRESENCE

SUB-TOPIC 1.1: HOSTING

Hosting is the English term used to designate a web hosting or web hosting. It is the storage space where you can find the files that make up a website, email, backups ... among others. Nowadays, companies do not need to have a physical server that contains the information of their website. Many companies (called hosting providers) provide space on their servers as a service to their customers, and these can hire the capacity they need for the time they decide without having to make a large investment in physical equipment.

SUB-TOPIC 1.2: WEBSITE DESIGN

A website is a digital document made up of diverse audiovisual content (text, audio, videos...) that can be viewed through web browsers. In the case of a company's website, its most basic function is to offer relevant information about the company to its target audience, such as, for example, a catalog of products or services, contact details or professional experience. For this purpose, it is common to structure a company website using some sections such as, for example:

- *Who are we?*
- *Catalog of products and/or services*
- *Portfolio*
- *Blog/News*
- *Contact us*

These sections can be found in different pages or all of them within the same page (known as One Page or Single Page design).

SUB-TOPIC 1.3: WEB RESPONSIVE

A responsive website is one capable of adapting its content and optimizing its visualization on any device (laptop, cell phone, Tablet, etc) regardless of the size and shape of the screen, browser or operating system. It can also be called multi-device web. To make a website responsive it is necessary that it is developed taking this point into consideration from the beginning of the project.

SUB-TOPIC 1.4: ACCESSIBILITY

Web accessibility means that people with some kind of disability (hearing, visual, cognitive, neurological..., etc.) can use the web in a simple and intuitive way. This also benefits other people, including the elderly who may have more difficulty navigating the site. The design must meet level AA conformance criteria of the WCAG-2.1. The WCAG-2.1 Guidelines are guidelines and criteria intended to help create Web content that is accessible and usable by people with disabilities. These guidelines help content creators, designers and programmers to ensure that their creations can be consumed by people with visual impairments, hearing impairments, learning disabilities, age-related limitations, etc. Three levels of accessibility are defined: A (the most basic), AA and AAA.

SUB-TOPIC 1.5: SELF-MANAGED

A self-manageable website is one in which the owner can easily modify, change, expand or delete content without the need to resort to technical staff or external providers.

Self-managing websites all have a CMS (Content Management System) or Content Management System. A Content Management System (CMS) or Content Management System, is a program developed so that users can administer and manage content of a website in a simple, agile and effective way without the need to have great computer skills. They are part of the structure of the web, but unlike other pages, access to the CMS is password protected so that only authorized persons can make changes to content. There are a multitude of CMS available. Some of them are free and others are not. The main CMS are Wordpress (the most used in the world), Drupal, Blogger, Moodle, Joomla, Magento or Prestashop.

SUB-TOPIC 1.6: BASIC POSITIONING

Positioning of the basic information of the business, contact and company profile in the main sites, business networks or directories of companies and professionals.

SUB-TOPIC 1.7: SEARCH ENGINE OPTIMIZATION (SEO)

SEO refers to the abbreviation of "Search Engine Optimization";, or what is the same in Spanish, optimización en motores de búsqueda. It consists of improving the visibility of a website so that it appears in better search results in an organic way. SEO is divided into two main branches: SEO On Page and SEO Off Page. The purpose of SEO On Page and SEO Off Page is practically the same, to improve positioning, although SEO On Page focuses on the actions that are carried out on the company's website and SEO Off Page focuses on the actions that are carried out outside the company's website.

SUB-TOPIC 1.8: FORMALIZATION OF THE ASSOCIATED DOMAIN

A domain is the Internet equivalent of the physical address of a business. This address (domain) is used to identify the website or the different e-mails of a company.

The domain can be composed of letters and/or numbers followed by a dot and an extension (.com, .es, .org, .com.es, etc...). Therefore the nomenclature of a domain is always the following:

[DOMAINNAME] [EXTENSION].

Each domain is unique, so it is impossible to register a domain that has been previously registered by another person or company.

To register a domain it is necessary to do it through "register" companies.



source:

<https://pyrumas.com/wp-content/uploads/2017/06/web-presence.png>

TOPIC 2: E-COMMERCE

SUB-TOPIC 2.1: PRODUCT BROCHURE/CATALOG

The overall objective of the e-commerce category is the creation of an online store for buying and selling products and/or services using digital means of exchange.

SUB-TOPIC 2.2: PAYMENT METHODS

A key to the success of e-commerce is the ease with which the user can make the transaction. For this reason it is important to have an adequate payment system where the user feels comfortable and can make the payment in the easiest way possible. There are different types of payment methods for e-commerce, each of them has its own requirements and benefits. The most common payment methods are: cash on delivery, bank transfer, direct debit, credit/debit card, bank payment without card (payment gateways of non-bank intermediaries such as PayPal), Bizum, ApplePay, GooglePay, etc.

SUB-TOPIC 2.3: ACCESIBILITY

Web accessibility means that people with some kind of disability (hearing, visual, cognitive, neurological..., etc.) can use the web in a simple and intuitive way. This also benefits other people, including the elderly who may have more difficulties in navigation.

SUB-TOPIC 2.4: SELF-MANAGED

A content management platform should be provided for the company, so that it is autonomous when modifying the content of its web pages, without the need to resort to the support of the supplier company. There are different content management systems: WordPress, Drupal, Blogger, Joomla, HubSpot CMS Hub, Moodle, etc.

SUB-TOPIC 2.5: BASIC POSITIONING

Positioning is a marketing concept based on the positioning by companies of their brands in the collective imagination of consumers. Through this control area, we try to measure the positioning of the basic information of the business, contact and company profile in the main sites, business networks or directories of companies and professionals.

SUB-TOPIC 2.6: SEO SEARCH ENGINE OPTIMIZATION

It consists of improving the visibility of a website so that it appears in better search results in an organic way. That is why this concept is also called natural positioning, organic positioning, search engine positioning, web positioning or, simply and given the relevance of this search engine, Google positioning.

SEO is divided into two main branches: SEO On Page and SEO Off Page.

The functionality and service dealt with in this area of control is the optimization of the presence in search engines by means of:

- *Keyword analysis*
- *Competitor analysis*
- *SEO On-Page, on at least two pages or sections*
- *Content hierarchy indexing*

SUB-TOPIC 2.7: RESPONSIVE DESIGN

The e-commerce solution designed must be adapted to be functional on all types of devices.

SUB-TOPIC 2.8: SHIPPING METHODS

Configuration and integration of digital and physical shipping methods for marketed products.



source: <https://www.nttdatapay.com/blog/wp-content/uploads/2021/03/epay-s-01-1-2-01.jpg>

TOPIC 3: SOCIAL MEDIA MANAGEMENT

SUB-TOPIC 3.1: SOCIAL MEDIA PLAN

The Social Media Plan (or Communication Plan or Social Media Marketing Plan) defines the strategies and actions necessary to achieve the company's objectives in social networks. In addition, it serves to help control the management of social networks taking into account the objectives, budgets, advertising campaigns, comments, among others.

SUB-TOPIC 3.2: REPORT PUBLICATIONS IN SOCIAL NETWORKS

It is a document that collects all the metrics that summarize the performance of your profiles in the period of time you want. This summary must reflect the activity that a certain brand or company has had in the different social networks.

Social Media Plan



source: <https://fernandocebolla.com/wp-content/uploads/2018/11/pasos-plan-social-media-infografia-etapas-social-media-plan.jpg>

TOPIC 4: CUSTOMER MANAGEMENT

SUB-TOPIC 4.1: USERS SUPPLIED

A user in computing is an individual who uses a computer, operating system, service or any system, it is also used to classify different privileges, permissions to which a user or user group has access to interact or run with the computer or with the programs installed on it.

SUB-TOPIC 4.2: SOLUTION ACCESS LOGS

Today, the vast majority of companies rely on systems capable of generating large amounts of data, which are presented in the form of textual traces, technically known as "logs". This is information that is not visible to users but is directly linked to their activity on their computer: web browsing history, open software, but also to the information system, such as security or connectivity.

Log file management allows better management and control of information, making it easier to access and exploit data. It also increases the likelihood of early detection of network threats.

SUB-TOPIC 4.3: PARAMETER SETTING

The concept of parameterization refers to the initial configuration of a system in a specific and predetermined manner, thus providing the ability to adapt to user requirements and influence the behavior of the system, as well as taking into account the security parameters and the necessary user permissions.

SUB-TOPIC 4.4: CUSTOMER MANAGEMENT

The solution must store and allow the consultation of each client's data from its registration as a business opportunity and the simulation of product purchase or service contracting.

SUB-TOPIC 4.5: LEAD MANAGEMENT

A lead is anyone who demonstrates interest in a company's products or services in some way or another. Leads are typically contacted by companies after providing their data in exchange for an offer of value, be it a downloadable, a subscription or a free trial.

The goal of lead management is to optimize the way leads are handled to optimize performance and convert them into customers. In other words, to turn leads into customers. An optimal lead management process takes into account the entire lead lifecycle (from generation to sale):

1. Generation.
2. Filtering.
3. Qualification.
4. Lead Scoring.
5. Distribution of leads to the sales team.
6. Prospecting
7. Lead Nurturing or Marketing Automation
8. Sales

SUB-TOPIC 4.6: OPPORTUNITY MANAGEMENT

First we have to explain or define the difference between opportunity and budget. A budget is when a customer has asked us for a price for a product or a service, this budget may arise from our commercial work or simply because he has requested it without us pushing him to it and opportunity is when the commercial action by his commercial action discovers that a customer or a potential customer may need a product or a service from us even if he has not requested it or simply by our commercial effort we have created the need or concern towards us, that is to say it would be a previous step to the budget or offer.

The opportunity comes to really measure the effectiveness of a commercial, since we can see what number of opportunities have been generated and which of them in the end have become sales.

SUB-TOPIC 4.7: COMMERCIAL ACTIONS OR TASKS

The solution must offer the possibility of creating commercial actions and tasks, both manually and automatically. In addition to managing the relationship with our customers, through a CRM it is possible to manage the work of the sales team. Organizing tasks with CRM allows us to measure what we do, when to do it and optimize all the work. Some examples of the actions that CRM task managers allow us to do could be the generation of tasks in the Calendar for different activities, such as, for example, reviewing prototypes, checking mail, logistic tasks, etc.

SUB-TOPIC 4.8: REPORTING, PLANNING AND COMMERCIAL FOLLOW-UP

The solution must offer tracking solutions through indicators (KPI's), pipeline and others with different levels of aggregation of information depending on the profile of the user of the solution. It must be able to generate reports for tracking and monitoring commercial activity, including efficiency ratios, phase status, pipeline and other measurable attributes (such as products, quotes, etc.), and according to channels, profiles, roles and/or commercial phases. These reports may show, at least, monthly, accumulated and/or comparative data between different business years.

SUB-TOPIC 4.9: ALERTS

Alerts and notifications are among the CRM features that ensure that customer interactions and events, such as meetings, emails, etc., are not missed. Alerts are a brief update on events and occurrences, while notifications are usually a longer message accompanied by context. Some of the most common alerts that can be implemented in a CRM tool are:

- Activity alerts: This alert notifies you about events and tasks classified as upcoming, overdue, and completed.
- Participation alerts: This alert helps you learn about the contact's actions on emails sent to you.
- Mention alerts: This alert informs you when another user mentions your name in a CRM record.
- Inactive alert: This alert informs you when a certain record has not been updated for a specific period of time.
- Lifecycle alert: This alert informs you when a particular record has not advanced to later stages as it is supposed to.

SUB-TOPIC 4.10: DOCUMENT MANAGEMENT

The use of a CRM facilitates the centralization and management of documents. Through CRM, all the company's employees can access information from any type of device, and even without the need to be connected to the Internet. Having a good document management system allows documents to be found more easily and quickly. In addition, the chances of any of the documents getting lost are practically non-existent.

CRM not only allows the management of external documents, but also organizes documents such as invoices, forms or order notes, among others. By using a CRM as a document management system, it is much easier to customize and update documents on the fly.

SUB-TOPIC 4.11: INTEGRATION WITH VARIOUS PLATFORMS

The concept of cross-platform integration allows connecting independently designed applications to work together and share information between them, providing greater functionality and options while using a particular software.

The solution should have integration functionality with other platforms common to it through the availability of APIs (Application Programming Interface) or Web Services for the consolidation of information and data across the enterprise.



source: <https://www.obz.es/contenido/uploads/2022/07/www.obz.es-que-es-un-crm-y-para-que-sirve-todo-lo-que-necesitas-saber-que-es-un-crm.png>

TOPIC 5: BUSINESS INTELLIGENCE

SUB-TOPIC 5.1: USERS SUPPLIED

Business Intelligence (BI) refers to the processes and technologies that help derive meaningful insights and actionable intelligence from data. Business Intelligence tools access an organization's data to present analysis and information in the form of reports, dashboards, charts, graphs, summaries and diagrams.

Analytics platforms offer customized visual tools that incorporate Artificial Intelligence and deliver automated knowledge by changing the role of the end user from "consumer" to "analyst" and "decision maker". This makes access to knowledge and decision making more democratic.

BI and analytics platforms have given great power to the end user to manage data, sources and to create new business rules and levels of information within the business model with the help of artificial intelligence and technologies.

SUB-TOPIC 5.2: SOLUTION ACCESS LOGS

This is information that is not visible to users but is directly linked to their activity on their computer: web browsing history, open software, but also to the information system, such as security or connectivity.

Log file management allows better management and control of information, making it easier to access and exploit data. It also increases the likelihood of early detection of network threats.

SUB-TOPIC 5.3: PARAMETER SETTING

The concept of parameterization refers to the initial configuration of a system in a specific and predetermined manner, thus providing the ability to adapt to user requirements and influence the behavior of the system, as well as taking into account the security parameters and the necessary user permissions.

SUB-TOPIC 5.4: INTEGRATION WITH OTHER DATABASES

Data integration is a process that consists of gathering data from different information sources to obtain a unified and more valuable view of them, so that a company can make better and faster decisions.

Thus, schematically, the integration with other databases from different sources, brings to a company: greater efficiency, data quality, better data management, greater control, greater security, cost reduction and greater knowledge of the information. For example: excel, text or CSV files, XML, Json, Oracle databases, etc.

SUB-TOPIC 5.5: DATA STORAGE

Data storage is the technological process of recording, archiving and storing bits of information containing images, text, video, programs, spreadsheets, among other digital files in multiple formats.

Data storage is used to collect data over time. Once classified in an orderly manner, it is possible to access the information you need immediately and easily. In business, it is used to perform queries that facilitate finding solutions, making decisions and creating strategies.

At the heart of a BI platform is the data warehouse, which hosts the business models. It is an authoritative data source, system of record and connectivity hub that presents business models for reporting, BI and data science.

SUB-TOPIC 5.6: CREATION OF STRUCTURED AND VISUAL DATA DASHBOARDS

A Business Intelligence dashboard is a data visualization tool that displays the current status of metrics and key performance indicators (KPIs) for a company. Dashboards consolidate and sort numbers, metrics and sometimes even performance markers on a single screen. Data visualization with dashboards and interactive visual objects allows for the design, deepen and explore information through objects such as pies, bars, tree and heat maps, geographical maps, etc.

SUB-TOPIC 5.7: DATA EXPORT

The concept of Data Export means moving data from one environment to another. That is, transferring data from one computer program to another. Thus the sending program exports the data and the receiving program imports it. The specific objective of the "Data Export"





source: https://cdns.tblsft.com/sites/default/files/pages/modern_analytics_cycle.png

TOPIC 6: PROCESS-MANAGEMENT

SUB-TOPIC 6.1: USERS SUPPLIED

Process Management is a management discipline composed of methodologies and technologies. Its objective is to improve the performance and optimization of an organization's processes. It is a way of approaching the work, where the continuous improvement of the activities of an organization is pursued through the identification, selection, description, documentation and continuous improvement of processes.

Today there are many digital solutions on the market that specialize in automating workflows in various departments. From human resources to information technology (IT), companies can standardize various processes to improve operational efficiency. With comprehensive flowcharts, owners can visualize data mapping to determine the work and technology flow for each sector.

The types of users that can exist in a Process Management solution include:

1. Administrator
2. Modeler
3. Business User (commercial, purchasing, HR, finance, etc.)

SUB-TOPIC 6.2: SOLUTION ACCESS LOGS

This is information that is not visible to users but is directly linked to their activity on their computer equipment: web browsing history, open software, also with the information system, such as security or connectivity.

SUB-TOPIC 6.3: DIGITIZATION AND/OR AUTOMATION OF PROCESSES AND WORKFLOWS

With the automation of processes and the implementation of new technologies, companies today are already enjoying the benefits of digitized and automated workflows that allow them to gain efficiency, productivity and competitive advantage throughout their organization.

Transitioning from traditional paper-based workflows to digital operations can generate considerable savings and improve your efficiency. Not to mention the positive effect on your environmental strategy.

SUB-TOPIC 6.4: INTEGRATION WITH VARIOUS PLATFORMS

The most widespread way to perform this process of integration and modernization of a company's infrastructure is through cloud technology. All companies are willing to integrate their data in the cloud to get immediate access and an integrated database in one place.

Reasons:

- Enhance and expand the functionality of the system the company uses, providing additional features it may need and allowing it to perform a much wider range of tasks.
- Avoid the manual and repetitive tasks of cross-referencing information between different tools and programs, which slows down productivity and widens the margin of error.
- Improve all aspects of the business: simplify processes, optimize efforts, streamline communication between sectors and customers and automate marketing processes or any other area.

SUB-TOPIC 6.5: UPDATEABLE

In computer science, the concept of software updates means that they are additional pieces of software published by those who produce operating systems, technological platforms, programs, etc., in order to improve them. The updates install improvements in the operation and in the security of the software. Updates also make it possible to: fix bugs. fix vulnerabilities.

SUB-TOPIC 6.6: ESCALABLE

Scalability is a characteristic of a system or application that indicates its ability to continue to perform well under increased or growing workloads. A system that scales well can maintain or even increase its level of performance or efficiency, even as operational demands increase.



source: <https://assets.www.happyfox.com/v2/images/business-process-management.png>

TOPIC 7: CYBERSECURITY

SUB-TOPIC 7.1: DEVICES SUPPLIED

Cybersecurity, also known as information technology security, is the practice of defending electronic systems, networks and information from malicious attacks.

Cybercrime is the illegal exploitation of computer networks and systems, pursuing illicit gains, causing damage, loss or risk by accessing, modifying, deleting or stealing sensitive data. Protecting an entire system requires a layered approach due to the large number of devices, networks and software that make up a system, and includes activities such as monitoring and scanning, hardening and patching systems, blocking attacks and performing risk assessments.

All of these activities and layers must be able to work seamlessly with each other to create unified protection against potential cyberattacks, as well as review for potential vulnerabilities in the system so that they can be addressed before hackers find these weaknesses. The main priority of cybersecurity is to reduce the surface area of an attack and mitigate these as soon as possible, as well as to restore the system if something happens and investigate the problem to prevent it from happening again in the future. It also includes training trainers to minimize human error as much as possible.

SUB-TOPIC 7.2: PRODUCTS SUPPLIED

The implementation of complex cybersecurity solutions to face the most common threats or cyber-attacks that exist today such as: viruses, Trojans, phishing, spyware, data theft, identity theft, among others; require both software and hardware products that act at different levels so that nothing fails when it comes to protecting information.

Among the variety of products and mechanisms used are: antivirus and antispyware, firewalls, private networks to ensure secure access to the network and intrusion prevention systems (IPS) to identify threats, as well as self-management portals for these same solutions.

SUB-TOPIC 7.3: SOLUTION TOOLS

There are several reasons why it is advisable for all companies to have cybersecurity tools in place. Here are a few reasons:

- The volume of data handled by companies has grown at an exponential rate, in some part, driven by the acceleration of digitization in the wake of the pandemic.
- As a result, security in organizations has become a key element, no longer just for the purpose of complying with legal requirements, but also to maintain a good reputation by protecting private and confidential data.

Among the solution's security tools that must be accredited by the solution are the following:

Antimalware

A type of program designed to prevent, detect and remediate malicious software on individual computing devices and IT systems. The terms antivirus and antimalware are often used synonymously as computer viruses are a specific type of malware. Therefore, anti-virus and anti-malware are the same. The main benefit of anti-malware software is to protect personal and confidential data and to keep the user's systems, applications and data protected. More specifically, anti-malware software can protect a user from:

- Malware, phishing and ransomware attacks.
- Automatic downloads that occur when a user visits a malicious web page.
- Advanced Persistent Threats (APTs) that are intended to establish a long-term illicit presence on a network to collect sensitive data or compromise the operability of an organization.
- Exploits that use zero-day vulnerabilities.

Antispyware

Antispyware is a type of software designed to detect and remove malicious or threatening programs on a computer. These programs are called spyware because of their tendency to obtain and send an individual's personal information to a third party without his or her consent. In other words, antispyware detects the presence of a possible spy who wants to intrude on your computer to learn about you and transmit private information to third parties who want to use it to their advantage.

Secure email

Secure email is email that is sent in encrypted form. One of its main characteristics is that it can only be read by people who have a secret key with which to decrypt these emails.

There are many tools or services for sending secure email, in order to avoid commercial risks and protect the information written in these emails. These tools make it possible to send and receive messages using secure end-to-end email encryption. End-to-end encryption means that the email is encrypted all the way from the sender to the recipient.

Safe surfing

The concept of safe surfing is, broadly speaking, the need for any user, company or institution to access the Internet with sufficient guarantees that allow their rights to be respected. Therefore, it not only has to do with training in good browsing habits for users, but also with installation and configuration procedures and rules of use in the case that we are talking about a corporation or institution.

With Safe Browsing, alerts are received about malicious software, risky extensions, phishing or sites identified as potentially unsafe.

Threat Analysis and Detection

Cyber attacks are malicious attempts to access or damage a computer system or network. Cyber attacks can cause you to lose money or result in the theft of personal, financial or medical information. These attacks can affect your reputation and security.

In the event of a cyber attack, every second counts. Losses due to an attack can multiply with each passing minute. That's why early detection is key to minimizing the impact of a cyberattack. EDR tools are a valuable ally when it comes to quickly mitigating a cybersecurity incident.

Threat detection, also known as cyber threat detection, is a proactive approach to identifying previously unknown, or ongoing uncorrected, threats within an organization's network.

EDR tools are comprised of three necessary components:

- Data collection - software components that run on endpoint devices and collect information about running processes, logins and open communication channels.
- Detection - which analyzes regular endpoint activity, detecting anomalies and reporting those that could pose a security incident.
- Data analysis - which aggregates information from different endpoints and provides real-time analysis of security incidents across the corporate network.

SUB-TOPIC 7.4: INITIAL SETUP AND UPGRADES

The specific objective of the "Initial Configuration and Updates" scope of control is to certify the initial configuration given to the Cybersecurity solution adapted to the customer and the latest updates of malware signatures and other data for threat detection.

TOPIC 8: ADVANCED PRESENCE ON THE INTERNET

SUB-TOPIC 8.1: BASIC INTERNET POSITIONING

Positioning of basic business information, contact and company profile in the main sites, business networks or directories of companies and professionals.

Positioning is a marketing concept based on the placement by companies of their brands in the collective imagination of consumers.

SUB-TOPIC 8.2: KEYWORD ANALYSIS

A keyword analysis, or keyword research, is an SEO task that consists of analyzing and investigating what keywords users search for in search engines related to our business so that those users end up reaching our website.

Knowing these words we can:

- Create a content strategy for our website
- Position them in search engines (mainly Google).
- Get traffic to our website.

SUB-TOPIC 8.3: COMPETITIVE ANALYSIS

Competitive analysis is the process that a company puts into practice to know how to act in the competitive environment, which starts by recognizing its competitors to determine what their main objectives, strategies, weaknesses and strengths are.

Once the data has been collected and classified, it is time to analyze it. This step is also called competitive benchmarking. A competitive benchmark is a study that results from the observation and analysis of competitors practices.

SUB-TOPIC 8.4: SEO ON-PAGE

SEO refers to the abbreviation of “Search Engine Optimization”, or what is the same in Spanish, optimización en motores de búsqueda. It consists of improving the visibility of a website so that it appears in better search results in an organic way. That is why this concept is also called natural positioning, organic positioning, search engine positioning, web positioning or, simply and given the relevance of this search engine, positioning in Google. SEO is divided into two main branches: SEO On Page and SEO Off Page. The purpose of SEO On Page and SEO Off Page is practically the same, to improve positioning, although SEO On Page focuses on the actions carried out on the company’s website and SEO Off Page focuses on the actions carried out outside the company’s website.

The solution must offer a minimum of two pages or sections SEO On-Page, optimizing the structure and internal content to improve the natural position of the SME in search engines, as well as the indexation and hierarchization of the content.

SUB-TOPIC 8.5: SEO OFF-PAGE

SEO Off Page focuses on the actions carried out outside the company’s website.

Top Cybersecurity Threats



MALWARE



PHISHING



SPEAR PHISHING



MAN-IN-THE-MIDDLE
ATTACKS



DENIAL OF SERVICE



SQL INJECTION



DNS ATTACK

source: <https://www.stealthlabs.com/wp-content/uploads/2020/12/cybersecurity-best-practices-to-protect-from-cyber-threats.jpg>

Chapter 4

THE REAL-LIFE CASES

CAYPE, Spain

ACTIVITY

Located in Vitoria-Gasteiz, Spain, Caype are distributors of office and school supplies, stationery and fine arts products.

THE CHALLENGE

They consider that due to the volatile and changing world we are in, online sales must be taken into account. But it is there and we believe as a company that we have to bet on it. They already had a website for nine years and at some point they saw that they needed to generate a new one as using the old one it was a patch. They found online sales very difficult as they were much more used to traditional shopping and they consider the physical shopping much more useful for customers thanks to the experience of buying the products at the very moment. Difficulties came when someone needs to transmit any information to the person who is making the web about what it is needed without having a very clear basis of what customer wants, of what is valid today but tomorrow may not be valid anymore. All this has made the connection with the ERP* significantly difficult.

()ERP stands for Enterprise Resource Planning. It is a type of software system that integrates various business processes and functions within an organization into a centralized platform. The main objective of an ERP system is to facilitate the flow of information and streamline operations across different departments, such as finance, human resources, supply chain, manufacturing, and customer relationship management.*

THE SOLUTION

They are aware that they have to invest in SEO, but not as a cold website. They want it to be a website where the client can call by phone, send a whatsapp and be answered by someone professional on the phone. They also intend the two things to coexist: an online sale and an advise service.

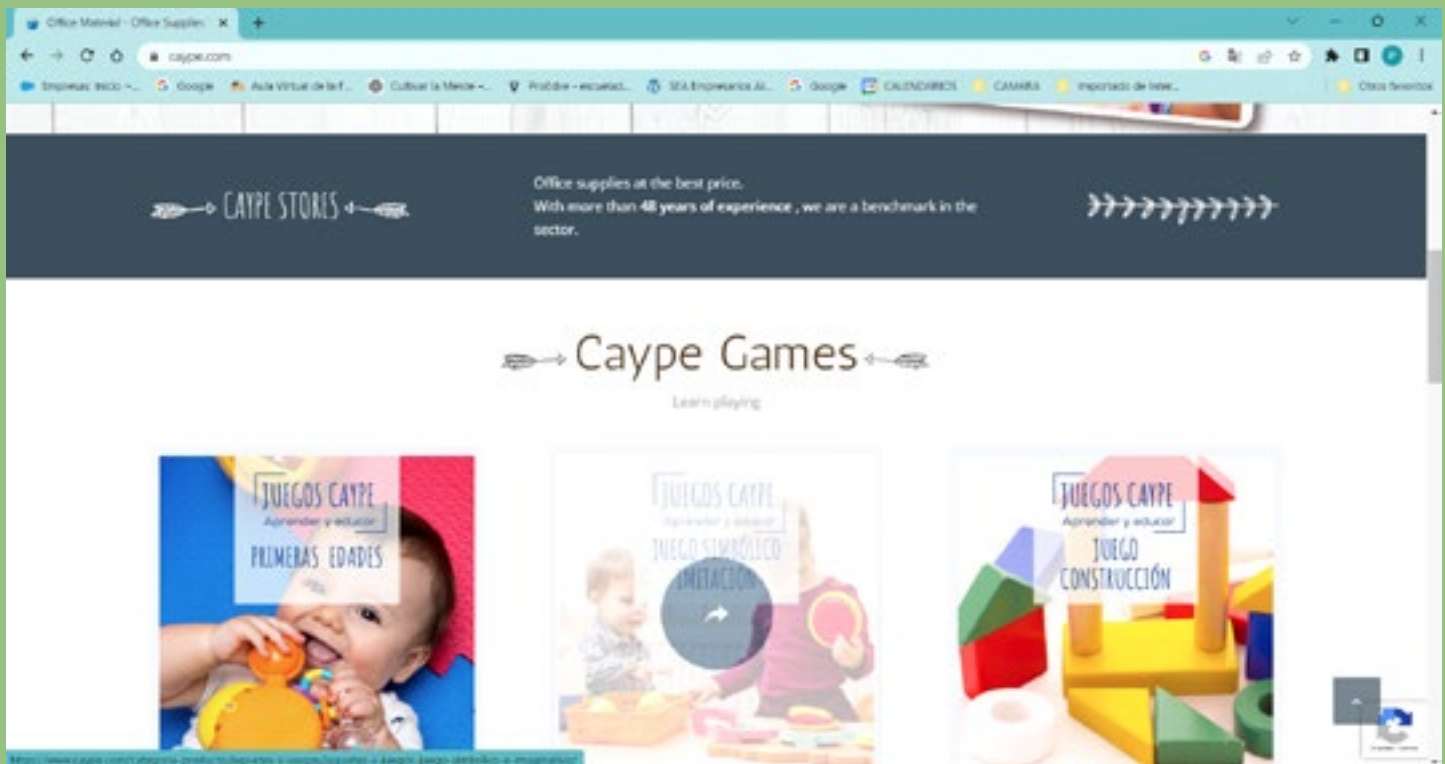
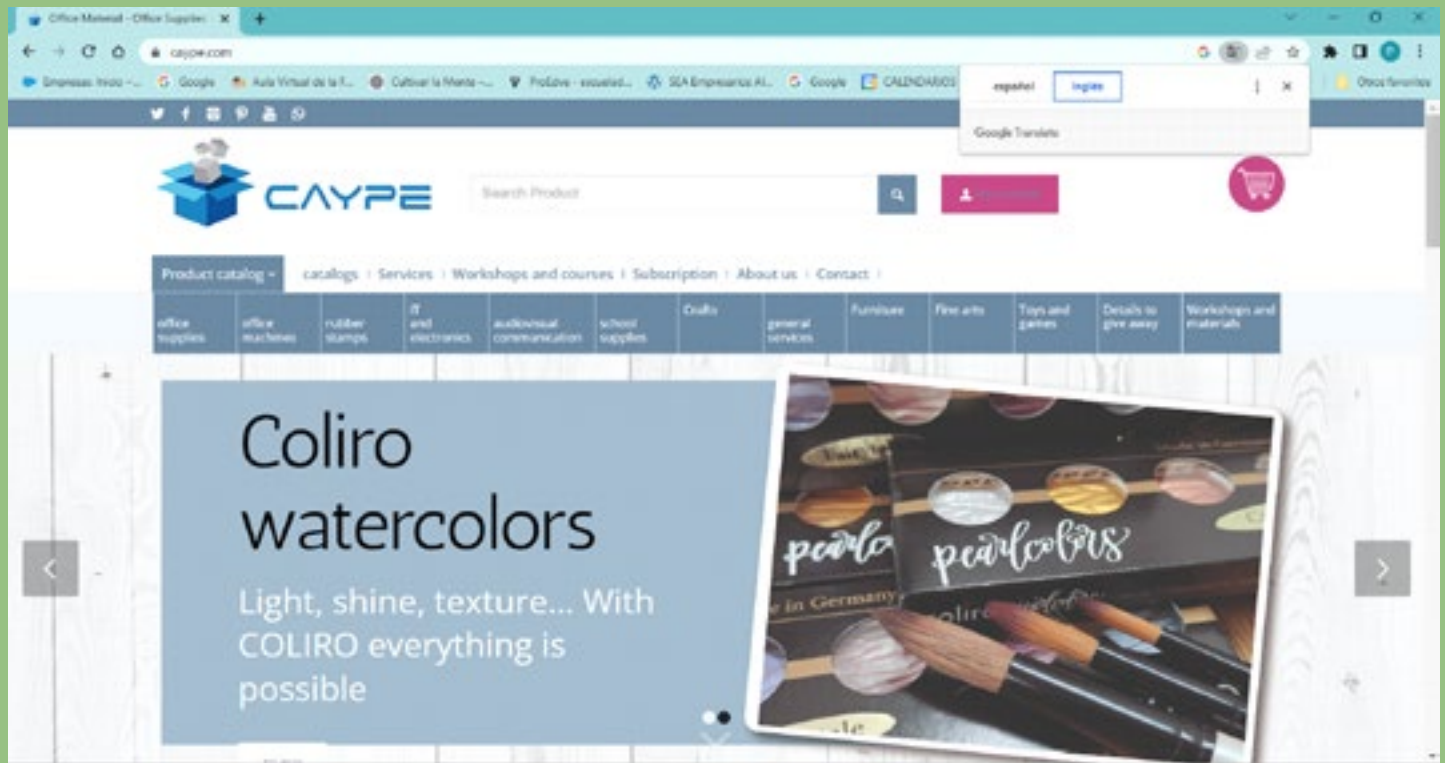
They have intended that their website would integrate directly with the ERP, call their ERP and nobody would have to operate those orders but they would automatically go to the warehouse.

THE BENEFITS

Caype has a section called workshops. When a speaker with lot of presence in social networks is brought, the workshops are full. By making an investment in social networks as instagram and twitter customers benefits increase exponentially. Even if investment is needed, it is worth to expand the business in this way.

THE IMPACT

Thanks to the digitalization the radius of action of the business has been expanded as the web opens all business to the world; it is possible to reach costumers that will be no available otherwise. As online shopping has more reach now than traditional commerce, services are more oriented in this direction.



BASKET COUNTRY, Spain

ACTIVITY

Located in different cities around Spain (Vitoria, Bilbao, San Sebastián, Tenerife, etc.) Basket Country is a company specialized in sports, dedicated to the purchase and sale equipment for basketball (clothing, footwear and accessories).

THE CHALLENGE

The most difficult part was the coordination at the start as they worked with a lot of items. In some of them there may be few products and they run out immediately and we have to restock, and many times. They have very limited units and the stock used to disappear in minutes so they had to move it with a management program that is instantly coordinated with the website.

Not having enough resources was also a hazard for the business. When they started working with a company they were told that the program using the POS* was not appropriate because it was not able to synchronize automatically with the website, so they had to automatized everything in a very rudimentary way at first.

Overall, the money and time investment was at first the real challenge.

() POS stands for Point of Sale. It refers to the physical or digital location where a customer transaction is completed, and the payment is made for goods or services. A Point of Sale system is a combination of hardware and software that facilitates and records these transactions. It is commonly used in retail stores, restaurants, hospitality establishments, and various other businesses that handle direct sales to customers (more info: <https://www.nayax.com/resource/what-is-an-integrated-pos-and-how-does-it-work/>)*

THE SOLUTION

Large money investments were the main solution for the business not to collapse. Thanks to collaborative work with a bigger company and also thanks to public aid they have been able to go ahead with the digitalization.

They have increased the time spent on social networks to continue growing and try to reach 20,000 followers and gain an important community. They are also investing economically to position themselves in Google, Bing and other search engines.



THE BENEFITS

By store throughout a day can pass the hundred people at most and that each publication that makes is in social networks currently there are around 11000 followers. They can get to see 5000 people in a day. This way, Basket Country have realized that it is very positive to be on social networks, to invest and even to make it a part of the advertising of each business.

THE IMPACT

There is an increase in the visibility of the products, especially among young people, who are one of the major target audiences in the sport sector. Thanks to digitalization, it is much easier to process certain orders or requests, as well as to showcase products that may go unnoticed in a physical store. Digital sales have increased the possibilities of this business with respect to what is offered in the physical store.

LA PIMIENTA DORADA, Spain

Located in Bilbao, Spain, La Pimienta Dorada is a bulk grocery store. This small business allows customers to go to the store and have the chance to see and smell the products, share recipes, etc. In short, what would also enter into the concept of slow shopping, which only requires some time to choose purchases, compare products, see and smell them.

THE CHALLENGE

La Pimienta Dorada faced challenges in trying to be aware of environmental care and product waste. The aspect they are looking to improve is undoubtedly the use of food: using the right amount, adjusting the purchase of food to the daily needs or to what is required, and thus not wasting anything.

THE SOLUTION

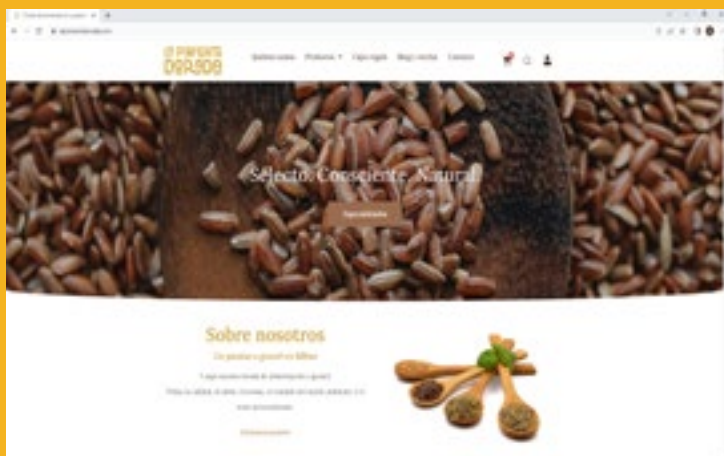
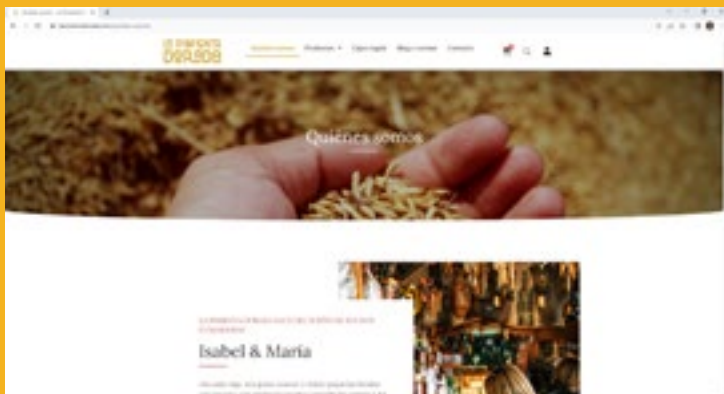
In order to avoid unnecessary waste, the jars that they refill in their store can be brought in so as not to generate waste. In case any bags are required, they can offer paper bags in the store and therefore they will generate as less paper waste as possible. Also, learning to manage the stock and the warehouse, has helped them not to run out of stock. This has been one of the best investments they have made as they have digitalized and automated it.

THE BENEFITS

The presence on the Internet today is vital, it has been essential to their business as many people know about them thanks to the Internet. They also considered SEO positioning as an important tool, together with the website where in addition to providing information to customers about the products and the ingredients also show possible uses for them. In addition, to show the brand, to show how they are, the design of it is essential. Social networks allow them to share product's information, as there may be common doubts among customers.

THE IMPACT

Customers have ways to see products and their properties without having to go to the physical store thanks to social media and the website. Although part of the mysticism of being present when buying products is lost, this way customers can make the purchase from anywhere and, in addition, it avoids wasting the little paper that the company consumes on its way to being a sustainable business.



JULERY JOYEROS, Spain

ACTIVITY

Located in Vitoria-Gasteiz, Spain, Julery Joyeros is a jewelry shop with manufacturing and repair workshop. They give old jewels a second life through restoration, all with the highest ethics and professionalism possible. They can also collaborate in carrying out appraisals as soon and fast as possible.

THE CHALLENGE

Due to being a small shop, they need training all the time, especially when it comes to social networks. As they have mentioned, whether like it or not nowadays to develop a project it is vital to know how to manage them with a certain fluency. Because of that they have had to reset themselves and bring themselves up to date.

THE SOLUTION

Due to the location of the shop, not all customers can access. So, they try to give accurate personal advice to customers using their social networks, trying to respond to all the needs that each customer who wants to approach a jewelry store may have from the moment before a purchase is done.

THE BENEFITS

Thanks to the digitalization of the business, they can offer a service regarded to the transformation of jewelry. Together with all this, it has also become feasible the reconversion of certain products into sustainable jewelry that were not sustainable before. Along with that, in relation to the information given previously, they also offer the purchase and sale of gold to people who are going through a delicate economic moment, making it easier after the full digitalization of the project.

THE IMPACT

It contributes to the lives of all the people who used to have difficulties to come to buy and acquire products because they have to give a gift or celebrate something. Now it is easier for them to be inform about new products and the different services. Digitalization can also help women to have gradually awareness of their value in this market, to take their place as managers, which seems to be basic and fundamental in today's society.



ACTIVITY

Headquartered in Maia, Portugal, SONAE is a multinational business group that operates in numerous sectors, including retail, financial services, shopping centre management, software and information systems, media, and telecommunications, and has a presence in 90 countries. With a total workforce of over 50.000, it is the largest private employer in Portugal.

THE CHALLENGE

The growth of e-commerce demands continuous optimisation to process thousands of orders daily with the level of service and quality that customers are used to. On the other hand, the value proposition of products and services in the retail sector has been diversifying with the offer of a personalised shopping experience and providing different delivery modes.

THE SOLUTION

SONAE had the vision to revolutionise the way people shop online. The company wanted to offer their customers a comprehensive and personalised shopping experience that would set them apart from the competition. To make this dream a reality, it knew it needed to fully embrace digitalisation and innovation. Its first step was to transform its online shop into a marketplace. This allowed SONAE to substantially increase its product offerings in both breadth and depth, giving their customers access to a wider range of options than ever before. But the company did not stop there.

It also recognised the importance of the human aspect of shopping that can only be found in physical stores. So, SONAE worked to provide rich content that complemented their online offerings and created an omnichannel experience that allowed customers to easily shop both online and in-store.

Its focus on international growth was another strategic business lever. The company adjusted its digital sales to consumer trends and offered an even greater variety of articles, sizes, and colours in markets where it had physical stores. SONAE even added complementary items, like childcare articles, to their own range.

To improve the customer experience, the company invested heavily in technology. It introduced in-store self-service options, including price checkers, self-checkout, and a mobile app called "Continente Siga". This app allowed customers to easily identify and consult opportunities and discounts on their favourite products, create shareable shopping lists, and access culinary recipes. It even helped improve the in-store shopping experience.

Thanks to SONAE's unwavering commitment to digitalisation and innovation, this retail company was able to grow sustainably and provide a shopping experience that was both comprehensive and personalised. It set itself apart from the competition and created new business opportunities that propelled its growth.



THE BENEFITS

Digitalisation has brought several benefits to SONAE, which include:

- **Enhanced competitiveness:** by leveraging emerging technologies, SONAE improved its business processes, optimised its operations, and stayed ahead of the competition.
- **Improved customer experience:** digitalisation helped SONAE better understand its customers preferences and behaviours, personalise its offerings, and provide a seamless and convenient shopping experience across channels.
- **Increased efficiency:** by automating and digitising its processes, SONAE streamlined its operations, reduced costs, and increased productivity.
- **Better data-driven decision-making:** digitalisation provided SONAE with real-time insights and analytics, enabling it to make informed decisions and take proactive measures to address emerging trends and issues.

Enhanced innovation: by fostering a culture of innovation and entrepreneurship, SONAE encouraged its employees and customers to experiment with new ideas and technologies, leading to the development of new products and services and the creation of new business opportunities.

THE IMPACT

Artificial intelligence and data analytics, used to personalise SONAE's offerings provide a seamless and convenient shopping experience across channels.

SONAE's implementation of digital solutions optimised its logistics and supply chain operations, improved its inventory management, and reduced company costs.

By embracing digitalisation, SONAE enhanced its competitiveness, meet evolving customer needs, and created new business opportunities.



GATO PRETO, Portugal

ACTIVITY

Formerly known as A Loja do Gato Preto, Gato Preto is a Portuguese retail company and brand for decoration and textiles. It was founded in 1986 in Lisbon by Marina Reis Ramos and Mário Tendeiro. Since 2002, the company has had a presence in Spain and, since 2011, in France.

THE CHALLENGE

The metaverse, an immersive virtual world that is being developed with the help of virtual reality and augmented reality technologies, brings opportunities and challenges to the retail sector and brands.

Specifically, brands like Gato Preto felt the need to:

- Create unique and immersive experiences that engage customers.
- Ensure that they are transparent about their data collection practices and have strong security measures in place to protect user information.
- Maintain consistent brand identity across different virtual platforms and experiences.

THE SOLUTION

With the ambition to become a global player, Gato Preto (<https://gatopreto.com/pt/en/>) implemented a omnichannel strategy, which was recognised by Google and highlighted for its innovative approach to online marketing.

Gato Preto's strategy focused on creating a user-friendly website that was optimised for search engines, as well as a strong presence on social media platforms. The brand also invested in Google AdWords campaigns to increase its visibility and attract new customers. As a result of these efforts, Gato Preto was able to expand its reach and increase its sales both domestically and internationally. More information on Google AdWords can be found here:

https://ads.google.com/intl/en_en/getstarted

Gato Preto was also one of the first Portuguese brands to explore the metaverse, a virtual world where people can interact with each other and with digital objects. By creating a presence in the metaverse, Gato Preto was able to engage with a younger, tech-savvy audience and expand its reach beyond traditional marketing channels.

Thanks to its omnichannel strategy, which focused on creating a strong online presence and exploring new channels of marketing such as the metaverse, Gato Preto is on the fast lane to becoming a global player.

THE BENEFITS

The benefits of Gato Preto's implemented strategy include:

- Increased brand visibility: by investing in Google AdWords campaigns and optimising its website for search engines, Gato Preto was able to increase its visibility online and reach new audiences both domestically and internationally.
- Expanded customer base: Gato Preto's strong presence on social media platforms and in the metaverse allowed the brand to engage with a younger, tech-savvy audience and expand its customer base beyond traditional marketing channels.
- Improved customer experience: creating a user-friendly website and investing in digital marketing campaigns, allowed Gato Preto to improve the overall customer experience and make it easier for customers to discover and purchase its products online.
- Recognition and awards: Gato Preto's omnichannel strategy was recognised as a success story by Google, which highlights the effectiveness of the implemented strategy and the brand's innovative approach to online marketing.

THE IMPACT

The impact of digitalisation on the products and the customers of Gato Preto were felt in different layers. Firstly, digitalisation allowed an enhanced customer experience, by the implementation of the omnichannel strategy. Customers can now seamlessly interact with the brand across multiple channels, including its website, social media platforms, and physical stores, leading to a more personalised and engaging experience.

By adopting this strategy, Gato Preto also increased convenience for customers: customers can shop online and pick up their purchases in-store or have them delivered to their homes.

Digitalisation also allowed the expansion of product offerings beyond what is available in its physical stores and improved inventory management, avoiding stockouts, which led to increased sales and customer satisfaction.



ACTIVITY

The company Elmibit Ltd., in collaboration with project partners including DIH Slovenia, aims to provide the sharing of relevant data on grape production from vineyards with the value chain through the eVine2Wine project. This will ensure top-quality wine and a better customer experience. They are upgrading the existing solution, eVineyard (an intuitive and easy-to-use software solution for vineyard management that helps vine growers produce higher quality grapes in an environmentally friendly manner), by providing traceability throughout the entire production chain, from grapevines to wine.

THE CHALLENGE

Traceability of wine from vineyard to table (following the concept of “from vine to fork”) is one of the aspirations of the wine industry. On one hand, it provides an excellent opportunity for marketing and sales activities for high-quality wines, while on the other hand, it ensures true traceability of the wine production conditions and activities that can significantly impact the safety and quality of the wine. The concept of providing comprehensive data about the vineyard and traceability from vineyard to bottle is currently only used for a very limited number of wines.

Over 80% of wine producers operate in a highly fragmented manner due to the involvement of multiple entities such as grape growers, consultants, winemakers, marketing companies, and distributors. For such a fragmented value chain, data exchange for traceability purposes, which can be used for food safety, marketing, or quality improvement, is considerably more challenging and is rarely implemented in multi-stakeholder environments.

In value chains with multiple stakeholders, trust between the vineyard and the cellar is crucial from several perspectives:

- Food safety
- Providing information about the production area that the cellar can use to optimize wine quality through appropriate processing methods and ensure the quality of the final product - wine.

THE SOLUTION

The goal is to ensure trustworthy and controlled data exchange using a digital twin of vineyard areas through the use of iShare, which provides mechanisms for identity and access control. The project is being implemented across four organizations in three countries: the grape grower (JoJo's Vineyard, Chiltern Hills Farm) will have the autonomy to decide which data from the vineyard management software (eVineyard) they want to share with the supplying winery (Langham Wine), the grape cultivation advisor (Vinescapes), and the marketing company (Digital Stories) that assists them in promoting sustainably produced wine.

Integrations and components of the software solution will enable all stakeholders to access relevant, secure, and voluntarily shared data from the vineyard, whether it be wine consumers, winery staff, advisors, marketing companies, or any other participant in the value chain.



Effective & Trusted
Data Sharing Experiments

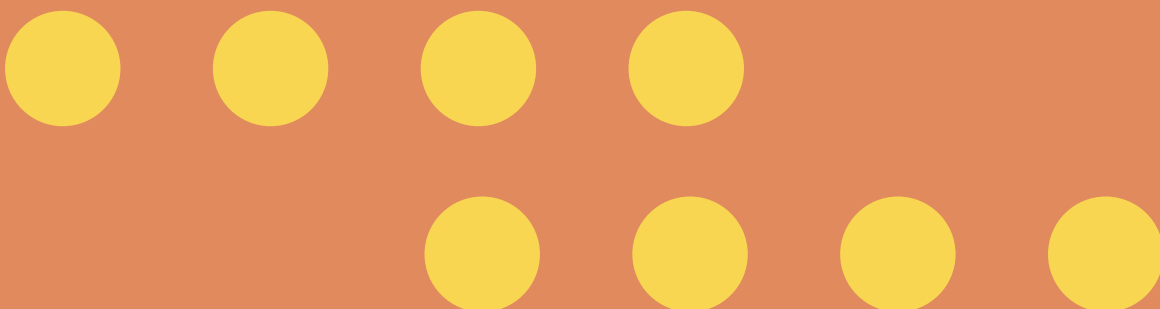
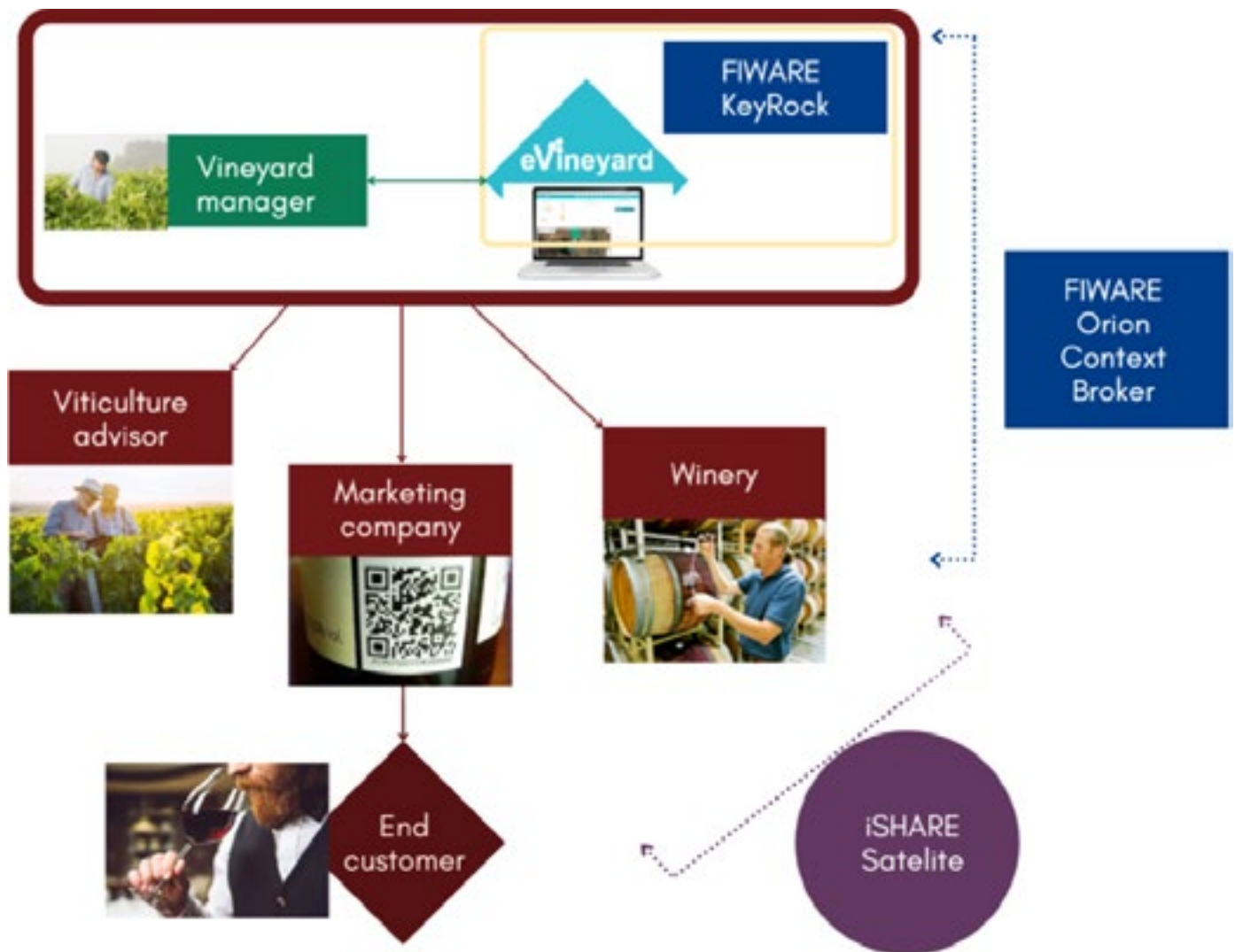
eVine2Wine (eV2W)

Share relevant grape production data from the vineyard with the value chain to provide superior product and customer experience.

THE IMPACT

By developing the eVine2Wine product, eVineyard improved its vineyard management offer and enabled small grape producers, involved in the complex and fragmented value chain with demanding customers, to:

- share relevant vineyard data across their value chain in a secure way.
- provide traceability records to the rest of the value chain players with multiple goals, above all the increased ability to ensure food safety in an easy way.
- build trust between wineries and customers.
- help them enhance the sustainability of the business and increase their customer base.



ACTIVITY

The new Clarus online store, resulting from their digital marketing voucher, is seen by them as an embodiment of contemporary trends, simplicity, clarity, and the ability to make a purchase in just a few clicks. They consider excellent user experience to be the greatest advantage of this innovation they have introduced.

THE CHALLENGE

Clarus stores, renowned for their exceptional quality and unparalleled selection, beckon customers from every corner of Slovenia. These captivating emporiums offer a diverse array of cutting-edge ophthalmic products, catering to the diverse needs and preferences of discerning individuals. With their strategically located branches spanning the country, Clarus ensures that their esteemed clientele can easily access their remarkable assortment of ocular treasures. Whether you find yourself in the bustling city streets or the tranquil countryside, a Clarus store awaits, ready to elevate your optical experience to new heights.

Step into one of their meticulously designed showrooms, where innovation and elegance seamlessly intertwine. Greeted by knowledgeable and friendly staff, you'll be guided through an immersive journey, exploring an expansive range of state-of-the-art eyewear, contact lenses, and vision care solutions.

But it wasn't always this effortless and enchanting. In the digital realm, the former online store seemed trapped in a time warp, lacking the convenience and efficiency modern customers crave. Clunky interfaces and slow processes stood between shoppers and the swift acquisition of their coveted eye-care products.

However, Clarus recognized the need for a transformative change and embarked on a quest to revolutionize the online shopping experience. With their newly launched, cutting-edge e-commerce platform, Clarus has unleashed a wave of convenience, allowing customers to indulge in seamless and rapid online purchases.

THE SOLUTION

The digital solution implemented by Planeta Ltd. in the form of the new Clarus online store represents a significant leap forward in the realm of e-commerce. Recognizing the ever-growing importance of the online landscape, Planeta has harnessed the power of digital marketing to create a platform that not only meets customer expectations but surpasses them.

Solution website:

<https://trgovina.clarus.si/>



THE BENEFITS

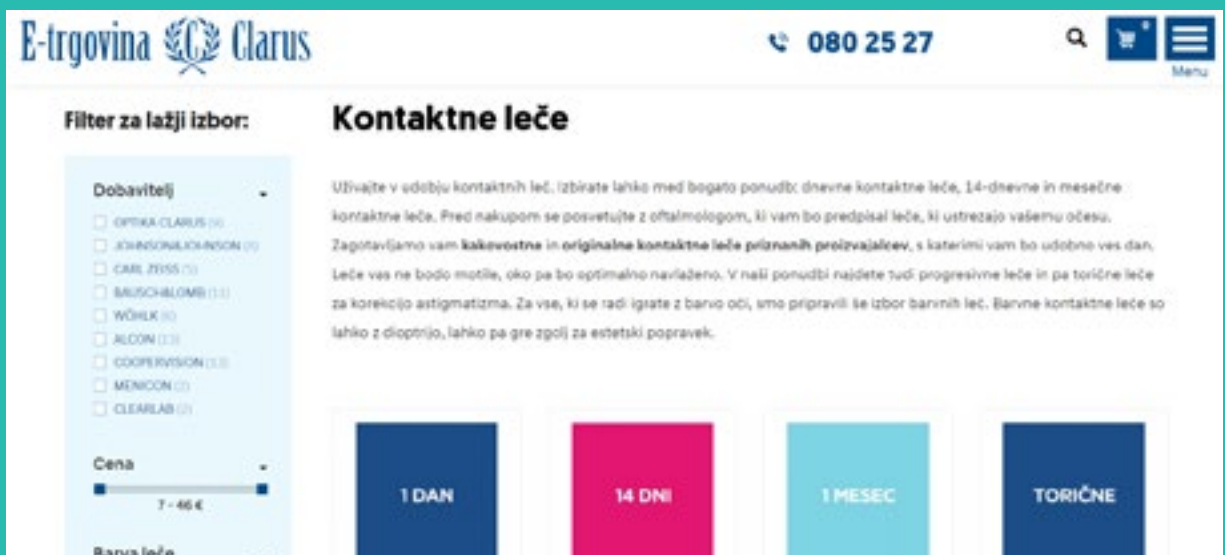
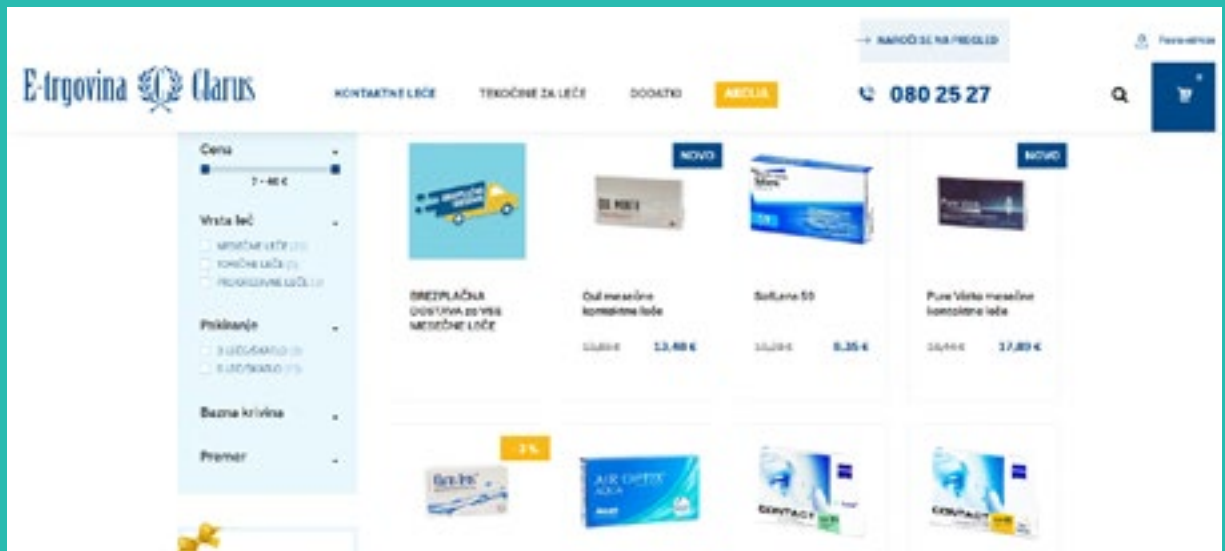
Expanded Product Range the digital platform enables Clarus to offer a significantly broader range of products compared to a physical store. Customers can explore an extensive catalog of eyewear, contact lenses, and vision care solutions, giving them more options to find the perfect fit for their needs.

Cost Efficiency with digitalization reduces the costs associated with maintaining physical stores, such as rent, utilities, and staffing to optimize its operations and allocate resources more efficiently, potentially resulting in cost savings that can be passed on to customers.

THE IMPACT

Modern and Intuitive User Experience where the online store prioritizes user experience, providing a visually appealing, easy-to-navigate interface. The modern design, streamlined browsing, and search features ensure a seamless and enjoyable shopping experience for customers.

Increased Customer Loyalty by providing an exceptional digital experience, Clarus can cultivate customer loyalty and satisfaction. Satisfied customers are more likely to become repeat customers, leading to long-term business growth and success. Simplified Purchasing Process with just a few clicks, customers can add products to their cart, review their selections, and complete their purchase securely and efficiently. The digital platform eliminates the need for lengthy checkout procedures, saving time and effort for customers.



BLOEMENWINKEL, The Netherlands

ACTIVITY

Bloemenwinkel is a charming flower shop located in the heart of Zaandam, Netherlands. With a focus on providing fresh flowers and creating beautiful floral arrangements, they cater to various occasions such as weddings, birthdays, and anniversaries.

THE CHALLENGE

Bloemenwinkel faced challenges in managing their orders efficiently, tracking inventory accurately, and promoting their products effectively. They realized the need for digitalization to streamline their order management, enhance inventory tracking, and expand their marketing efforts.

THE SOLUTION

To overcome these challenges, Bloemenwinkel adopted a point-of-sale (POS) system that integrated inventory management and online ordering capabilities. They developed a website with an online catalog showcasing their floral arrangements and implemented social media marketing strategies to increase their online presence. www.bloemenwinkel.nl/2-alle-boeketten



THE BENEFITS

The digital solutions brought significant benefits to Bloemenwinkel. The integrated POS system improved their order management process, reducing errors and enhancing efficiency. The online catalog on their website enabled customers to explore the available floral arrangements and place orders conveniently. Social media marketing strategies increased the shop's visibility, customer engagement, and brand awareness.

THE IMPACT

Customers benefited from a streamlined ordering process, where they could browse and select floral arrangements online. The digitalization efforts made it easier for customers to place orders for specific occasions and receive timely deliveries. The expanded marketing efforts allowed Bloemenwinkel to reach a wider audience, attracting more customers and generating increased sales.



KLEDINGWINKEL, The Netherlands

ACTIVITY

Kledingwinkel is a medium-sized clothing store located in the bustling city of Rotterdam, Netherlands. They specialize in offering a wide range of fashionable apparel for men, women, and children, catering to various tastes and styles.

THE CHALLENGE

Kledingwinkel faced intense competition from online retailers, and they recognized the need to establish a strong online presence. They aimed to improve their marketing strategies and provide customers with the convenience of online shopping.

THE SOLUTION

To address these challenges, Kledingwinkel established an e-commerce website where customers could browse and purchase clothing items online. They integrated secure payment gateways and implemented a user-friendly interface to enhance the online shopping experience. Additionally, they focused on digital marketing techniques such as search engine optimization (SEO) and social media advertising to increase brand visibility and attract more customers. www.kledingwinkel.nl

THE BENEFITS

The digitalization efforts yielded significant benefits for Kledingwinkel. By establishing an online store, they expanded their reach beyond their physical location and gained access to a larger customer base. The implementation of digital marketing strategies helped them increase brand exposure, drive traffic to their website, and generate higher sales.



THE IMPACT

Customers now had the convenience of shopping for clothing items from Kledingwinkel's online store, allowing them to explore a wide range of products and make purchases at their convenience. The digitalization efforts provided a seamless and user-friendly online shopping experience, leading to improved customer satisfaction. Furthermore, the increased brand visibility and marketing efforts helped Kledingwinkel attract new customers and retain existing ones, ultimately driving business growth.

DE FIETSENWINKEL, The Netherlands

ACTIVITY

De Fietsenwinkel is a well-established local bicycle shop located in Amsterdam, Netherlands. They have been serving the community for over 20 years, offering a wide range of bicycles, accessories, and repair services.

THE CHALLENGE

De Fietsenwinkel faced challenges in managing their inventory effectively and expanding their customer base beyond the local area. They recognized the need for digitalization to streamline their operations, improve inventory management, and reach a broader customer base.

THE SOLUTION

To address these challenges, De Fietsenwinkel implemented an e-commerce platform that allowed customers to browse and purchase bicycles online. They integrated inventory management software, enabling real-time tracking of stock levels, automated reordering, and synchronization between the physical store and the online platform. <https://www.fietsenwinkel.nl/>

THE BENEFITS

The digitalization efforts brought several benefits to De Fietsenwinkel. They experienced increased sales and revenue as the online platform expanded their market reach and attracted customers from beyond their local area. The integrated inventory management system helped optimize stock levels, reduce manual errors, and improve overall operational efficiency.

THE IMPACT

Customers benefited from the convenience of browsing and purchasing bicycles online, with options for home delivery or in-store pickup. The digitalization efforts improved the overall customer experience by offering a seamless online shopping experience and ensuring better stock availability.



Chapter 5

DIGITALIZATION PROCESSES IN THE RETAIL SECTOR. WHEN AND HOW TO START WITH THE DIGITALIZATION PROCESS?

Introduction, objective, topics

The transition from traditional commerce to digital commerce is of big importance in today's rapidly evolving business landscape. Firstly, digital commerce opens up a vast array of opportunities for businesses to reach a global customer base. Unlike traditional commerce, where geographical constraints often limit market reach, digital platforms provide a borderless marketplace. By leveraging the power of the internet and online platforms, businesses can expand their customer base exponentially, tapping into new markets and demographics that were previously inaccessible. This increased accessibility translates into significant growth potential and higher revenue generation for businesses.

Secondly, digital commerce offers unmatched convenience and efficiency to both businesses and customers. With online platforms, customers can browse and purchase products or services from the comfort of their homes, at any time that suits them. Additionally, digital commerce enables businesses to streamline their operations, automate processes, and reduce costs associated with traditional retailing.

The shift from traditional to digital commerce brings immense benefits to businesses. The expanded market reach and increased revenue potential, coupled with the convenience and efficiency of online platforms, create a compelling case for businesses to embrace digital commerce. Embracing this transformation allows businesses to stay competitive in a digital-driven world and capitalize on the ever-growing opportunities presented by the digital marketplace.

Objective

This chapter will guide you through different topics will help you with a self-diagnosis and start with a viable and scalable action plan to convert your business in a digitized one.

Topics

Topic 1: Journey through trade: traditional versus digitized trade (What can we do and priority?)

Topic 1 covers the journey through trade from traditional business to digitized trade by analyzing different areas such as: Identification and visibility, Research and comparison, selection, purchase, retention and loyalty, Logistics and warehousing, finance, Purchasing and supply management, Assortment mix planning and Personnel and organizational structure.

Topic 2: Recommendations to business

Topic 2 gives recommendations to digitalize business regarding strategies, client interfaces and logistic chains.

TOPIC 1: JOURNEY THROUGH TRADE: TRADITIONAL VERSUS DIGITIZED TRADE (WHAT CAN WE DO AND PRIORITY?)

The following subtopics will help you through the transformation from a traditional commerce to the digitized one.

SUB TOPIC 1.1: Identification and visibility

Difficulty level: high.

Priority level: high.

In the traditional commerce the tools used are:

- Advertisements in newspapers, radios,
- Television advertising
- Flyers, mailing, ...
- Search engine positioning
- Some social networking

In the digitized commerce tools are:

- Predictive analysis of social media profiles and customer profiles for targeted marketing
 - Micro-segmentation based on digital marketing
 - Sending notifications to customers' mobile devices to build positioning and relevance
- Think about the current situation of your business and which steps could you implement in order to identify and make your business visible digitally speaking:

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SUB TOPIC 1.2: Research and comparison

Difficulty level: average.

Priority level: average.

In the traditional commerce the tools used are:

- Research conducted by store staff
- In-store signage and displays to attract customers to selected products

In the digitized commerce tools are:

- Digital kiosks in physical stores to enable product searches
- Virtual shelves
- Endless aisles
- Intelligent beacons that detect customers, classify them, profile them and redirect them to or within stores
- In-store navigation
- Wearable technology and virtual shopping assistants

In your path to a digitized business which are the steps to be taken in order to make a re-search about the market and competence:

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SUB TOPIC 1.3: Selection

Difficulty level: high.

Priority level: high.

In the traditional commerce the tools used are:

- Physical testers

In the digitized commerce tools are:

- Virtual mirrors
- Virtual Switchers
- Click and Select options on mobile devices
- Recommendation customization engines
- Product customization (tailor-made)

Think about the current situation of your business and which steps could you implement in order to make a proper selection digitally speaking.

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SUB TOPIC 1.4: Purchase

Difficulty level: low.

Priority level: average.

In the traditional commerce the tools used are:

- Physical points of sale

In the digitized commerce tools are:

- Multi-modal shopping options, click and select, mobile point-of-sale, virtual wallets
- Attractive pricing using precision marketing
- Auto check out (self-service)
- Rooming in (mobile,...)

Think about the ways you could use in order to purchase digitally:

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SUB TOPIC 1.5: Retention and loyalty

Difficulty level: low.

Priority level: average.

In the traditional commerce the tools used are:

- Traditional membership and loyalty card programs

In the digitized commerce tools are:

- Loyalty programs based on block chain technology
- Automated price discounts for loyal customers
- Enhanced bundled product and service packages for loyal customers
- Subscription and auto-replenishment

Think about effective ways to retain and keep customer's loyalty:

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SUB TOPIC 1.6: Logistics and warehousing

Difficulty level: average.

Priority level: low.

In the traditional commerce the tools used are:

- Linear supply chain
- Warehouse management and traditional logistics

In the digitized commerce tools are:

- Digital supply network
- Shared logistics capabilities
- Digitally supported logistics services
- Automated continuous monitoring
- Drone deliveries

List the different ways you could implement to change your business from a traditional business to a digitized one:

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SUB TOPIC 1.7: Finance

Difficulty level: high.

Priority level: average.

In the traditional commerce the tools used are:

- Traditional financial reporting management

In the digitized commerce tools are:

- Using robotic technology to automate financial functions
- Processes supported by IOT

List the different measures you could adopt to change your business from a traditional to a digitized one:

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SUB TOPIC 1.8: Purchasing and supply management

Difficulty level: average.

Priority level: high.

In the traditional commerce the tools used are:

- Traditional customer-supplier relationship

In the digitized commerce tools are:

- Vendor collaboration for success
- Block-chain technology for contract and payment management

Think about the different technological measures you could adopt for purchasing and supply management:

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SUB TOPIC 1.9: Assortment mix planning

Difficulty level: high.

Priority level: average.

In the traditional commerce the tools used are:

- Decisions based on judgment and experience
- Prioritization of ad hoc assortment

In the digitized commerce tools are:

- Assortment planning based on data algorithms
- Adoption of predictive and real-time models for forecasting
- RFID chips to make the supply chain more responsive

Think about assortment plans to bring a business closer to a more digitized model:

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SUB TOPIC 1.10: Personnel and organizational structure

Difficulty level: low.

Priority level: average.

In the traditional commerce the tools used are:

- Traditional ways of managing training and resources
- Historical and isolated work and decisions

In the digitized commerce tools are:

- Simplification of people management processes through automation.
- Digitization of KPIs to measure and incentivize personnel.

Make a list of the most efficient digitalized forms of personnel management and organization of structures:

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TOPIC 2: RECOMMENDATIONS TO BUSINESS

SUB-TOPIC 2.1: Estrategy

Business models

- Increase customer contact/engagement to create value and opportunity to develop long-term relationships.
- Explore the possibilities of creating service propositions around the products

Formats of operations

- Examine the importance of multichannel strategies from an e-commerce point of view.

Segmentation

- Explore opportunities arising from micro-segmentation by leveraging data and analytics engines
- Providing a better customer experience in the physical store by putting digital options in place to help achieve it
- Focusing on customer personalization to quickly meet customer expectations

SUB-TOPIC 2.2: Client interfaces (Front-end)

Customer experience

- Invest in compatible apps, which can be accessed by the customer from any of their mobile devices and not only in the store.
- Ensure seamless customer experience online and offline.

Merchandising and promotion

- Penetrate micro communities such as Facebook groups, Instagram, Hashtags, etc. for real-time contacts and customer interaction.
- Leverage data management (e.g. dark analytics) to gain customer insights and promote targeted promotions based on purchase histories

Loyalty plans

- Utilize existing customer data to reward for loyalty and go beyond being a discount retailer Pricing and point-of-sale solutions
- Use dynamic pricing models for products based on customer profiles, buying habits and feedback.
- Explore ways to improve revenues by enabling linkages with different payment gateways (wallets, cards and digital transfers).

SUB-TOPIC 2.3: Logistic chain (Back-end)

Supply Chain, logistics and warehousing

- Shift from traditional supply chain to digital supply chain (DSN)
- DSD can leverage real-time data resulting in better decisions, more transparency and broader collaboration.
- Exploring big data solutions and associated technologies to enable holistic insights into the location of stock products
- Automate warehouses for maximum efficiency

Assortment mix and planning

- Adopt a demand-driven, customer-centric assortment strategy based on heuristic data analytics.
- In order to have a real-time tabulation of products available (on hand), in transit or scheduled for purchase, the retailer should consider radio frequency (RFID) and IOT technologies.

Supply and supplier management

- Enable strategic sourcing to be more predictive, more automated transactional purchasing and more proactive supplier relationships
- Redefine supplier relationships through data sharing to provide transparency and communicate effectively through social media tools

Support functions

- Analyze the advantages enabled by innovative technologies (RPA, block chain, Big Data, NLP, IOT, etc.) in finance from a broader perspective, to enable exponential benefits of economics, risk and value for stakeholders
- Implement People Analytics, on-demand training and build a sense of community within the organization (buy-in)
- Digitally monitor, track and lead the sales force and channel partners to achieve their metrics and incentivize them appropriately

Annexes

Annex 1 -TRADE DATA

REGISTRATION FORM

Date of
registration

NIF / CIF

Company
name

Commercial
name

Address

Zip/Postal
Code

Location

E-mail address

CONTACT INFORMATION

Name

Email

Telephone

Self phone

BUSINESS ACTIVITY DATA

Trade
epigraphs

No. of workers

Trade activity

Annex 2 - GOOGLE MY BUSINESS

1. BUSINESS PRESENTATION

Include contact information:
Name, Address, Phone number,
Opening hours.

Mention the activity
of the business

Include Product
Catalog

Include Company
Description

2. IMAGES

You have enough published
images of the owner
(min. 4 images)

Images are of
adequate quality

Includes business logo

Includes exterior images

Includes interior images

Includes product images

3. REVIEWS

Number of reviews

Reviews are answered

Rating of reviews out of 5 stars

4. WEBSITE

Includes "Website" button

Annex 3 - FACEBOOK

1. BUSINESS PRESENTATION

Account link	
Number of followers	
The profile picture identifies the business	
Cover photo identifies the business	
The name identifies the business	
Username identifies the business	
Includes contact information	
Includes business opening hours	
Includes a description of the business	

2. CONTENT OF PUBLICATIONS

Frequency of publications	
The content is appropriate and related to your activity	
Displays the product catalog	
Responds to comments	
You have some kind of sale on Facebook	

Annex 4 - INSTAGRAM

1. BUSINESS PRESENTATION

Account link	
Number of followers	
The profile picture identifies the business	
The name identifies the business	
The username identifies the business	
Biography describes the business	
Biography includes contact information	
Includes Featured Stories	

2. CONTENT OF PUBLICATIONS

Frequency of posts	
Content is adequate	
Show the product catalog	
Use hashtags	
Responds to comments	
Has some kind of sale on Instagram	

Annex 5 - ONLINE STORE CHECKLIST

Link to the page

1. HEADER

Top bar: Offers, discounts,
free shipping ...

Number of followers

Cart

Login or Register

Search engine

Logo

Language selection

Main navigation menu

2. HOME

Carousel/Slider

Highlights

Product catalog: Images,
prices, sizes, units...

Newsletter Subscription

Help Chat

3. PRODUCT LISTING PAGES

Categories and Subcat-
egories

Allows you to customize the view: Products by line, by page, product sorting...	
Product filtering (Size/Brand/Price/Color/)	
4. PRODUCT SHEET	
Brand	
Product name	
Model	
Short description	
Detailed description, features / advantages	
Images, Videos	
Eye-catching “Add to Cart” button in high visibility location	
Price visible and emphasized	
Size guide	
Transparency with shipping and return policy	
Indicate special offers, free shipping and other promotions	
Integrated social content (social media sharing buttons)	
Customer reviews (star ratings)	
Cross-selling: complementary products, other people also viewed...	

PHASES OF THE PURCHASE (CHECKOUT) (Important: that this checkout tunnel works well)

(Important: that this checkout tunnel works well)

Step 2: Login / Buy as a guest

Step 3: Address

Step 4: Shipping

Step 5: Payment

Reference to accept the "Conditions of Sale"

FOOTNOTES

Legal texts: Legal Notice, Privacy Policy, Cookies Policy, Terms and Conditions of Purchase...

Contact

Shipping and returns

Payment methods

Other

MISCELLANEOUS (SEO, Technology)

Page Title

Page Meta Description

Images with defined ALT

Clean URL

Optimized for mobile

SSL

Google Analytics

Annex 6 - OBSERVATIONS FOR THE ACTION PLAN

Contact the local Chamber of Commerce or similar and get advice on the following steps.

Project consortium

Chamber of Commerce and industry of Álava - Project coordinator, Vitoria-Gasteiz, Spain

Fondo Formación Euskadi - Partner, Trapagaran, Spain

Chamber of commerce and industry of Slovenia - Partner, Ljubljana, Slovenia

Inthecity Project Development B.V. - Partner, Rotterdam, The Netherlands

Mindshift Talent Advisory lda - Partner, Lisboa, Portugal

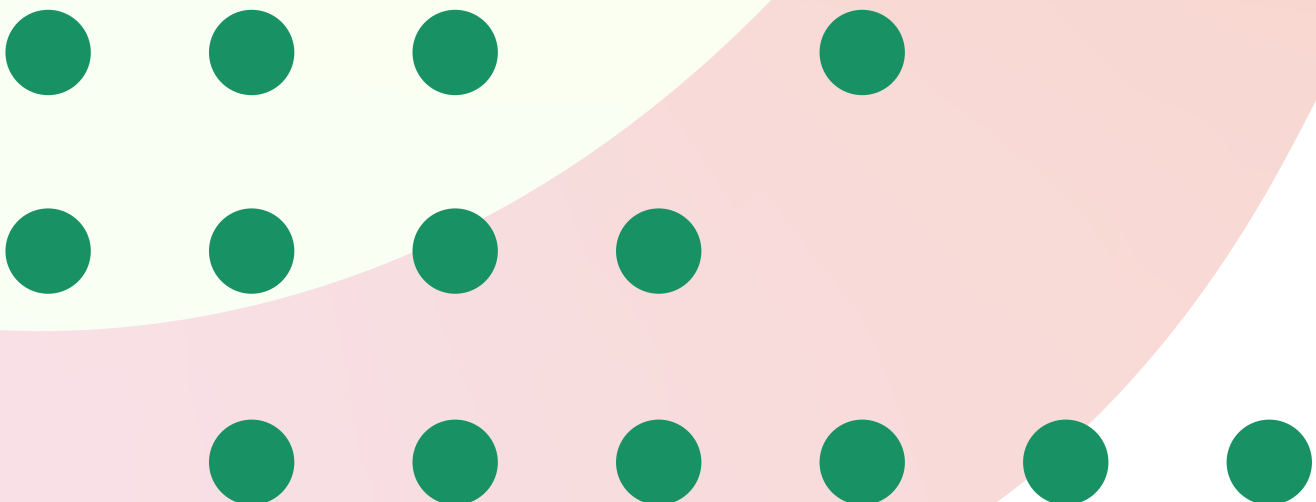
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This publication is a document by the consortium of project 'DIGITAIL- Fostering the Digitalization in the Retail Sector'. It aims to provide evidence-based practical support to the project's result 3: "Handbook - "Digitalization of Retail sector - concepts, methods, practical application"". The project results expressed does not imply scientific, pedagogical, or academic positions of the current consortium. Neither the partners nor any person acting on behalf of the consortium is responsible for the use which might be made of this publication.

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Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA).

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Chapter 3

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Chapter 5

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