

## Summary Tables of Results

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*Table 01. Understanding Aspects of Customer Centric Digital Business Processes*

This table is related to RQ1: What are the main perspectives when working with customer centricity in the context of digital business processes?

| Characteristics  | Definition  | Description  |
|--|---|--|
| Customer Perspective   |   |  |
| Empathy and understanding  | Putting oneself in the customer's shoes to deeply understand their needs, challenges, and how they interact with the company's products or services, especially via digital channels                                | Adopting a customer-centric approach when updating or creating processes in an organization involves understanding how customers will use the service and their preferred channels of engagement.  |
| Holistic journey and touchpoint consideration                          | Mapping out all customer touchpoints including the digital interactions and ensuring a cohesive and positive experience across them   | A customer-centric process involves identifying all customer touchpoints and optimizing the customer experience at each one. The challenge lies in ensuring comprehensive coverage of these touchpoints, as companies often focus unevenly, potentially neglecting important aspects of the customer experience. |
| Seamless and effortless experiences                                    | Ensuring that customers can interact with the company smoothly across various digital channels without unnecessary hurdles  | In a digital process, customers should be able to seamlessly resolve their issues from start to finish without needing alternative communication channels, ensuring the process is intuitively designed to align with their journey.   |
| Company Perspective  |   |  |
| Company wide mindset and culture                                       | Ensuring that customer-centricity is a core theme where every employee, regardless of their role, prioritizes customer needs and experiences  | A company-wide mindset focused on understanding and solving customer problems is crucial for success and should be seen as an integral, business-critical part of the organizational culture.  |
| Empowerment with tools and processes                                   | Equipping teams with the right tools and streamlined digital processes to enable them to serve customers more effectively and efficiently   | The organization prioritizes equipping all teams, from support to sales to customer success, with the necessary tools and processes to enhance efficiency and ultimately provide the best possible experience for customers.   |
| Feedback loops and internal communication                              | Establishing channels including digital ones for continuous feedback and communication within the company to ensure that customer insights and concerns are quickly and effectively communicated across departments | Building a customer-centric business involves establishing internal feedback loops across various teams such as customer service, product, engineering, sales, and marketing to ensure continual improvement and alignment around customer needs as the central focus of their efforts.                          |
| Managing Customer Perspective and Company Perspective                  |   |  |
| Finding the right balance of prioritizing long-term relationships over | Prioritizing long-term customer relationships above immediate financial returns to foster enduring growth and profitability   | Focusing primarily on profit without considering customer needs leads to trade-offs that can harm customer satisfaction and, ultimately, be counterproductive to long-term business success.   |

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| short-term gains                                 |  |   |
| Operationalization of customer insights and data | Systematically collecting customer feedback and insights, especially through digital channels, and using this information to guide the development of products/ services and improvement of digital business processes | The process focuses on gathering insights and data to create a narrative that ensures customer satisfaction with the end result, aligning with the company's goals. |

*Table 02. Understanding Reasons for Striving for Customer Centricity in Digital Business Processes*

This table is related to RQ2: Why do companies strive to improve customer centricity in digital business processes?

| Reasons Originating from External Sources                |   |
|--|---|
| Reason   | Description   |
| Market Dynamics  |   |
| Companies want to adapt to consumer trends/ expectations | Companies are increasingly focusing on understanding global trends and their industry-specific implications to stay competitive. They prioritize adaptability, frequently updating internal processes in response to new trends and simpler methods. The growing significance of digital interfaces necessitates an omnichannel approach to customer engagement, aiming to meet the high standards set by other industries. This includes providing a comprehensive view of the company's operations and maintaining standards in digital services. Additionally, companies are dedicating resources to monitor trends not only to attract new customers but also to retain existing ones, acknowledging that customer retention is both less costly and strategically vital. |
| Pressure from the competitors                            | Customer centricity is important in gaining a competitive edge in the digital marketplace. Brands enhance features like free returns to stand out and appeal to consumers who have numerous choices. However, in monopolistic environments where competition is minimal, companies face less pressure to prioritize customer needs, which can reduce internal motivation to adopt customer-centric practices. This necessitates alternative approaches to cultivate a customer-focused culture within such organizations.   |
| Cooperation opportunities with competitors               | Companies often engage in co-creation projects where competitors double as customers, blurring traditional business boundaries. Such collaborations are exemplified by sharing expertise and resources, including visits between companies to exchange knowledge across various departments such as design and HR. This approach not only fosters mutual learning but also strengthens relationships within the industry, demonstrating that maintaining good ties with competitors can be beneficial and lead to shared growth and learning opportunities.   |
| Regulations  | Government regulations often require businesses to fulfill certain public service obligations. These regulations may dictate that they do not favor a single demographic or overwhelm one client. This approach promotes a balanced and inclusive representation in business practices, aligning with broader societal values.  |
| Technological advancements                               | Technological advancements enable companies to offer personalized services tailored to individual needs, improve operational efficiency, and enhance the overall customer experience. This strategic integration of technology helps businesses better align with   |

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|  | customer expectations and drive revenue, reflecting the significant impact of modern technologies on business operations and customer interaction strategies.  |
| Customer Experience  |  |
| Companies care about how customers perceive overall experience.                              | Businesses prioritize the overall customer experience by focusing on customer well-being, empowerment, and happiness, understanding these elements are crucial for loyalty and satisfaction. Companies strive to make customers feel valued and special, recognizing the importance of this perception for retention. Being customer-centric means tailoring digital processes and products directly to customer feedback and needs, emphasizing that customer priorities must be at the forefront to ensure continued patronage and maintain competitive relevance.   |
| Companies aim for improved customer satisfaction and loyalty.                                | Companies aim for improved customer satisfaction and loyalty by ensuring their services create genuine value. This involves providing excellent, honest customer service that genuinely cares about the guest's experience, thereby fostering strong relationships and making a company the first choice over competitors. Integration of digital practices enhances engagement, leading to higher customer satisfaction, increased conversion rates, and greater customer lifetime value across all stages of the customer lifecycle.   |
| <b>Reasons Originating from Internal Sources</b>   |  |
| <b>Reason</b>  | <b>Description</b>   |
| Strategic Positioning  |  |
| Some companies choose to employ customer-centricity as their core business model or strategy | Companies adopt a customer-centric model as a core business strategy, focusing intensely on meeting customer needs as a primary aspect of their operations. This approach not only aligns company strategies with customer demands but also serves as a strategic differentiator, setting a brand apart from its competitors. The fundamental principle here is that the company's business targets and the customers' needs are aligned, ensuring that business actions directly contribute to fulfilling customer expectations. This alignment is critical for creating a strong, loyal customer base and distinguishing a brand in competitive markets.   |
| Businesses want to achieve brand recognition and reputation                                  | Businesses prioritize brand recognition and reputation to gain competitive advantages. Positive service ratings and customer feedback, particularly shared through digital channels, enhance a company's public image and attract new customers. Achievements like awards for customer-centric practices further validate a company's efforts and direction, boosting its reputation in the industry. Additionally, companies leverage their digital infrastructure not only for operational purposes but also as a tool for publicity, showcasing their technological advancements. For monopolies, maintaining a positive reputation is especially critical, as it influences government decisions regarding their market status and can impact their operational freedom. |
| To boost employee satisfaction   | Employees find meaningfulness and pride in their work when they see that the services and products they deliver successfully meet customer needs and resolve their issues. Positive customer feedback serves as a significant motivator, contributing to a sense of accomplishment and job fulfillment. Conversely, negative feedback can be an energy drainer, highlighting the importance of positive interactions in maintaining a motivated workforce.   |
| Profitability  |  |

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| Companies want the customers to use their products/ services more | Businesses actively gather customer feedback through surveys to identify opportunities for product enhancements, such as reducing the time required for specific transactions, thereby potentially increasing usage. Improvements in digital interfaces, particularly from a user experience (UX) perspective, are driven by the goal of facilitating future sales and onboarding. By making interfaces more intuitive and aesthetically pleasing, businesses aim to mitigate the challenges of negative reviews and simplify the sales process. Overall, the main focus is to attract more customers and increase their engagement with the products and services offered.                             |
| Companies need to generate revenue/ profit                        | Effective strategies for revenue generation include aligning product offerings directly with customer desires and ensuring high-quality customer service. Customer-centric approaches not only enhance user experience but also serve as a competitive advantage, as demonstrated through positive feedback and reviews in public forums like app stores. This feedback often translates into qualitative value, indirectly boosting sales and revenue. Ultimately, businesses understand that to avoid products remaining unsold on shelves, they must closely match what they provide with what customers actually want, thereby closing any gap that might result in lost sales and reduced revenue. |
| To ensure company survival  | Focusing on the customer, solving their problems, and maintaining their loyalty are essential as competitors are always ready to attract customers with superior services. The lack of a customer-centric approach can lead to customer churn, particularly in industries, where newcomers are continuously disrupting traditional models and attracting a younger demographic. Therefore, companies view customer centricity not just as a strategy but as a fundamental necessity tied directly to their business success and long-term viability.  |
| Operational Excellence  |   |
| Companies aim to reduce operational costs                         | Companies aim to reduce operational costs through various strategies, focusing on internal process efficiencies and prioritizing customer retention, which is typically cheaper than acquiring new customers. Despite acknowledging the costs associated with implementing new technologies, the overarching goal is to balance spending while maintaining high quality and delivering maximum value to customers. Cost-effectiveness is crucial, especially in business environments characterized by thin profit margins.   |
| Need to optimize resources  | Companies are focusing on optimizing resources to enhance operational efficiency and customer satisfaction. By developing self-service options and automating customer service functions, they reduce the need for large customer service teams, thereby lowering costs and improving response times. Implementing user-friendly interfaces and streamlined internal processes also reduces the workload on support teams, allowing for more effective service. However, aligning company culture with these efficiency-driven changes can be challenging, especially when key personnel are indispensable but do not fit the new operational philosophy.   |

*Table 03. Understanding How Companies Approach Customer Centricity in Digital Business Processes*

This table is related to RQ3: How do companies approach to make the digital business processes customer-centric?

| How companies approach  | Description  |
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| <b>In Identification stage</b>                                    |  |
| Making efforts for customer experience research and development   | Companies invest in UX teams to monitor and analyze customer interactions with digital platforms, ensuring that the design and functionality meet user expectations. This involves constant feedback collection through user insights, interface adjustments, and extensive market research to keep pace with evolving customer preferences. Regular surveys across various customer touchpoints help identify areas of struggle and satisfaction, providing a foundation for continual improvements. Additionally, understanding customer types and segments enables more targeted and effective enhancements, leading to increased value for both the customers and the company.   |
| Analyzing market trends and competitor offerings                  | Companies are actively engaging in comprehensive market research, including macro trends and industry-specific developments, to stay competitive and innovate effectively. This research extends beyond local insights, encompassing global trends and strategies employed by companies in various sectors around the world. There is a focused effort on competitor tracking and benchmarking, not just within their own industry but across different sectors, to gather diverse solutions and ideas. This broad scope of analysis helps companies adapt to evolving market conditions and innovate solutions that may originate from outside their immediate industry.  |
| <b>In Action stage</b>  |  |
| Developing a general understanding of customer needs/ pain points | Companies are committed to gaining insights directly from customers through various methods such as customer support interactions, in-depth interviews, and continuous engagement with customer data. This allows businesses to identify the primary issues and challenges faced by customers, informing the development of solutions that are genuinely needed rather than based on assumptions. By making customer feedback accessible to teams beyond the front line, companies foster a unified understanding of customer issues across all levels of the organization. This ensures that every solution is customer-centric, addressing real problems, which is fundamental to successful product development and service delivery. |
| Directly engaging with customers                                  | Companies utilize various methods to ensure direct engagement is effective, including conducting in-depth, face-to-face interviews, participating in customer service interactions, and accommodating customer requests for in-person meetings to demonstrate products. These practices allow businesses to collect valuable insights directly from their customers, facilitating a better understanding of their perspectives and enhancing the ability to address their specific needs and preferences effectively. This hands-on approach allows a close connection with customers, facilitating tailoring services and products to meet real-world demands.  |
| <b>In Decision stage</b>  |  |
| Making data-driven decisions                                      | A data-driven approach involves making decisions based on quantitative and qualitative data collected through various methods. Businesses adopting this approach enhance customer-centricity in their digital processes by employing customer research, conducting surveys, and directly engaging with feedback mechanisms. This enables them to identify specific customer needs and preferences, such as product demands or preferred digital integrations. Using actual data ensures that development efforts align closely with what   |

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|                                | customers truly want, avoiding assumptions. Such insights also facilitate better technology integration, allowing companies to consolidate data across platforms for more effective decision-making. Overall, a data-driven approach helps businesses balance product appeal, feasibility, and strategic considerations, ensuring developments meet real customer needs.   |
| Making strategic decisions     | A strategic approach involves deliberate planning and decision-making aimed at aligning business practices with long-term goals, often using structured processes and continuous evaluation. This includes process mapping to assess benefits from both customer and company perspectives, such as identifying cost reductions and potential automations. Integrating customer feedback from the start ensures that strategies align with business unit activities. Regular reviews with technology partners are essential, requiring frequent assessments to verify that software and partnerships meet business needs. Businesses also consider a wide range of metrics—such as revenue impacts, technical costs, and competitive dynamics—to prioritize actions, whether for long-term goals or quick fixes.  |
| Making operational decisions   | An operational approach refers to the methods and practices businesses implement to manage daily activities efficiently while ensuring alignment with broader strategic goals, particularly in enhancing customer centricity. Key points from the statements about this approach include maintaining dedicated teams, such as external software developers, who can be contacted for immediate troubleshooting, thus ensuring continuous operational support like a 24-hour help desk. Businesses also demonstrate flexibility in their processes, as shown by the willingness to overhaul a problematic procedure to better meet customer needs in Brazil. Moreover, decision-making within operational teams often involves rapid adjustments, where involving relevant stakeholders and understanding customer pains are crucial for effective implementation. This approach ensures that operations are agile and responsive, directly addressing customer issues and needs as they arise. |
| Making centralized decisions   | A centralized approach to decision-making consolidates authority and control within a higher tier of management or specific committees, ensuring decisions align with overall organizational strategies and regulatory compliance. Often, directives come top-down, where senior leadership initiates changes that need immediate implementation. For more operational changes, approval typically flows through a hierarchical chain from operations managers up to chief officers. In more regulated environments, introducing new technologies involves a formal review by specialized committees consisting of a combination of experts to ensure compliance with relevant laws.   |
| Making decentralized decisions | A decentralized approach to decision-making distributes authority and decision-making power across various levels and functions within an organization, enabling more localized or team-specific responses to challenges and opportunities. Cross-functional teams collaborate to test hypotheses and evaluate the total customer experience before implementing changes. Development-related committees assess resources and plan capacities for smaller projects, ensuring that initiatives align with overall capabilities. In some cases, autonomous teams comprising relevant experts are formed to address specific customer issues, making decisions about the tools and strategies they use. Furthermore, this approach empowers individual product owners or teams by making customer data widely accessible, allowing them to directly address customer pain points in their specific regions or functions. This approach enhances agility and responsiveness.                       |
| Making reactive decisions      | A reactive approach to decision-making involves responding to issues, feedback, or requirements as they arise. Companies address recurring trends or immediate technical issues by adjusting processes based on specific customer or operator feedback. Teams may modify an existing process to enhance customer-centricity or implement a feature only when a clear need is communicated by users. Changes, particularly in customized products, tend to be implemented during initial setups or when explicitly requested by long-term users, rather than  |

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|                            | spontaneously during the product lifecycle. This approach ensures that adjustments are made effectively, maintaining stability and continuity for users accustomed to existing setups.  |
| Making proactive decisions | A proactive approach to decision-making anticipates customer needs and initiates improvements ahead of issues, involving strategic planning and foresight. This starts with understanding customer needs and pain points, creating customer journeys to identify service gaps, and prioritizing improvements based on potential impact and value. Decisions about adopting new technologies involve considerations of scalability, integration, and cost-effectiveness. Following a thorough evaluation, companies decide whether to buy or build the technology, develop a minimum viable product (MVP), and scale it to enhance customer-centric operations effectively. This approach ensures that businesses not only meet current customer demands but are also well-prepared for future challenges. |

*Table 04. Understanding Principles of Customer Centric Digital Business Processes*

This table is related to RQ4: What are the principles for customer centric digital business processes?

| Principle   | Link to customer centric perspectives  | Key Insights   | Description   |
|---|--|--|---|
| Principles Improving Data-Driven Customer Interaction |  |  |   |
| Automated data collection                             | Supports the 'operationalization of customer insights and data' of customer centricity, a key characteristic of managing both the 'customer view' and 'company view' | <ul style="list-style-type: none"> <li>• There is a notable customers' shift toward digital engagement.</li> <li>• Initial data gathering is valuable to provide a tailored service</li> <li>• Data collected through automated processes can be used to validate a product's value proposition</li> </ul> | Digital channels are used as primary touchpoints for gathering customer information, with an extensive majority of customer interactions occurring online. Companies employ automation where possible to streamline the process and ensure efficiency. Specific methods include digital questionnaires to ascertain customer preferences and interests, where such data helps tailor services to individual needs. Furthermore, a customer-centric digital process involves capturing data at strategic points in the customer lifecycle to validate and refine product offerings. This approach underscores the importance of integrating customer data collection into the digital workflow to enhance service personalization and product development. |
| Prototype/ product testing                            | Aligns with the 'customer view' of customer centricity, under the characteristic of 'empathy and understanding'  | <ul style="list-style-type: none"> <li>• Customers are actively involved in validating and refining products or services before they reach the market.</li> <li>• This principle ensures that the end product aligns closely with</li> </ul>   | Prototype and product testing in customer-centric design processes includes not only analyzing data but also directly engaging with customers through interviews, advisory boards, and voice of customer programs to gauge the acceptance of new digital initiatives. UX tests, such as A/B split testing and virtual experiments, are conducted before the development phase to validate the design's value. Companies also validate prototypes by   |



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|   |   | customer expectations and needs.  | integrating customer feedback early in the design process, using both automated touchpoints and traditional methods like interviews. This principle ensures that products are well-aligned with customer expectations before they reach the market.   |
| Feedback & review retrieval/<br>customer engagement | Fits most appropriately under 'operationalization of customer insights and data' in combined management of the 'customer view' and 'company view' | <ul style="list-style-type: none"> <li>Businesses understand customer experiences, preferences, and pain points, enabling them to refine products / services continuously.</li> <li>This principle is not only about collecting data but also creating a dialogue with customers, showing that their opinions are valued and acted upon.</li> </ul> | Having a structured system to categorize customer interactions by product features, allowing businesses to pinpoint specific areas for improvement is important. Companies maintain robust systems that attribute customer support contacts to respective product teams, which then analyze the feedback to understand and resolve issues. Having a feedback and review system enables customers to easily share their experiences. This feedback is aggregated and utilized by businesses to continuously refine and enhance their offerings, ensuring that product development and customer service strategies are directly informed by user input, leading to better customer experiences. |
| Principles Empowering Customer Independence         |   |   |   |
| Availability of mobile apps/<br>digital accounts    | Categorized under the characteristic of 'empowerment with tools and processes' of 'company view'  | <ul style="list-style-type: none"> <li>This principle refers to a strategic implementation of technological tools that create a channel for employees to serve and interact with the customers more effectively and efficiently.</li> <li>This can also be a niche approach to customer service.</li> </ul>   | Mobile apps and digital accounts have diverse applications across various industries to enhance user engagement and streamline customer interactions. For example, mobile apps facilitate content access across multiple devices, requiring users to create accounts for full access. Also apps and digital accounts are tailored for activities such as aftersales support, tracing usage and managing digital contracts. This multifunctionality in mobile apps and digital accounts plays their role in providing crucial, real-time information and services that cater to specific user needs.   |
| Self Sufficiency in E-business/<br>Online Ordering  | Falls within the 'seamless and effortless experiences' characteristic of the 'customer view'  | <ul style="list-style-type: none"> <li>This principle means ensuring that digital platforms are accessible, intuitive, and responsive to the varied needs of a diverse customer base</li> <li>There is a clear push towards digital sales from customers' side.</li> </ul>  | Self-sufficiency in e-business and online ordering provides seamless, fully-integrated digital platforms that allow customers to complete transactions independently without needing to switch channels. This includes enhancing digital sales through web shops, sometimes incentivizing customers with special discounts to promote online purchases. Additionally, some services facilitate entirely online operations, allowing users to apply for, receive the services to manage a business without any physical interactions.  |
| Ability to tailor products or                       | Fits best with the 'customer view',   | <ul style="list-style-type: none"> <li>This principle improves the value</li> </ul>   | Some companies provide tools enables users to integrate various existing products into a  |

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| services directly through their digital accounts | under the characteristic of ‘holistic journey and touchpoint consideration’ | of the product offering in the eyes of the customer | comprehensive solution, facilitating the creation of customized projects using a company’s offerings. Similarly, companies offer extensive customization options, allowing business partners to modify standard products or develop entirely unique formulations through digital interfaces. This principle empowers customers to directly influence product development and customization, ensuring that the final offerings align with their unique needs and preferences. |
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#### Principles Fostering Customer Awareness

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| Content marketing efforts | Falls within the ‘feedback loops and internal communication’ characteristic of ‘company view’ | <ul style="list-style-type: none"> <li>• Emphasis is on the use of different media to inform and educate customers</li> <li>• This principle also refers to communicating background information to help customers make informed decisions.</li> <li>• Clarity in product communication is important</li> </ul> | Companies utilize webinars, newsletters, targeted offers, educational materials, and advice services to delve into specific topics, offering a platform for interaction and queries. Additionally, newsletters are used to send targeted news and updates to subscribers. On websites, the focus is on presenting relevant information that helps potential customers understand options aiding them in finding the best opportunities even when the focus would not necessarily be on direct purchases or service orders. For product-specific digital platforms, content is designed to quickly impart clear and focused information on what the product offers and its limitations, enabling customers to make swift and informed purchase decisions. |
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| Frictionless customer onboarding/ training | Categorized under the characteristic of ‘empowerment with tools and processes’ of ‘company view’ | <ul style="list-style-type: none"> <li>• Making use of technology to automate and simplify initial steps for immediate access and use is important.</li> <li>• The value of guided, structured onboarding experiences that help customers achieve early success and familiarity with the product is recognized.</li> </ul> | Automation plays a crucial role in speeding up processes such as ID verification, allowing customers to onboard in seconds—a significant improvement over manual checks that could take minutes or hours. This enhances the overall product experience by making it faster and more efficient. Additionally, structured trial periods are designed to quickly demonstrate value to new users; for example, guiding them to add their first deal or client soon after signing up increases the likelihood of their continued engagement and success with the service. However, there is also a recognition that excessive automation can make the onboarding experience feel impersonal. |
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#### Principles Enhancing Customer Loyalty and Retention

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| Availability of loyalty programs | Supports the ‘operationalization of customer insights and data’ of | <ul style="list-style-type: none"> <li>• Digital platforms are used to facilitate loyalty programs and offering tiered rewards to recognize</li> </ul> | Companies often structure their loyalty programs with multiple tiers, where customers can earn points with each transaction that qualify them for greater rewards. This tiered system is designed to recognize and incentivize |
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|   | customer centricity, a key characteristic of holistic management of the 'customer view' and 'company view'. | different levels of customer engagement is significant.<br>● Offers are designed and customized only for loyal customers.   | ongoing customer loyalty. Additionally, large-scale implementations like membership programs utilize points to offer exclusive products and special deals to members, adding significant value to the customer relationship. Furthermore, the integration of loyalty programs within mobile apps, allowing them to function as digital loyalty cards, simplifies access to these benefits, enhancing user experience and encouraging frequent use. |
| Availability of digital customer service/ Support | Classified within the 'company view', under the 'empowerment with tools and processes'                      | <ul style="list-style-type: none"> <li>● The scale of digital customer service processes is noteworthy.</li> <li>● This principle can enhance the quality and accessibility of customer service, improving customer satisfaction and engagement.</li> </ul> | Businesses utilize various tools such as ticketing systems and online contact forms to manage and respond to customer inquiries systematically. These systems are crucial for managing large volumes of support requests. Additionally, the design of digital platforms includes a focus on the ease of access to these support resources, ensuring that customers can quickly and conveniently reach out for assistance whenever needed.          |

*Table 05. Understanding Customer Centric Functional Features of Digital Business Processes*

This table is related to RQ5: What features in digital business processes make them customer centric?

| Feature                        | Definition  | Description  |
|--------------------------------|---|--|
| To Enhance the User Experience |   |  |
| Personalized recommendations   | Tailored suggestions provided to users based on their previous behaviours, preferences, and data.                               | Personalization is achieved through various methods such as displaying updates, suggestions, and content that are relevant to specific user behaviours and interests. Businesses use algorithms to analyze behavioural histories and subsequent product interactions to offer hyper-personalized content and recommendations. In the B2B sector, personalization involves understanding specific business needs and refining product displays and recommendations based on detailed customer profiles and preferences. Simple personalized touches, like greeting users by name upon portal login, also contribute to making the digital experience feel more tailored and customer-centric. |
| Add-ons/ upgrades              | Allow customers to enhance or customize their user experience by purchasing additional functionalities or higher service tiers. | Businesses strategically employ tiered subscription models and optional add-ons to meet diverse customer needs and enhance revenue. Customers are encouraged to upgrade as their requirements grow, facilitated by streamlined payment processes via integrated subscription management tools. Companies offer various packages with differentiated features, such as commercial-free options, and target specific upselling opportunities based on customer preferences, like renewable energy or fixed pricing. Additionally,  |

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|  |   | add-ons like automated marketing campaigns are provided to simplify customer tasks and add value.  |
| Accessibility and inclusivity features   | Ensuring that all individuals, regardless of their abilities or disabilities, can use and benefit from products or services effectively creating equitable, usable, and comprehensive environments for all users.                   | Companies are incorporating advanced options like voice dictation and video messages to simplify user interactions, particularly in contexts where customers need to demonstrate issues with a product visually. Additionally, text-to-speech functionalities enhance accessibility for users who benefit from auditory support. Regular accessibility audits ensure that digital channels comply with relevant standards, allowing those using assistive technologies like screen readers to access services effectively. Legal requirements also drive the integration of accessibility features in apps, ensuring that businesses meet standards for service inclusivity. |
| Geolocation-based Multi-Language Support | Capability of digital platforms to detect a user's location and suggest or switch the content to a language that is commonly spoken in that region.   | Companies implement region-specific landing pages and language options to cater to local preferences and inquiries, such as offering multiple language toggles to accommodate a country's multilingual environment. Additionally, global e-commerce platforms adapt their content, marketing, and payment methods to fit regional consumer behaviors across dozens of countries, ensuring a localized yet unified shopping experience.   |
| To Improve Customer Convenience          |   |  |
| Self-service portals/accounts            | Platforms that allow customers to manage their interactions with a company independently, without needing direct assistance from customer service representatives.  | Self-service portals and accounts allow customers to manage their bookings, account settings, and purchases independently, catering to preferences for minimal to zero direct interaction with service providers. Similarly customers can monitor and manage their consumption and view invoices. This capability not only meets the growing customer demand for self-service options but also proves essential in dynamic market conditions, offering users control and flexibility in managing their services and accounts.  |
| Advanced search and filters              | Enabling users to input detailed search queries or select multiple filtering options to sort through large datasets or product inventories, allowing them to quickly and efficiently narrow down options based on specific criteria | Businesses across various industries implement sophisticated filtering options to help customers quickly locate the specific items or services they need. Additionally, some businesses are looking to incorporate AI into their search functions to further refine the accuracy and relevance of search results. These advanced search tools significantly enhance the usability of digital platforms, making them more customer-friendly and efficient.  |
| Multiple payment options                 | Ability of a business to accept a wide range of payment methods tailored to customer preferences and regional practices.  | Businesses provide a variety of payment methods, including modern digital wallets like Google Pay and Apple Pay, alongside traditional options such as Visa and MasterCard. The availability of these methods varies by country and can range from simple to complex setups. Additionally, some businesses have developed their proprietary payment solutions, such as customized payment cards in collaboration with banks, which operate exclusively within their  |

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|  |   | corporate group. This flexibility in payment options caters to the global consumer base and streamlines transactions, making the payment process smoother and more adaptable to individual needs.   |
| To Boost Customer Interaction and Engagement |   |   |
| Instant/<br>reminder<br>notification<br>s    | Automated messages sent to users to inform them immediately about specific actions or updates related to their activities, transactions, or account statuses          | Notifications are strategically used across industries to guide and remind customers about necessary actions. For instance, airlines send notifications to prompt passengers to check into flights through an easy digital flow. In the hospitality sector, emails remind guests about their bookings and offer options for digital check-in. Utility companies alert customers about power outages via SMS, and other services use notifications to remind customers of upcoming payment due dates to prevent late charges. These automated reminders and notifications not only improve service efficiency but also increase customer satisfaction by keeping users well-informed and engaged with the service process. |
| Chatbots/<br>live chats                      | Automated communication tools integrated into websites, apps, or messaging platforms to provide immediate assistance and support to users.                            | Chatbots and live chats enhance efficiency and provide immediate support. Chatbots handle routine inquiries and tasks, such as offering basic information or processing cancellations, allowing customers to resolve issues independently. They are often equipped with AI to suggest responses or direct inquiries appropriately, ensuring seamless service. When more complex issues arise, live chats provide a platform for real-time human interaction, ensuring that customers receive the assistance they need promptly. Together, these tools reduce wait times and improve customer satisfaction by catering to user needs quickly and effectively.  |
| Customer<br>engagement<br>t features         | Enabling customers to voice their opinions, provide suggestions, and express their needs across various digital platforms   | Businesses actively create opportunities for customers to express their opinions through direct feedback channels, surveys, and automated messages following service interactions. This feedback is often reviewed by quality assurance teams to ensure service standards are met. Additionally, customers are encouraged to leave reviews on third-party websites as well as directly through company apps. This multi-channel feedback system allows companies to collect a broad range of insights, helping them to continuously improve their offerings and respond effectively to customer needs.  |
| Community<br>engagement<br>t Features        | Creating online platforms and forums where customers can interact, share insights, collaborate and provide a space for mutual support, learning, and direct feedback. | Virtual classes, community portals, and forums are utilized by companies to extend the value of their services beyond basic transactions. These communities enable customers to engage with each other and with company staff, fostering a space for learning and mutual support. Additionally, these platforms serve as a channel for customers to participate in focus groups, provide feedback on products and services, and learn about new launches. Feedback gathered from these community interactions is crucial for companies to understand consumer perceptions and improve their offerings accordingly.  |

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| Gamification & loyalty rewards       | Incorporating elements of game playing into non-game environments and reward and incentivize customers for their continued engagement and patronage.  | Companies use programs to incentivize customers with challenges such as sustainable practices, rewarding participation with benefits like free electricity hours. Similarly, businesses are adopting gamification tactics to make interactions more engaging, which offers games that lead to real-world discounts and prompts repeated store visits. Loyalty programs are highly effective, with many purchases driven by the opportunity to earn points that can be converted into monetary rewards or exciting alternatives like lottery tickets for significant prizes, such as cars. These strategies significantly increase customer engagement and loyalty by combining fun, rewards, and practical benefits.                                   |
| To Provide Comprehensive Information |   |  |
| Educational Content/ FAQs            | Providing users with accessible, structured information about products, services, or processes.   | Companies aim to consolidate FAQs, training materials, industry news, and updates in one central location to streamline the customer experience and prevent the fragmentation of information. Specific content is strategically placed to be most useful in relevant customer journey phases, such as pre-trip information or check-in procedures for airlines, or inspirational content for travel planning. Additionally, interactive elements like searchable customer service pages allow users to quickly find answers to common questions like store hours, enhancing self-service capabilities. This approach fosters an informed and engaged customer base by providing them with all necessary tools and information in one accessible place. |
| Featured content display             | Highlight specific products, services, or information prominently to draw attention to new arrivals, special offers, or other significant content, making it easily accessible and engaging for users.  | Companies are implementing sections like 'new arrivals' on their landing pages so frequent visitors can immediately see the latest products without needing to navigate through the entire catalog. Additional features like pull-out sidebars provide detailed information about specific items, adding depth and context to the browsing experience. Furthermore, organization of product portfolios is crucial, especially for large companies, to help customers quickly understand the differences between similar products and make informed decisions based on their specific needs.  |
| Visual/ textual attribute indicators | Design elements such as icons, labels, badges, and tooltips that offer quick insights or detailed attributes, such as size, weight, material, or status of items used on digital platforms to provide clear and concise information about products or services. | Companies are careful to clearly label products with specific regional identifiers, such as 'American product' to cater to a global audience. Detailed descriptions of items like jewellery are emphasized to meet customer expectations for specificity. Additionally, interactive features like online maps show real-time information about events such as power outages, with clickable icons for further details. Software applications enhance navigation by incorporating user flows and informational widgets that reveal more data about features through simple interactions like clicking a question mark or info icon.   |
| Enhanced Visual                      | Use of advanced graphical displays such as high-quality images,   | Companies are integrating different technologies to allow customers to visualize products in their own spaces, such as visualizing how furniture would look in a room before purchasing. In e-commerce,  |

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| Representat<br>ion                     | interactive maps, Augmented Reality (AR), and Virtual Reality (VR) for realistic product reviews to provide users with a more detailed and immersive view of products or services.  | particularly in fashion and consumer goods, AR is being piloted to show how items might look on the customer themselves. Additionally, high-quality imagery, including 360-degree views and photos showing products worn by people, helps customers gauge the size and fit of items like earrings. Interactive online maps are also employed to provide real-time, visual information about events such as power outages.  |
| To Strengthen Trust                    |   |  |
| Security<br>related<br>features        | Various technologies and protocols implemented to protect sensitive information, safeguard against unauthorized access and data breaches and ensure safe transactions.  | To ensure data security, companies employ a range of tools and strategies managed by dedicated security officers. This includes the use of two-factor and multifactor authentication methods to add layers of security to customer transactions and account access. Additionally, businesses collaborate with third-party security experts to audit and enhance security across all customer touchpoints and the digital ecosystem, including cloud services. This comprehensive approach ensures that every interaction within the system is secure, safeguarding customer information against potential breaches and maintaining trust in digital services.  |
| To Establish Operational Efficiency    |   |  |
| Third-party<br>service<br>integrations | Incorporating external services, tools, or platforms into a company's own digital systems to enhance their service offerings, streamline operations, and improve customer experiences with specialized capabilities that are not primarily available within their own infrastructure. | Third-party service integrations are essential for enhancing operational efficiency and customer trust across various business sectors. Businesses integrate KYC providers to comply with regulatory requirements, ensuring secure customer verification. Additionally, companies use electronic data interfaces (EDI) to connect customers' ERP systems directly to supply chain operations, streamlining procurement processes. To build credibility, businesses also collaborate with independent rating agencies, which provide objective customer experience assessments. Moreover, firms offer API capabilities and partnerships with platforms, allowing tech-savvy customers to develop custom integrations, thereby enhancing service functionality and adaptability. These integrations support efficient service delivery and create a more seamless ecosystem for users. |
| Traceability<br>/ tracking<br>features | Capabilities that allow customers to monitor the status, location, progress and usage of their orders, products, or services in real time.  | Financial institutions offer tracking for card deliveries and transfer timings, updating customers on the expected arrival or completion, reducing frustration of waiting. In manufacturing and e-commerce, businesses have introduced systems that allow customers to view the real-time status of their products within the production process or during shipment, a service unique in some industries. Additionally, adjustments have been made to allow customers to alter delivery options post-purchase, adding flexibility to previously rigid processes. For utility services, consumption monitoring tools are highly valued, as they enable customers to understand and compare their consumption patterns.  |

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| Dashboards            | Interactive tools used in digital platforms to visually display critical data and metrics in an organized and easily understandable format               | Dashboards enhance user experience and provide critical insights through visual and interactive interfaces. Dashboards are designed with intuitive color coding—green for normal, yellow for caution, and red for critical issues—which helps users quickly assess statuses at a glance. They are employed not only in gaming for responsible play monitoring but also in energy sectors to track consumption and in business environments to manage operations and performance metrics. These dashboards allow users to generate and interact with reports, offering a centralized platform where all necessary business functions can be executed efficiently.  |
| Connectivity features | Enabling seamless communication across different platforms and environments by allowing devices and systems to connect with each other and the internet, | In-flight systems integrate seat screens and mobile applications to create a comprehensive service ecosystem that not only entertains passengers but also facilitates communication between cabin crew and customers. Similarly, smart hotel rooms employ IoT technology to offer customizable environment controls, such as temperature and lighting, and integrate entertainment options like Netflix on SmartTVs. Automated sun shades further add to the convenience, eliminating manual adjustments. These connectivity features are designed to provide seamless, digitally-enhanced experiences, improving comfort and satisfaction for users while streamlining operations for service providers. |

*Table 06. Understanding Customer Centric Non-Functional Features of Digital Business Processes*

This table is related to RQ5: What features in digital business processes make them customer centric?

| Feature       | Definition   | Description  |
|---------------|--|--|
| Availability  | The degree to which a digital system, service, or resource is operational when needed by users | Businesses emphasize the need to be constantly available to their customers, providing services with minimal downtime. This ensures that customers can engage with services at their convenience, particularly through online platforms that operate 24/7, allowing bookings and interactions outside of standard business hours. Different customer preferences across sectors also dictate the modes of communication offered, with digital methods like live chat becoming increasingly favored, although traditional phone support remains essential in areas like healthcare where personal discussions about complex issues are necessary. |
| Accessibility | The ease with which users can access and effectively utilize digital services and resources    | Companies are actively working to ensure that their resources, such as knowledge bases and support services, are as accessible as possible. This involves designing digital platforms that facilitate easy access to customer support, distinguishing customer-centric businesses from those that may limit accessibility to reduce engagement costs. Additionally, mobile applications are developed with customer centricity in mind, providing straightforward access to services and important updates about flights, ensuring that customers have all the necessary information and functionalities at their fingertips.                    |



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| Understand ability         | Make digital interactions as straightforward and intuitive as possible  | Businesses strive to ensure all processes are clear and easy to comprehend, highlighting simplicity in digital interactions. The goal is to minimize the number of actions customers need to perform to complete tasks, making every step smooth and straightforward. Additionally, product simplification involves using language that customers understand and creating interactions that are logical and intuitive.  |
| Seamless Product Journey   | Creating smooth, uninterrupted experiences that cater directly to user preferences and needs.   | Businesses aim to allow customers to complete their entire journey on a single device, eliminating the need to switch between devices or visit physical locations. The overarching goal is to make digital interactions simpler and more intuitive than in-person or telephonic alternatives. This seamless integration across different channels is designed to meet customer expectations, enhance ease of use, and reduce friction, ultimately improving customer satisfaction and loyalty. Companies continuously gather and integrate customer feedback to refine and ensure that digital experiences are seamless.      |
| Usability                  | Ease of use   | Usability is a major consideration for businesses, with a focus on simplifying processes such as making transfers or using mobile apps so that customers can perform tasks effortlessly without needing to recall complex steps. The concept aligns with a hierarchy of user needs, similar to Maslow's pyramid, where fundamental usability ensures the most basic interactions are straightforward. Additionally, customers' expectations for usability are often influenced by their experiences with other services; they expect consistency or improvements in usability across different platforms.                     |
| Time Efficiency            | Streamline operations and enhance user experiences by reducing time and effort required for tasks                                     | Businesses are focused on reducing the number of steps required to complete tasks, with strategies like the 'three-click approach' ensuring that users can achieve their objectives swiftly. This approach extends to automated services designed to quickly address customer needs and enhance the support experience. Additionally, speed of access is crucial in the digital journey, guiding customers efficiently based on predictive insights about their preferences and behaviours. Overall, enhancing time efficiency is a strategic priority aimed making digital interactions as quick and effortless as possible. |
| Cost-Effectiveness         | Focusing on reducing costs while maintaining or enhancing value   | By properly allocating resources, businesses can expedite processes, significantly shortening the time-to-market, which in turn can lead to substantial cost savings. The focus is on evaluating current timeframes and costs, identifying areas of inefficiency, and demonstrating how strategic changes can lead to tangible financial benefits. This approach not only speeds up operations but also aligns improvements directly with cost-effectiveness, allowing companies to optimize both performance and expenditures effectively.   |
| Cross Platform Consistency | Ensuring that regardless of the medium through which users access a service—be it a mobile app, desktop website, tablet interface, or | Businesses strive to ensure that all processes and products are accessible via various platforms, including mobile apps and web interfaces, to meet customer expectations for availability and convenience. Challenges such as discrepancies between internet banking and mobile app functionalities highlight the ongoing need   |

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|              | any other digital channel—their experience remains consistent in terms of design, features, accessibility, and performance. | to align features across platforms. The goal is to offer consistent services, such as saving shopping lists that can be accessed both through apps and web portals. Ultimately, ensuring that customers receive the same high-quality experience, regardless of the channel they choose to interact with, is crucial for satisfying digitally savvy consumers and enhancing their engagement across multiple touchpoints.   |
| Transparency | Clear and open communication about services and processes.  | Businesses focus on ensuring that customers are fully informed about the costs and features of services upfront, helping to set accurate expectations from the beginning. This approach includes providing potential customers with essential information—even if negative—before they commit time or resources to a process, enhancing their decision-making. Overall, transparency builds trust and satisfaction by avoiding surprises and ensuring that customers have all the necessary information to make informed choices. |

*Table 07. Understanding Digital Technologies that Enable Customer Centric Features in Digital Business Processes*

This table is related to RQ6: What digital technologies are used in designing and developing customer centric digital business processes?

|   | Enabling customer centricity in the whole process   | Used in specific parts of the process   |
|---|---|---|
| <b>For enhancing customer interactions and experience</b> | <ul style="list-style-type: none"> <li>• Machine Learning (ML)</li> <li>• Customer Relationship Management (CRM) tools</li> <li>• Experience management software</li> </ul> | <ul style="list-style-type: none"> <li>• Artificial Intelligence (AI)</li> <li>• Augmented Reality (AR) and Virtual Reality (VR)</li> <li>• Internet of Things (IoT)</li> <li>• Customer service and support software</li> <li>• Collaboration and communication tools</li> </ul> |
| <b>For ensuring security</b>                              | <ul style="list-style-type: none"> <li>• Secure technologies (Blockchain technology, login passwords, two factor authentication)</li> <li>• Cloud computing</li> </ul>      | <ul style="list-style-type: none"> <li>• Digital signatures and IDs</li> </ul>  |
| <b>For improving findability</b>                          | <ul style="list-style-type: none"> <li>• Search Engine Optimization (SEO)</li> <li>• Application Programming Interfaces (APIs)</li> </ul>                                   | <ul style="list-style-type: none"> <li>• Geo Spatial Mapping technology</li> <li>• Content Management Systems (CMS)</li> </ul>  |
| <b>For enhancing insights</b>                             | <ul style="list-style-type: none"> <li>• Big data analytics and business intelligence tools</li> </ul>  |   |
| <b>For streamlining operational efficiency</b>            | <ul style="list-style-type: none"> <li>• Cloud Computing</li> <li>• ML</li> <li>• CRM</li> </ul>  | <ul style="list-style-type: none"> <li>• IoT</li> <li>• Project management and collaboration tools</li> </ul>   |

*Table 08. Understanding How Digital Business Processes can be Redesigned for Customer Centric Digital Business Processes*

This table is related to RQ7: How does digital technologies enable design and development of customer centric digital business processes?

| Aspect  | Scenario before redesign  | Scenario after redesign   |
|---|---|---|
| Automation speeds up processes that would otherwise be manual and time-consuming.   | Before the introduction of automation, the e-commerce meal subscription service faced significant operational challenges due to its weekly renewal and billing cycle. Many customers were caught off guard by the frequent charges, leading to a high volume of cancellation requests—around 400-500 daily. This influx overwhelmed the customer service team, making it difficult to manage other inquiries efficiently and detracting from the overall customer experience.   | To address these issues, the company instituted more lenient cancellation policies that allowed customers to cancel within the first 24 hours without affecting production. Additionally, they implemented automation in the form of chatbots to handle the cancellation process. This shift not only streamlined operations, reducing the time and resources spent on managing cancellations, but also enhanced customer satisfaction by aligning the service more closely with customer expectations and needs.   |
| Automated systems perform tasks the same way every time, eliminating the variability and errors that can occur with human intervention.                       | Before implementing automation, the company faced challenges with the ID verification process during customer sign-ups. This procedure initially required human intervention to confirm the identity of new customers, matching selfies to IDs. This manual approach led to significant delays in customer onboarding, sometimes stretching from minutes to hours. The variability in the manual checking process also introduced potential for errors and inconsistencies, affecting the reliability of the service and the initial customer experience.   | After adopting automated systems for ID verification, the company experienced a marked improvement in the efficiency and consistency of the onboarding process. Automation enabled the company to perform identity checks almost instantaneously, reducing the wait time for new customers from hours or minutes to mere seconds. This shift not only enhanced the customer experience by streamlining their entry into the service but also ensured a higher level of accuracy and uniformity in how verifications were handled, bolstering customer trust and satisfaction right from the start.  |
| Enhanced interactions provide improved and more engaging ways in which businesses connect with their customers using advanced digital tools and technologies. | Before the integration of advanced digital technologies, shopping for significant items like furniture typically required customers to visit the physical stores. In those settings, customers had to rely heavily on their imagination to visualize how a piece of furniture would fit into their home and complement their existing decor. This process often led to dissatisfaction if the purchased items did not meet expectations once placed in their actual environment. The inability to preview products resulted in less confident buying decisions, potentially leading to higher rates of returns and decreased customer satisfaction. | With the introduction of an app that enables virtual enhanced interactions, customers can visualize how furniture will look in their homes before making a purchase. This digital tool allows users to input their preferences, such as style, budget, and inspiration sources like Pinterest, to receive personalized recommendations. These advancements have transformed the shopping experience from guessing to seeing, providing a more immersive and engaging customer journey. As a result, customers can make more informed decisions, significantly reducing the likelihood of returns and increasing overall satisfaction with their purchases. The process from planning and measuring to |

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|   |   | delivery is also streamlined, enhancing the efficiency and effectiveness of customer service.   |
| Segmentation and targeting helps companies to make sure that their interactions are relevant and tailored to different customer groups. | Before the advent of digital technologies, marketing strategies primarily relied on broad demographic data for segmentation and targeting. This approach often led to generalized marketing campaigns that addressed a wide audience without much specificity. As a result, the messaging could feel irrelevant to many within the target audience, leading to lower engagement rates, ineffective marketing efforts, and a lesser degree of customer satisfaction. The lack of detailed customer insights made it challenging for businesses to develop products and services that precisely met the diverse needs and desires of different customer groups, often resulting in a one-size-fits-all approach that failed to maximize customer retention or value perception. | With the integration of digital technologies, companies can now gather and analyze rich, detailed customer data, enabling much more precise and dynamically tailored segmentation and targeting. This transformation allows businesses to understand their customers at a granular level, segmenting them into smaller, more specific groups based on a variety of factors such as spending habits, geographic location, language, and even how they interact with different product features. As highlighted by the experiences of interviewees, this advanced segmentation supports the development of highly personalized marketing messages and product adaptations that resonate deeply with individual segments. This targeted approach not only enhances customer engagement and satisfaction by delivering more relevant content and services but also significantly increases the effectiveness of marketing efforts and customer retention. |
| Predictive analysis allows businesses to anticipate customer needs and behaviours, and proactively address them.                        | Before the integration of advanced digital tools, predictive analysis in business largely depended on historical data and manual trend analysis. This traditional method involved extrapolating future behaviors and needs from past patterns, often supplemented by subjective interpretations of available information. The reliance on historical data limited the responsiveness of businesses to immediate changes in market conditions or customer behavior, as updates to analyses were infrequent and often outdated by the time they were completed. This delayed approach made it difficult for companies to respond proactively, forcing them to react to changes and customer needs after they had already impacted the business.                                 | With the advent of digital technologies, predictive analysis has been revolutionized by real-time data processing and sophisticated analytics tools. Businesses can now anticipate customer needs with greater accuracy and respond proactively. Tools like customer experience management platforms (e.g., Qualtrics, Medallia) and analytics software (e.g., Power BI, Chart Mogul) allow for the continuous gathering and analysis of data, enabling businesses to identify trends, customer satisfaction metrics, and risk signals much more rapidly. This shift has transformed business strategies from reactive to proactive, allowing companies to optimize customer retention strategies and adapt their offerings in alignment with real-time customer behaviors and preferences, thus maintaining and increasing revenue efficiently.  |

*Table 09. Understanding Aspects of Customer Centric Digital Business Processes*

This table is related to RQ8: How can business processes for digital products and services be measured for customer centricity?

| Metric                          | Definition  | Description   |
|---------------------------------|---|---|
| Business Performance and Growth |   |   |
| Number of Customers affected    | A scale of impact any particular issue or feature may have on a customer base.                  | Businesses monitor metrics such as the number of bookings and revenue from various channels to understand market performance and optimize resource allocation. Additionally, when considering customer requests or issues, it's crucial to determine whether they represent widespread needs or are isolated cases, which guides the development of solutions or workarounds. For instance, an e-commerce company used data on high volumes of cancellation requests to streamline the process by implementing a chatbot, significantly reducing the time required to handle each cancellation. This approach not only enhances operational efficiency but also improves customer satisfaction by swiftly addressing their needs.   |
| Visitation metrics              | No. of visits   | Businesses monitor the frequency of store visits and the behaviours of customers during those visits, such as the duration of stay on a webpage or the total time spent in a store. This data helps companies understand customer engagement levels across different channels, enabling them to tailor experiences, optimize store layouts, and improve website design to better meet customer needs and enhance their overall shopping experience.   |
| Click Through Rate (CTR)        | Assess the effectiveness of digital engagements and how well they convert interest into action  | Companies measure operational data like CTR to understand how effectively their digital content attracts and prompts actions from users. This involves analyzing where customers click within a website or app, which areas perform best, and how these interactions lead to conversions. Such insights help businesses optimize their digital platforms by enhancing areas that receive less engagement and leveraging those that show high user activity, ultimately aiming to improve overall user experience.   |
| Customer Conversion Rate        | How well a business turns potential customers into actual paying ones                           | Businesses track how advisories sent to customers influence their decisions to enter into agreements, and they monitor the number of visitors versus the number of actual bookings or purchases made. Additionally, understanding the transition from trial users to paid subscribers is crucial, emphasizing the importance of not just the quantity but the quality of leads. Effective marketing aimed at targeted demographics can yield higher quality leads, thereby increasing conversion rates and revenue. The focus is on achieving a higher return on investment by attracting leads that are more likely to convert, rather than merely increasing the volume of less committed prospects. Changes to product offerings or the introduction of online sales platforms are also noted to significantly boost conversion rates. |
| Churn Rate / Retention Rate     | Churn rate reflects the percentage of customers who stop using a company's products or services | Businesses focus on identifying lagging indicators such as churn rates to determine the effectiveness of their customer retention strategies. By analyzing retention and repurchase rates, companies gauge long-term customer engagement and satisfaction. Detailed tracking systems help identify when and why churn occurs, allowing businesses to invest in targeted improvements. Additionally, examining specific customer   |

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|                                    | over a specific period.<br>Retention rate shows the percentage of customers who remain with the company during the same period. | interactions and pathways reveals opportunities to enhance the user experience and reduce churn. For instance, reducing the steps from a social media platform to desired content from five steps to just one by adding a direct link, significantly decreased churn rates, showcasing how simplifying processes can directly enhance customer retention. This approach demonstrates the importance of proactive adjustments in retention strategies to effectively minimize churn and boost customer loyalty.  |
| LifeTime Value (LTV)               | The total value a customer brings to a company throughout their relationship.   | Companies use LTV to estimate the total revenue expected from a single account over the duration of their relationship with a company, serving as a vital indicator of customer loyalty and the economic value they bring. Companies aim to enhance LTV by improving customer satisfaction, which in turn can lead to higher conversion rates and repeat purchases. Metrics such as ratings, review scores, retention, and repurchase rates are often analyzed as indicators that directly impact LTV, guiding businesses in their efforts to optimize customer engagement strategies and overall profitability.  |
| Customer Loyalty                   |   |   |
| Net Promoter Score (NPS)           | How likely customers are to recommend a company's products or services to others  | NPS is widely used across both B2C and B2B sectors. It serves as a direct indicator of customer value and centrality by identifying satisfied and dissatisfied segments within the customer base. High NPS scores reflect strong customer loyalty, while low scores pinpoint areas needing improvement, such as the checkout process, which can significantly influence overall satisfaction. Businesses leverage NPS to drive strategic changes that enhance customer satisfaction and address specific issues highlighted by the score. For example, one company identified friction in the transition from trial to paid services through NPS feedback. By streamlining the billing process, reducing transaction steps, and expanding payment options, they significantly improved their NPS. This not only increased customer satisfaction but also boosted customer retention, showcasing NPS's effectiveness in guiding enhancements in business processes and customer experience management.   |
| CSAT (Customer Satisfaction score) | How satisfied customers are with a company's products or services   | CSAT is typically derived from surveys asking customers to rate their satisfaction on a scale from 1 to 10. In a B2B context, CSAT measures satisfaction in terms of how effectively a company supports its clients' business growth. CSAT can be applied to evaluate specific parts of the customer journey, such as the booking experience, or more broadly to gauge satisfaction across different channels like mobile applications. A practical example of utilizing CSAT is tracking the "Happy Customer Score", which involves continuous monitoring of all business processes to identify and address any dissatisfaction. For instance, if customers frequently abandon the checkout process or struggle with registration due to complexity or time consumption, these insights drive improvements to make processes more customer-centric and efficient. This ongoing evaluation and enhancement based on CSAT results underscore a commitment to optimizing the customer experience and ensuring that business operations align closely with customer needs. |
| Customer Effort Score (CES)        | The ease with which customers can interact with   | CES focuses on minimizing the number of steps or clicks required to complete a task, thereby enhancing the customer's experience by making processes more intuitive and less time-consuming. CES is often considered  |

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|                                  | and complete tasks within a company's digital processes   | alongside other metrics such as CSAT and NPS to provide a comprehensive view of customer experience. A practical application of CES improvements is demonstrated through the example of simplifying a digital process originally requiring five clicks, it was streamlined to just one or two. This reduction significantly improved the speed and ease of the user experience, reducing confusion and frustration, and thereby positively impacting long-term customer satisfaction and operational efficiency.   |
| No. of Referrals / Word of Mouth |   | Positive customer experiences lead directly to increased referrals, where satisfied customers actively promote a company's products or services to friends and relatives. This natural form of endorsement is particularly influential among small businesses and personal customer segments, where as much as 70% of new customer engagement can originate from word of mouth. Negative experiences are equally likely to be shared, underscoring the dual potential of word of mouth to affect a company positively or negatively. Furthermore, successful digital interactions enhance word of mouth, giving companies a competitive advantage by improving brand reputation and facilitating growth, particularly in digital transformation efforts.   |
| Efficiency                       |   |  |
| Average Wait Time (AWT)          | Reflects the responsiveness of a business   | Companies assess AWT to gauge the ease and speed with which customers can access support and resolve issues, aiming to minimize wait times and enhance the customer experience. Metrics like first contact resolution, ease of accomplishing tasks, reply times, and downtime tracking are used to understand and optimize customer interactions across various service points. An effective strategy to improve AWT is illustrated by the example where a company faced long response times due to a mismatch in support coverage across time zones. By strategically hiring remote employees in the US and later in New Zealand to cover different time zones, the company successfully reduced the average response time from 36 hours to less than 4 hours. This dramatic decrease in wait time significantly enhanced responsiveness and demonstrated a strong commitment to providing timely and efficient customer support. |
| <i>OTIF (On-time in-full)</i>    | On-time delivery of products/ services  | OTIF assesses the ability of a business to meet delivery commitments both in terms of quantity and timing. For example, delivering only 50 out of 100 requested items on time results in a 50% OTIF score, which is considered inadequate. Maintaining a high OTIF rate is essential as it directly impacts customer satisfaction and trust. Ensuring that customers receive exactly what they ordered at the promised time is highlighted as one of the most important metrics for maintaining strong customer relationships.   |
| Quality                          |   |  |
| Internal Quality Metrics         | Assessing customer centricity from an internal perspective within a Quality Management System (QMS) | Internal Quality Metrics focus on how service teams utilize a Quality Management System to assess and enhance the quality of customer interactions. These metrics include evaluating the empathy displayed during interactions, the effectiveness of the solution provided, the product knowledge of the service representative, and the timeliness of the response. These elements are aggregated into an 'internal quality score' that quantifies service performance. Furthermore, the impact of these metrics is underscored by linking them directly to potential revenue losses. For example, if customers experience issues and are considered at risk of   |

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|                    |  | churning, the potential revenue loss can be substantial. This scenario demonstrates how internal quality scores not only reflect service quality but also help quantify the financial implications of customer dissatisfaction.  |
| Process evaluation | Capture the depth and variety of feedback mechanisms | Organizations measure success through predefined criteria, incorporating feedback from user inputs, social media, interviews, prototypes, and usability tests into comprehensive follow-up reports. For instance, in hospitality, guest experiences such as room cleanliness, food quality, security, and amenities are rated on a one-to-five scale. Aiming for high scores, any ratings below four prompt a detailed analysis to identify trends and implement corrective measures. This structured approach ensures continuous improvement and consistently high customer satisfaction. |