

Using ArchiMate for Optimising a Customer Journey in the Car Hire Industry - a Case Study

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Abstract. With the advent of digitalisation and digital transformation, organisations are transforming the way they do business and are turning into service-driven businesses. This article presents the results of a descriptive case study research, where the process of digitalisation of a car-hire company is described using the ArchiMate Full Framework. The case illustrates a service transformation, a process of digitalisation, and its organisational changes. Furthermore, it highlights the problem of using digital brokers to access a digital service through a Customer Journey (CJ). This research sets the firm ground for future modelling work to find ways to overcome the CJ flaw in a B2B and B2B2C context, present when using digital intermediaries that do not share the same nodes for communication.

Keywords: Customer Centricity, Customer Journey, Digitalisation, Digital Transformation

1 Introduction

The advent of digitalisation has meant that Customer Experience (CE) and its subsequent exploratory studies view CE as a challenge for research in the upcoming years due to the complexity and multiplicity of touchpoints [1]. It is, therefore, paramount to carefully plan the transition from a traditional model of business to a digital one. An improved digital journey through a carefully mapped CJ guarantees customer satisfaction thus bringing positive experiences and improving customer satisfaction [1]. It is of vital importance to understand that customers today use different online touchpoints to interact with firms and other clients through multiple channels and media [2], meaning that the nature of customers has changed completely. Moreover, customers tend to switch between different online and offline channels, resulting in omnichannel touchpoints playing a greater role [2].

The purpose of this paper is to present and discuss the results of a descriptive case study research in the optimisation of a CJ in the context of a car hire industry, where ArchiMate Full Framework was used to model the transition for digital service – Key ‘n Go. The research relied heavily on a partnership with the Europcar Group, specifically, with their low-tier car hire company Goldcar.

The case answered the following RQs:

- RQ1 - What are the benefits of incorporating an optimised CJ through a digital service?
- RQ2 - What are the challenges of incorporating a CJ in the context of a B2B relationship with brokers?
- RQ3 - How can CJ enable and excel as a digital service?
- RQ4 - How to overcome the inhibitors of a CJ?
- RQ5 - Can CJ contribute to innovation and set ground for the digitalisation of an organization?

To answer the above RQ, evidence was collected from three sources - interviews to middle and top-level management, an observation as normal participant at a Goldcar’s counter in Malaga Airport in Spain, and archival evidence based on a previously developed SLR.

Furthermore, the research based its ArchiMate models in three views: the Traditional Model View, the Implementation Migration View, and the Key ‘n Go (AS-IS) view.

The reported findings set the ground for future research and for the development of a future TO-BE solution that addresses the core identified problem in the business architecture – the relationship with digital brokers in a B2B

or B2B2C context, where due to a lack of communication between the nodes the customer is left without the full CE.

This paper begins with a presentation of the research background that contextualises the research, it then presents the scope of the case design and moves to demonstrate the ways data was collected for evidence. Lastly, it presents the findings and concludes with a discussion, a presentation of its limitations and future research.

2 Research Background

This section presents an overview of Digital Services (DS) and Customer Journey (CJ), Customer Experience (CE), and related concepts in the context of innovation and digital transformation.

With the ubiquity of the internet, smart technology, and mobile devices, services are becoming the centre of a revolution, whereby the customer is put at the centre of the equation and services are tailored to their behaviour and needs [3]. Aunkofer argues that in the future consumer goods will mostly remain a long-term investment [3], the customer will focus on DS rather than on a new device full of features that they will not use.

The concept of DS has evolved from a static service to a full customised CE. The customer goes through a path of experiences and through different points of contact (touchpoints) that enrich the CE and marketing databases created from the data collected at the points of contact between the customer and the firm [4]. Organisations take full advantage of their CJ approaches and use them to analyse data processes and increase sales. This can be done through an analysis of the data shadow of our smart products by the identification of available customer data along the CJ [5], as well as a complete analysis of the customer behaviour DNA [3].

Moreover, efficient customer service is increasingly becoming an expectation for customers [6], and it is also highly popular amongst big firms such as KPMG, Amazon, and Google, which now have chief CE officers, CE vice presidents, or CE managers responsible for creating and managing the experience of their customers [1]. In summary, we are witnessing a shift from a product to a service delivery economy, consequently CE has become the main differentiator and thus turned into a management priority [7].

The CE allows for the establishment of patterns of human behaviour, and the categorisation of customers and aids in the preparation of future Customer Journey Mapping (CJM), the development of digital campaigns [7], and DS. A careful and planned CJM with a series of omnichannel touchpoints whereby customers interact with a service provider via an agent, artefact, or platform that includes all offline, online, and mobile channels that enable customers to interact with a retailer in multiple ways [8] is developed to improve the communication, trust levels and to build a rapport between the customer and the service provider.

Though CJM is seen as an integrated journey, each customer has its own CE. It is therefore vital to understand that each touchpoint is independent of the other [4], meaning that each CJM can take different directions and experiences that vary according to the quality of customer interaction with the firm. The introduction of smart technologies and wider connectivity allows for more knowledgeable and empowered customer decision and promote communication among people, things, data, and processes that in turn will influence CJ and CE [9]. This reality with the advent of continuously new technology development, and the increment of new devices and touchpoints, results in a challenge and complex planning and mapping CJ [9].

2.1 Goldcar Context

Goldcar is a low-tier car hire solution from the Europcar group that has a strong presence in European and specifically in the Iberian market of car hire. The company was acquired in 2017, and the idea behind the French house company was to get a significant position in the low-cost market by 2020 [10]. Upon its acquisition Goldcar had to deal with three identified pain-points that were lowering its NPS - Net Promoter Score:

- **Long Waiting Times** - at airport desks, especially in high season and/or in busy airports, with queues having reported waiting times of one plus hour.

- **Hard-Selling Techniques** - the nature of the low-cost business model of Goldcar is one that maximises its economic gains by training its staff in hard-selling techniques at the counter (Staff try to sell add-on products, e.g.- automatic toll devices, extra-insurance, children car-seat, etc).
- **Insurance Coverage Problems** - Lack of coverage of the insurance plans generated complaints as customers were subsequently charged for something that they thought had coverage of the insurance plan.

A low NPS can contribute to driving customer trust levels down, making it difficult to keep existing customers and find new ones. To address these pain-points and to digitalise the service of car hire Key ‘n Go was created.

2.2 Key ‘n Go Specifications

Key ‘n Go is a digital service that provides a mapped CE with carefully planned touchpoints to provide a complete car hire solution service through a programmed CJ. It is also an example of a carefully programmed digital transformation in a highly competitive and traditional industry. A previous paper reported an analysis of Key ‘n Go business process in a digital solution for InterRent a sister company of Goldcar, where findings indicate that the digital business is more than a technical implementation. It is, indeed, the result of the different aspects such as desires, goals, and needs of value-ascribing stakeholders [11].

In the context of Key ‘n Go, the relationship with intermediary brokers has proven to be a difficult one, as there is a lack of communication between the service provider node and the third-party broker. This results in a customer being unable to access the offered CJ and service, ensuring customer dissatisfaction with the service and the firm. The below Business Function Viewpoint in Figure 1 shows the communication flowing between the Customer and the Intermediary Broker but not between Goldcar and the broker.

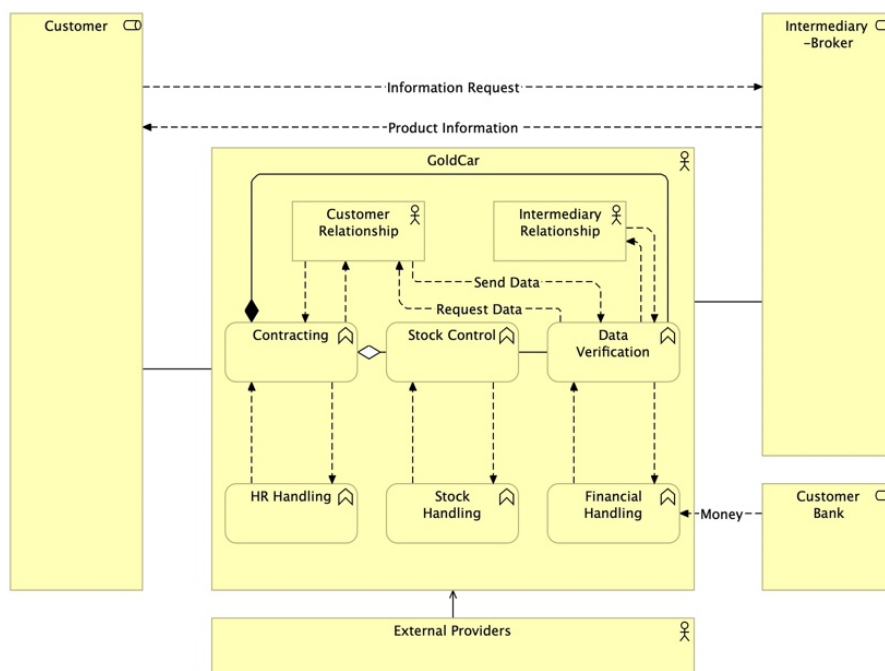


Figure 1. Business Function Viewpoint - Key ‘n Go (AS-IS) View

The association between the broker and the firm shows that the Intermediary only notifies Goldcar of an existing booking without providing the necessary customer details. Lack of customer details prevents the initiation of the Data Verification function that is essential to initiate the CJ.

In terms of the actual product, Key ‘n Go is defined by Goldcar as a hassle-free product, where the customer merely needs to do a set of steps and complete a pre-registration process (provide a Passport/ID Card and driving

license) to activate the booking. It is faster than the traditional model of car hire, safer as it guarantees information integrity and is convenient upon arrival at the airport counters. The below viewpoint in Figure 2 shows the Product Viewpoint of Key ‘n Go – (AS-IS) view, outlining the product value.

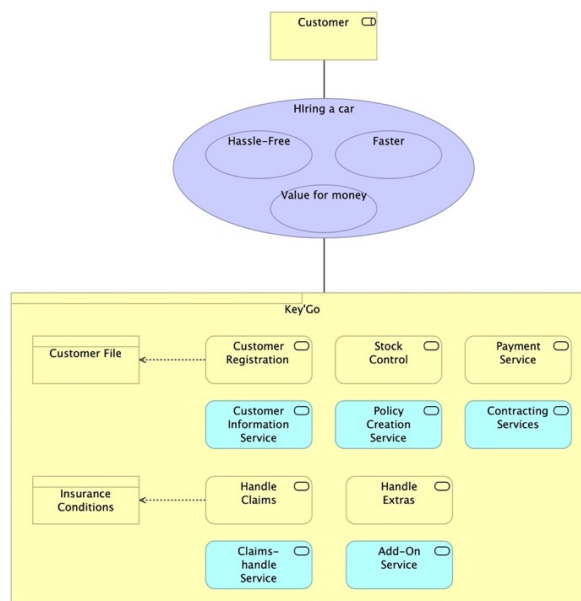


Figure 2. Product Viewpoint Key ‘n Go (AS-IS) View

3 Key‘n Go Case Study Design

This case models the full digital transformation of Goldcar, modelling three different stages of the process - The Traditional Model, the Implementation Migration model and the AS-IS Model. The produced models were based on interviews conducted by the researchers with top and middle management of Europcar and through the conducted observation of Key ‘n Go in action via an ethnographic observation where a researcher took part as a normal participant. The analysis of this case was conducted through the interpretation of the models and their context. The collected data was qualitative, which provided a better understanding of the organisational context, the business processes, the applications that support the processes and the technical infrastructure in place. Table 1 outlines the procedures and protocols for data collection.

Table 1. Case Study Protocol

Scope	Data Collection	Analysis	Interpretation
Descriptive	-Interviews -Observation -Archived Data	Analysis of the case using ArchiMate Full Framework	Interpretation of the results by answering the RQs.

3.1 ArchiMate a framework for innovation

The case study uses ArchiMate Full Framework to demonstrate, describe and illustrate Goldcar’s organisation and to have an overview of the impact of the implementation of Key ‘n Go. The framework is applied as described in detail in the OpenGroup ArchiMate 3.1 Specification guidelines [12]. Firstly, the Core Framework was applied, following

ArchiMate’s Core Framework, with three levels - Business, Application, and Technology. The core layers of the framework are fundamental when modelling an enterprise. Though, when applying ArchiMate’s Full Framework in the case the research goes beyond and contributes by modelling other layers, including – the Strategy layer and the Implementation Migration layer. Relevant aspects of the framework are:

- **The Active Structure Aspect** – as the name indicates represents the structural elements of the architecture. e.g. - business actors, application components, and devices that display actual behaviour [12].

- **The Behaviour Aspect** – displays the behaviour components of the architecture. e.g. - processes, functions, events, and services performed by the actors [12].
- **The Passive Structure** – represents objects on which the behaviour is performed [12].

3.2 Goldcar Traditional Model

The traditional model intends to mirror the reality of the organisation before the introduction of Key ‘n Go. It proposed an internal and external analysis that looked directly at Goldcar as a traditional firm before the digitalisation process. Through this analysis, it was possible to identify the stakeholders, business processes and their interrelations, the applications that support the processes and the technology that gravitates around it all providing integrity to the physical infrastructure. The below Figure 3 is an example of a developed viewpoint, showing the internal and external actors, the roles within the company, the business functions, and the business interfaces for interaction between the customer and Goldcar.

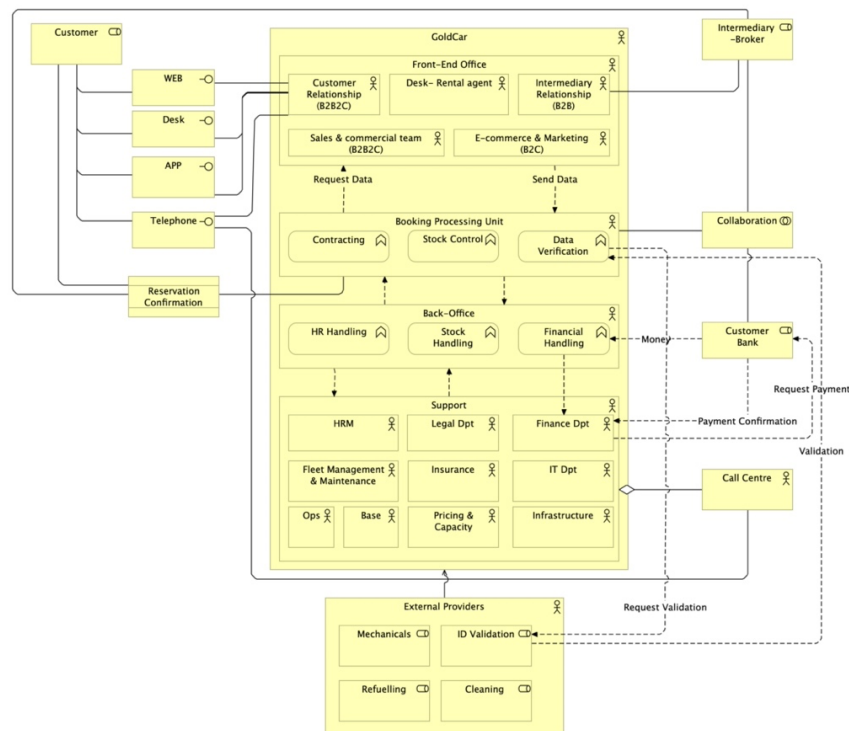


Figure 3. Actor Co-operation Viewpoint, Traditional Model Viewpoint

3.3 Implementation Migration Model

The Implementation Migration model relates projects and programs to the architecture that they want to implement. In Goldcar, the decision has been made to implement a new product – Key ‘n Go, to address the identified pain points and to answer the challenges of innovation and digital transition. The below viewpoint shows the different stages of Implementation.

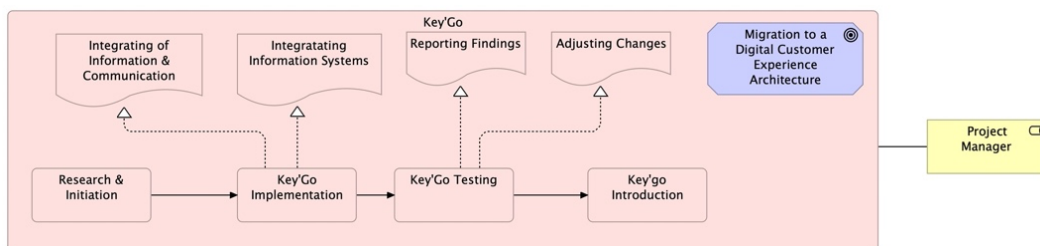


Figure 4. Project Viewpoint

The above Project Viewpoint is primarily used to depict an architecture for change, in other words, it is a map for Project Managers to move from a baseline architecture (Traditional Model) to the target architecture (Key 'n Go). Essentially it models projects to be managed through an existing timeframe by a Project Manager that has the role to manage, govern and deliver the target architecture.

As for every project, it is important to understand what our main goal is, and what the project intends to deliver. As noted in the viewpoint the aim is - migration to a digital CE architecture. For that to be achieved there are four main working packages (series of actions) that need to occur – Research & Initiation, Key 'n Go Implementation, Key 'n Go Testing and Key 'n Go Introduction. These actions occur sequentially, and only one is finished the next one can occur.

Another element that is present in this viewpoint is the deliverable of a particular work package. A deliverable intends to represent the outcome of a particular series of actions, as an example, once Key 'n Go's Implementation is completed then we would have integration of information and communication, as well as integration of information systems.

3.4 Key 'n Go AS-IS view

The AS-IS model reflects the state of the organization right now where it is possible to hire a car through the traditional method and Key 'n Go, essentially Key 'n Go works as a premium no-brainer product where the customer has access to premium coverage insurance, where there are no queues at the desk and where the picking up process is smooth and can be controlled digitally through various touchpoints in a mobile app. The below Figure 5 presents Key 'n Go Business Process.

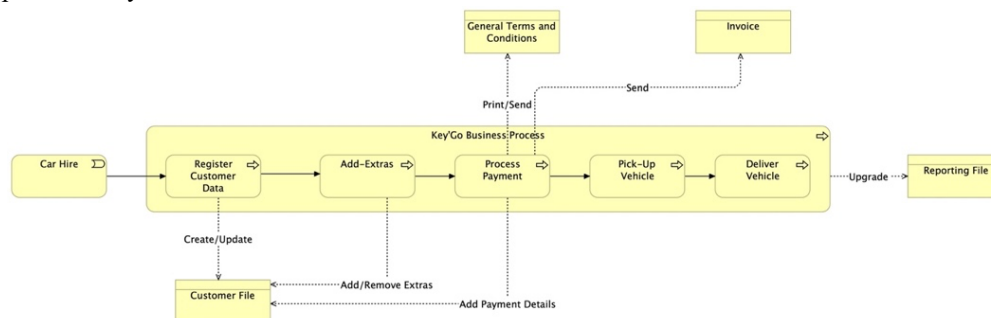


Figure 5. Key 'n Go (AS-IS) - Business Process Viewpoint

It is important to understand the key differences presented in the main business process of Key 'n Go when compared with the traditional model. The main goal of the Key 'n Go digital product remains the same, as the one in the traditional model – hire a car – and doing so by following a set of steps represented here in the above viewpoint as sub-business-processes (e.g. – Register Customer Data, Add Extras and Process Payment).

Acknowledging this and knowing that within the realm of the low-tier business of Europcar, Key 'n Go represents a premium product, and therefore the event of adding or removing car insurance is irrelevant to the product and thus eliminated from the main business process. This is because the product itself already includes a maximum coverage for all customers purchasing Key 'n Go.

It is worth noticing that within the General Terms & Conditions (presented in this viewpoint as an object representation) that are sent to the customer once the payment is processed there is a dedicated section where the customer can access details about insurance coverage. All the other details of the Key 'n Go Business Process remain the same. Note that Key 'n Go and the Car Hire Business Process both exist in the AS-IS reality, essentially a customer can use Key 'n Go to hire a vehicle or the traditional method.

4 Data Gathering

The data for this case was collected in three different ways- interview, observation, and archival data.

4.1 Interviews

The interviews for data extraction were organised in two sets of individual interviews, both were conducted for middle and top management positions within the Europcar group. The first interview was conducted with Gérman Rico, Customer Experience Manager of Europcar Mobility Group, and the last interview was conducted Paulo Pinto Head of Country Portugal at Europcar Mobility Group. It is worth noticing that the head of Country is also a co-author of this paper.

During the first interview, it was possible to identify the main business processes, the main roles within the organisation, the actors behind those roles, and the business function and look at the technical application that is currently in use within Europcar Group and the technological infrastructure that supports those applications.

The second interview focused on the product itself, the main advantages of using Key 'n Go, its weaker points, flaws, and plans for future development of a Key 'n Go 2.0. It was of particular importance the retrieved information regarding the business intelligence side of Key 'n Go, with special importance the relationship between the internal stakeholders, the company, and the customer (B2C), and lastly the difficult relationship between the company and the brokers (B2B and B2B2C scenarios).

4.2 Observation

The research conducted an ethnographic observation experience. Its aim was to understand the product and to have a full-on experience of the Customer Journey of Key 'n Go. The experience took place in Málaga – Costa Del Sol International airport and had the researcher as a normal participant.

To fully test the product the researcher went through all the touchpoints of the Key 'n Go CJ. Firstly, the booking was made using a desktop computer and CJ Goldcar's mobile application was installed to manage the booking and to deal with the pre-registration process. In total the observer identified four channels of interface available-Website, Desk Counter, Mobile Application, and telephone.

Secondly, the observer identified the product value – hassle-free, there were practically no queues and no waiting time for customers using Key 'n Go, good value for money, the product proposes full-coverage insurance and no waiting times at the pick-up points, faster and easy to use. Lastly, the observer was able to try the Key 'n Go machine available at the airport counters and test its usability.

4.3 Archival Data

An analysis of the relevant literature took place at the beginning of this research having the researcher conducted an SLR about Customer Journey and digital services. The idea was to get to know the existing literature about CJ, CE, and digital transition and to understand how CJ aids the process of digital transition and innovation.

It was also paramount to analyse literature outside the scope of the SLR, particularly important were the analyses of the factors that led to the digitalisation process of Key 'n Go, the understanding of how the digital transformation was conducted in the Europcar group and some of the specific characteristics of the industry itself and the entire transformation process, as well as, to identify the type of innovation that was implemented. All of this was patented in the article “Digital Transformation and Business Process Innovation: A Car Rental Company Case Study”[11].

Further literature confirms the importance of the process of digitalisation and innovation, in the article “The digitalization of retailing: an exploratory framework retail sector”, the authors confirm through an exploratory case study that digitalisation is important for the retail industry with findings suggesting that the retailing exchange in several ways including communications, transactions and distributions blurring the distinctions between a product and service [13]. The service-driven mentality of today's industry is an important point to understand how CJ plays an important part in the future digital transition.

5 Findings

This section reports on the findings of the case study by answering the proposed research questions.

5.1 RQ1 – What are the benefits of incorporating an optimised Customer Journey through a digital service?

The identified benefits of CJ – Customer Journey include a CE that is holistic and involves the customer's cognitive, affective, emotional, social, and physical responses to the retailer [1]. Taking the example of our case into practice, the involvement in the CE between the Goldcar and the customer happens throughout an optimisation of business processes depicted in Figure 5, this optimisation contributes to lowering the costs of transition and moving from the traditional model to the digitised model. This brings innovation to the company without drastically changing processes and the physical infrastructure that supports it.

When comparing the Traditional Model view with the AS-IS view, we quickly realise that an optimised CJ such as Key 'n Go benefits the business simply by addressing the identified pain points with an offered CE that inevitably drives the experience to good levels of NPS, thus building rapport in the online community.

The product value is another important benefit of incorporating a CJ in a service. Observing the developed product viewpoint in Figure 2 and contrasting it with the Traditional model we can perceive the added value of the product that can be differentiated when compared with the traditional product. This itself brings flexibility to the organisation that can sell the traditional product to one segment of the market that is more conservative, a digital product to an audience that is apt to use digital and mobile technology.

The reviewed literature by Kojo I, Heiskala M, Virtanen J (2014) regarded that some of the benefits of a CJ experience include – customers buying into a service-process behaviour model, an improvement in service quality, an improvement in customer satisfaction, and an evolved Customer Relationship Management model [14].

5.2 RQ2 – What are the challenges of incorporating a Customer Journey in the context of a B2B relationship with brokers?

Implementing a CJ requires the handling of a few challenges. Firstly, it takes time to move from a Traditional Model of service to a target CJ with a centralised-centric system. If we looked at the model presented in the Integration Migration Viewpoint and take the implementation of Key 'n Go as an example, we can quickly realise that between the baseline and the target there is a time constraint.

Secondly, it is important to understand that implementing good CJ, requires good project management skills to successfully integrate information systems, normalise processes, improve the service, test, and implement the service technology. These challenges are modelled in the Implementation Migration view of Goldcar and in its Project Viewpoint presented above, where the viewpoint concentrates on demonstrating the full length of the projects

Note: efficient project management, though reducing the project length can be time-consuming and might require specialised skilled management to correctly implement the transition to a customer-centric and innovative model of service.

5.3 RQ3 – How can Customer Journey enable and excel as a digital service?

As regarded in “Customer Journeys: A Systematic Literature Review” [12], the concept of CE is shaped during the sum of the interactions between the customer and the service provider [15] this happens through a series of carefully planned touchpoints where the customer interacts with the service provider. To empower a digital service, it is of predominant importance to facilitate and capacitate the digital and physical touchpoints with the capacity to provide the customers with their exact needs and answers.

Any CE journey starts before and after the transaction of a service between the customer and the provider. Also, any CJ is composed of carefully planned touchpoints permitting a journey through different steps and points of

contact. Another characteristic of a CJ is the desirable targeted service (e.g.- renting a car, receiving a package/product, etc.), it needs to meet and even outdo the customer expectation [15]. Therefore, to excel in any digital service, it is advisable to enable good business processes and carefully think about the communication between internal nodes and stakeholders, and ultimately increase the quality of each touchpoint.

5.4 RQ4 – How to overcome the inhibitors of a Customer Journey?

The main inhibitor of a customer journey is the unpredictability of the stakeholders at each touchpoint. The conjugation of multiple stakeholders requires coordination between parties to obtain fluidity in the journey.

Looking at Goldcar, specifically its organisational aspect, we observe the key issue in the relationship between the broker and the firm. The lack of communication between nodes occurs due to the economic advantage that the broker has in withholding customer details relevant to the business (e.g. - e-mail address). Without this information, the CJ cannot begin, and the circle of a transaction (Customer -Service provider) is interrupted.

To overcome the illustrated problem, it is recommended that both parties reach an agreement through a serious process of negotiation where it is demonstrated to both parties that both are to gain with an agreed partnership. The economic argument of sharing information is valid, because both parties have more to gain when sharing this information, as client satisfaction would rise, the service will be better and the final perception of either the broker or Goldcar will remain intact.

5.5 RQ5. – Can CJ contribute to innovation and set the ground for the digitalisation of an organisation?

There is no significant model to implement Digital Transition (DT) and Innovation in the organisation, though it is evident that today's enterprises thrive with new forms of consumption with technology being incorporated into our daily life introducing new ways of conducting business [16] Business have move from traditional platforms that were technology dependent to mobile technology, where the transformation of processes is much more important [16]. As mentioned by Zhang, Xuejie, et al. (2020) when exemplifying the banking sector call centre activity, companies are increasingly competing for customer loyalty, with banks having call centres to build a sense of trust and increase customer support [6]. The problem arises when there is too much demand in the call centre and the customer must wait for hours, being this an identified pain point in that study. The authors argue that the solution is a personalised digital service. If drawing a parallel with this case, Goldcar also addresses its pain-points using customise digital journey - Key 'n Go - an answer and service optimisation. The service optimisation can be seen throughout the model ArchiMate architecture views developed with special emphasis on the AS-IS model.

The contribution of CJ to innovation reflects a model of user behaviour as it plays the essential role of mapping touchpoints that build an optimised service and subsequently the enterprise architecture that supports it. The authors Kojo I, Heiskala M, Virtanen J (2014) report on the evolution of self-reporting applications that study human behaviour that aid in tailoring user needs, referring that "CE pertains to customer satisfaction and loyalty has long been recognised by service organisations" [14]. Optimised services are at the centre of the engagement of customers in a personal, memorable, emotional, physical, and intellectual way of an experience-centric service [14], putting the CE at the centre of an equation that sets the ground for new processes, new services, and an innovative enterprise.

6 Conclusion

This research used the Archimate Full Framework to depict a digital transformation within the car-hire business and show how the advent of digitalisation had a good impact on an organisation. The case was of descriptive nature and had into consideration the various aspects of the analysed firm to conduct an analysis of the transformation of processes, services, and business roles. This case contributed to illustrating the importance of CE, CJ, and their role as a key transformative aspect of innovation.

There were two main limitations for the conduction of the analysis of the first one had to do with the SLR context conducted to support this case study and its limitations - the lack of scientific articles in the field, which resulted in a broad search string and the conduction of multiple searches to arrive at a satisfactory result. Future research should concentrate efforts on developing a TO-BE model for Goldcar that bypasses the identified problem of lack of communication between nodes of the firm and the digital broker.

References

- [1] K. N. Lemon and P. C. Verhoef, "Understanding customer experience throughout the customer journey," *J Mark*, vol. 80, no. 6, pp. 69–96, Nov. 2016, doi: 10.1509/jm.15.0420.
- [2] H. Nam and P. K. Kannan, "Digital Environment in Global Markets: Cross-Cultural Implications for Evolving Customer Journeys," *Journal of International Marketing*, vol. 28, no. 1, pp. 28–47, Mar. 2020, doi: 10.1177/1069031X19898767.
- [3] R. Aunkofer, "Connecting the World and Reinventing Customer Centricity," *NIM Marketing Intelligence Review*, vol. 10, no. 2, pp. 54–59, Oct. 2018, doi: 10.2478/gfkmir-2018-0019.
- [4] A. Micheaux and B. Bosio, "Customer Journey Mapping as a New Way to Teach Data-Driven Marketing as a Service," *Journal of Marketing Education*, vol. 41, no. 2, pp. 127–140, Aug. 2019, doi: 10.1177/0273475318812551.
- [5] M. Schacht, G. Schuh, and J. Frank, "Digital shadow of customers in the manufacturing industry," in *Proceedings - 2021 8th Swiss Conference on Data Science, SDS 2021*, Jun. 2021, pp. 52–53. doi: 10.1109/SDS51136.2021.00016.
- [6] IEEE Computational Intelligence Society, International Neural Network Society, Institute of Electrical and Electronics Engineers, and IEEE World Congress on Computational Intelligence (2020: Online), *Personalized Digital Customer Services for Consumer Banking Call Centre using Neural Networks*.
- [7] M. Heuchert, "Conceptual modeling meets customer journey mapping: Structuring a tool for service innovation," in *Proceedings - 21st IEEE Conference on Business Informatics, CBI 2019*, Jul. 2019, vol. 1, pp. 531–540. doi: 10.1109/CBI.2019.00068.
- [8] W. Wetzlinger, A. Auinger, H. Kindermann, and W. Schönberger, "Acceptance of personalization in omnichannel retailing," in *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 2017, vol. 10294 LNCS, pp. 114–129. doi: 10.1007/978-3-319-58484-3_10.
- [9] C. Mele and T. Russo-Spena, "The architecture of the phygital customer journey: a dynamic interplay between systems of insights and systems of engagement," *Eur J Mark*, vol. 56, no. 1, pp. 72–91, Jan. 2022, doi: 10.1108/EJM-04-2019-0308.
- [10] W. 'Vergauwen and D. 'Rodriguez, "France's Europcar to acquire low-cost rival Goldcar," *Reuters*, Jul. 19, 2017. <https://www.reuters.com/article/us-goldcar-m-a-europcar-groupe-idUSKBN19A0NM> (accessed Oct. 16, 2022).
- [11] S. B. Gomes and M. Mira Da Silva, "Digital Transformation and Business Process Innovation: A Car Rental Company Case Study." [Online]. Available: https://is.gd/DTnI_BPM_Onto_Model.
- [12] The Open Group, "ArchiMate® 3.1 Specification, a Standard of The Open Group," *The Open Group*, 2019.
- [13] J. Hagberg, M. Sundstrom, and N. Egels-Zandén, "The digitalization of retailing: an exploratory framework," *International Journal of Retail & Distribution Management*, vol. 44, no. 7, pp. 694–712, Jan. 2016, doi: 10.1108/IJRDM-09-2015-0140.
- [14] I. Kojo, M. Heiskala, and J.-P. Virtanen, "Customer Journey Mapping of an Experience-Centric Service by Mobile Self-reporting: Testing the Qualiwall Tool," 2014.
- [15] A. Følstad and K. Kvale, "Customer journeys: a systematic literature review," *Journal of Service Theory and Practice*, vol. 28, no. 2. Emerald Group Holdings Ltd., pp. 196–227, Mar. 06, 2018. doi: 10.1108/JSTP-11-2014-0261.
- [16] S. B. Gomes, F. M. Santoro, M. M. da Silva, and M. E. Iacob, "A reference model for digital transformation and innovation," in *Proceedings - 2019 IEEE 23rd International Enterprise Distributed Object Computing Conference, EDOC 2019*, Oct. 2019, pp. 21–30. doi: 10.1109/EDOC.2019.00013.