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## **The Impact of Online Payments on Employee Benefits**

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Master in Management

Supervisor:

Doctor Renato Telo de Freitas Barbosa Pereira, Assistant Professor,  
ISCTE Business School

October, 2020



BUSINESS  
SCHOOL

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Department of Marketing, Operations and General Management

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## Abstract

### Português

Os Benefícios Extrassalariais têm vindo a ganhar relevância como pratica adotada na Gestão de Recursos Humanos. A presente tese de mestrado discute a importância dos Benefícios Extrassalariais, na perspetiva dos colaboradores das empresas, com o objetivo de contribuir para o debate teórico sobre o tema. Adicionalmente, reconhecendo que uma grande parte dos benefícios extrassalariais são utilizados como meio de pagamento, foi também considerada a evolução dos meios de pagamentos, bem como os seus possíveis impactos na utilização dos Benefícios Extrassalariais.

Em termos teóricos, a relevância, o suporte através do qual são distribuídos e os tipos de benefícios extrassalariais mais valorizados foram discutidos.

No que concerne às implicações praticas da presente investigação, foi explorada a intenção de adotar meios de pagamento online para o uso dos benefícios extrassalariais – nomeadamente, dos benefícios relacionados com a Educação. Adicionalmente, o presente projeto explora e define o *service mix* mais adequado, da perspetiva de todos os *stakeholders*.

A presente investigação permitiu aferir que os colaboradores das empresas valorizam grandemente os Benefícios Extrassalariais como parte do seu pacote salarial. Além disso, aferiu-se ainda que estes utilizadores demonstram uma clara intenção de adotar meios de pagamento online para a utilização dos seus Benefícios Extrassalariais, particularmente para a utilização dos benefícios relacionados com a educação.

As conclusões da presente investigação estão condicionadas a território português, não só pelo contexto socioeconómico, mas também pelo contexto legal que lhe está subjacente. Deste modo, não são aconselhadas extrapolações para outras geografias.

Este projeto foi realizado em parceria com a Edenred Portugal.

### **Keywords:**

Benefícios extrassalariais; Gestão de Recursos Humanos; Compensação salarial; Pagamentos online; Evolução tecnológica; Meios de Pagamentos.

**JEL Classification System:** M12, O33

## **English**

Employee Benefits have been earning increasing relevance as a Human Resource Management practice. The present research discusses the importance of the topic from employees' perspective, in order to theoretically and practically contribute to debate on this field. Furthermore, acknowledging that many of employee benefits are used as a payment method, it has been also relevant to consider means of payment evolution, and its possible impact on Employee Benefits.

On regards to theory, the importance of employee benefits, the relevance of the format for its distribution and the most valued employee benefits are discussed.

Concerning practical implications, employees' intention to adopt online forms of payment for the use of Employee Benefits is explored – particularly for the use of Education Employee Benefits. Moreover, this in-company project explores and defines the most adequate service-mix, from all stakeholders' perspectives.

The most relevant conclusions from this research highlight the high value employees attribute to Employee Benefits, particularly to those related to education and childcare. Also, it is clear a preference for online forms of payment for its distribution and use, from all stakeholders' perspective. Furthermore, employees reveal a clear intention to adopt online forms of payment for the use of Education Employee Benefits.

The research is limited to Portuguese context, conditioning extrapolations for other geographies, considering the specific legal context underlying Employee Benefits topic.

This project was developed in partnership with Edenred Portugal.

### **Keywords:**

Employee Benefits; Human Resource Management; Employee Compensation; Online Payments; Technological evolution; Payment Methods.

**JEL Classification System:** M12, O33

## Executive Summary

Employee Benefits relevance has a Human Resources Management practice has been earning ground. Over the past century, the topic evolved along with the socioeconomic context and the work force needs and expectations. Also, the technological revolution during this period has impacted the Employee Benefits environment.

Despite its known relevance, theoretical research on Employee Benefits field is scarcer. Furthermore, no research concerning the relation of the topic with the emerging payment technologies - particularly online payment methods - is available. Considering this, the present research attempts to contribute to fulfill this theoretical gap, by evaluating the impact of payments technology, particularly online payments, on the use of Employee Benefits.

Moreover, the present work aims to contribute to solving the management problem of assessing not only employees' intention to adopt online forms of payment for the use of Education Employee Benefits, but also to identify the most adequate service mix for all active stakeholders – employers, employees and merchants.

Acknowledging the complexity of Employee Benefits context, the approach took into consideration all stakeholders to topic, them being the government, the employers, the employees and the merchants, where Employee Benefits can be used. Government participation on this topic consists on the creation of a legal framework, based on the socioeconomic context, that makes Employee Benefits relevant for the other stakeholders. Regarding this, law regulating this topic has been extensively reviewed.

In order to achieve the above-mentioned goal, the research was designed to comprise both secondary and primary data. Considering previously referred absence of research regarding the relation of Employee Benefits and Online Payments, literature has been reviewed on each field individually. Prior research on the topic Employee Benefits defined it “as all the incentives, aside from the payment for the worked time, that employers provide to employees” (Milkovich and Newman, 2005). On regards to Online Payments, previous research has defined it as the process of finance or payment mainly using the medium of internet (UNCTAD, 2001).

The collection of primary data, by the means of empirical research addresses all stakeholders apart from the government. Firstly, focused on employees' perspective on the topic, a focus group has been held. From this session, the most relevant topics for an online survey to users were withdrawn. The results obtained from this questionnaire were considered for the development of prototype ideal service-mix. The prototype service-mix was tested in six workshops with a total of twenty-one companies acting in Portugal. This prototype was tested both from employees and

employers' perspective. At last, an informal breakfast with merchants was carried, in order to assess their needs and constraints, as well as the fitting to the prototyped solution.

The theoretical contribution of the present research emphasizes the importance employees attribute to Employee Benefits, as an element of their compensation package. Present research results show that employees recognize high value to Employee Benefits, rating its importance as 4.6 out of 5. Additionally, regarding the relevance of the Employee Benefits distribution support, employees rate it as 4.4 out of 5. These ratings clearly reveal the importance of these benefits and of the support through which they are distributed.

These findings corroborate previous research from Williams et al. (2008) and Torre-Ruiz et al. (2017) regarding the importance and impacts of Employee Benefits on overall employee satisfaction. Moreover, the importance attributed to the support under which the EB are distributed, enhances benefit administration satisfaction stance as one of the three dimensions contributing to overall employees' benefit satisfaction.

The last theoretical contribution from the present research concerns the most valued EB, having been obtained that Health insurance, Bonus Performance and Education EB are both the most attributed and the most valued Employee Benefits, apart from the democratized meal EB.

Focusing the practical contribution of this work by responding to the above-stated management problem, it has been assessed that employees' reveal a clear preference for online forms of payment for the use of their Employee Benefits. Additionally, they demonstrated a very high intention to adopt online payment methods for the use of Education Employee Benefits, revealing a clear preference for mobile based formats, rather than web portals. Employees argue the preference for online payments with time and resources saving, flexibility, convenience, improved user experience and risk mitigation (linked to traditional existing paper vouchers).

At last, having assessed the importance of Education Employee Benefits and the preference and intention to adopt online forms of payment for its use, the ideal service mix has been prototyped and tested. Considering the three most partaking stakeholder for this business, the service mix construction was addressed in three perspectives: Clients (employers), Users (employees) and Merchants (affiliate education institutions). The detail of the service mix for all partaking stakeholders can be consulted in fifth chapter "Project design and implementation".

Concerning present research limitations, it is relevant to consider that the investigation is limited to Portuguese territory. Acknowledging the legal frame grounding Employee Benefits subject, extrapolations to other geographies can lead to invalid conclusions.

Another limitation for the present in-company project involves the socioeconomic context under which it has been developed. During the period of research, a global pandemic -coronavirus - has



settled. Since its ending is still unknown, the possible impacts to the research cannot be outlined. Nevertheless, it is relevant to consider that impacts of this pandemic on economy and work force behavior are expected in the near future.

At last, it is relevant to state that the present in-company project has not been implemented to the moment. Having this, no implementation results are yet available.



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### I. Problem Definition

Prior to 1900, the concept of Employee Benefits was not a topic. The foundation developed for employee benefits in the past, permitted the 20th century to bring a significant growth in this field. Employers - both in the private and public sector - started implementing strategies aimed at meeting the needs of their workforce.

Fast forward to the digital revolution of the 21st century, and we are witnessing a new wave of transformation. Employers are reviewing and evaluating their compensation program. Likewise, we are witnessing a growing number of companies evolving their Employee Benefits package.

Employee Benefits can be explained as the programs provided by employers to increase the monetary compensation received by an employee, for the job performed. Traditionally most employee benefits (e.g. meal vouchers, education vouchers, bonus vouchers) were handed through paper checks. The evolution of payment methods drove the format evolution to cards and digital vouchers.

In order to remain competitive in an evolving job market, it is imperative that companies elaborate employee benefit plans responding to workforce changing needs. This change in workforce demographics and characteristics, deeply related to millennials, raises the need to provide up to date technological payments methods, for the use of Employee Benefits. Furthermore, Employee Benefits issuing institutions, must evolve in order to provide companies with up to date technologies, for the employee benefits they provide to their work force.

In order to better understand the potential impact of the most recent payment methods in the usage of employee benefits, it is relevant to consider its evolution.

Over the last 30 years, payment methods have evolved from the credit card terminal – introduced by Visa – to the online payment services. The raise of online payments through technologies such as “e-wallet”, “e-cash”, “NFC technology” and several others, opened a door to a new world of possibilities of payment methods, for the usage of corporate benefits.

Identically to other Human Resources Management (HRM) policies, Employee Benefits have been influenced by cultural, social and law forces (Kaufman, 2004). Despite all efforts of theoretical research to explain the factors influencing employees’ satisfaction with overall compensation package and particularly the satisfaction with benefits (in all its dimensions), empirical research on the field is scarcer (Arnold and Spell, 2006). Previous studies are mainly focused on North American firms, with studies focused on continental Europe being scarcer (Baeten & Verwaeren, 2012), limiting the application of conclusions to Europe.

The present in-company project proposes to contribute to theoretical and practical research. In the theoretical dimension, it aims to shorten the above identified research gap, concerning the facts

influencing employees' satisfaction with Employee Benefits. In the practical dimension, it intends to address the management problem of identifying employees intention to adopt online forms of payment for the use of Education Employee Benefits, as well as the most adequate service mix, from all stakeholders perspective.

## II. Literature Review

### i. Employee Benefits

#### a. Concepts and evolution

During the 20<sup>th</sup> century, employers elevated employees' economic security by providing benefits in addition to direct compensation (Dulebohn et al., 2009). Besides compensation, benefits comprise all other incentives provided by the employer to its employees (BLS, 2005). In agreement with this definition of employee benefits, Milkovich and Newman (2005) defined them "as all the incentives, aside from the payment for the worked time, that employers provide to employees".

In an era of prolonged wage stagnation in many economies, an increase in the relevance of employee benefits has been noticed. Since 1990s, the proportion of benefits in employees' remuneration has been growing, with estimates suggesting they represent 20 to 30% of total compensation costs in the USA, UK and Australia, and 10 to 20% in several Western European countries (Shields et al., 2016; Dulebohn et al., 2009). Additionally, a report about job satisfaction and engagement conducted by the Society for Human Resource Management (SHRM) showed that, in 2015, American employees considered benefits among the top three factors that determined their job satisfaction, and the second most important reason for staying in or leaving their current organization (SHRM, 2016).

Several factors have motivated employers to attribute benefits to its employees, comprising self-interest of the decision makers, unions' bargaining power, tax advantages, the need to stay competitive and retain talent. According to Harris and Fink (1994), the rational underlying employers' strategy to voluntarily provide benefits indicates that benefits offering is associated with employees' satisfaction, which in its turn is associated with attitudes and behaviors that serve employers interests. In agreement with this line of thinking, Williams et al. (2002) advocated that employees' satisfaction, and precisely with their rewards, acts as a key factor on their affection towards the organization, and consequently influencing their behavior.

The reasoning implied, based on social exchange, considers that when employees are satisfied with the provided benefits, they are committed to and remain with the employer, performing their jobs well, which in its turn conducts to strong organizational performance (Dulebohn et al., 2009).

#### b. The impact of employee benefits on satisfaction

Based on Miceli and Lane (1991) definition of compensation satisfaction, it "is the amount of overall positive or negative affect (or feelings) individuals have towards their pay" using the term "pay" broadly to include wages, salaries, and benefits.

Furthermore, scholars highlight the fact that employees' attitudes and behavior are influenced not only by their monetary pay but also by other benefits that complement their salary (Milkovich & Newman, 2005; Schlechter, Thompson, & Bussin, 2015).

However, the few studies which have focused on benefit satisfaction, have come to conflicting conclusions, mainly when trying to explain the influencing factors and consequences of benefit satisfaction (Jawahar & Stone, 2010). One of the most consensual justifications for the conflicting results of previous studies, concerns that when analyzing the consequences of compensation satisfaction, scholars have not considered its multidimensional nature (Dulebohn et al., 2009). For instance, research by Heneman and Schwab (1985) did not include satisfaction with benefit procedures in their model. Also, a few years later, Dreher et al. (1988) investigated employee satisfaction conceptualizing it as a unidimensional notion, only taking into consideration the value (or level) of benefits.

Later, concerning the abrupt changes in the means of benefits delivery, like benefits flexible programs, Miceli and Lane (1991) argued that benefit satisfaction is composed of two constructs: benefit level satisfaction and benefit system satisfaction. Benefit level satisfaction referring to the satisfaction of employees with the value or amount of benefits received, and benefit system satisfaction as "how well the system by which the benefits are administered results in a favorable reaction by the employee". Afterwards, Williams et al. (2002) conceptualized and validated Miceli and Lane (1991) proposal.

As an improvement to prior research and concerning the identified research gaps, Williams et al. (2008) established that benefit system satisfaction comprises both satisfaction with the way benefits received by employees are determined (benefit determination satisfaction) and the way in which such benefits are administered/ delivered (benefit administration satisfaction). Regarding evolutions on employee benefits satisfaction, three dimensions are currently considered: benefit level satisfaction, benefit determination satisfaction, benefit administration satisfaction.

Contemporary research from Torre-Ruiz et al. (2017) established that the three dimensions of benefit satisfaction are positively and significantly related to organizational commitment by the mediating effect of perceived organizational support (POS).

For the purpose of the present research, focus remains on benefit administration satisfaction, argued by Williams et al. (2008) as the dimension of employees' concern with the policies and procedures used to administer their benefits, namely the information they are provided about their benefits and the ease of use of their benefits.

In line with the above mentioned, research from Torre-Ruiz et al. (2017) exposed the relevance of the information provided to employees about the benefits they receive, the importance of the



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effectiveness of the system that provides the benefits and the importance of the efficiency with which benefits are provided, from employees' perspective.

### c. Work-life benefits (WLB)

As acknowledged by Dulebohn et al. (2009), the most common employee benefits prevail pensions, health care and work-family benefits (also known as work-life benefits). For the purpose of this research, focus will be maintained on work-family benefits. Considering the challenge for employees to achieve a work-life balanced condition, it would be fair to assume that WLBs are valued by them (Firfiray and Mayo, 2016).

Martocchio (2003) argued that work-life benefits are designed to “promote effective coping skills and educational opportunities for employees and, sometimes, family members”. In other terms, they have the purpose to address the conflicting demands between work and personal life.

Although they are relatively recent as a mean for delivering employee benefits, work-life incentives have come to represent a potentially great source of differentiation between organizations in terms of discretionary benefits, becoming a source of potential value for the attraction and retention of talented workforce (Dulebohn et al., 2009).

Research by Bloom and Van Reenen (2006) and Dupre and Day (2007) expose that WLB policies can improve firm performance, while assuming that firm performance neither negatively nor positively influences the implementation of WLB policies. Adame- Sánchez and Miquel-Romero (2012) research corroborate this finding, stating that the implementation of WLB policies has a significant relationship with managers' perceptions of market or business outcomes.

Empirical work by Firfiray and Mayo (2016) demonstrated that work-life benefits have a very high positive relation with person organization (P-O) fit theory and job attractiveness, comparing to the moderate positive relation of health-care benefits with P-O fit theory and organizational attractiveness.

	P-O fit theory	Organizational attractiveness
Health care benefits	Moderate positive relation	Moderate positive relation
Work-life benefits	Very high positive relation	Very high positive relation

Figure 2.1- Summary of results from Firfiray and Mayo (2016) empirical research.

Although the focus of the hereby in-company project concerns education employee benefits, no relevant research for the subject was retrieved. Considering this, the academic basis for the present

research is grounded by general research on employee benefits field and more specific on work life benefits.

Additionally, it is relevant to consider the legal context behind employee benefits. The law grounding these corporate benefits differs widely among countries. Having this, one can conclude that the impact on social context also varies considerably from country to country.

Further information regarding this topic is expected to be obtained through empirical research, in order to obtain responses for the outlined research questions.

## **ii. Online payments**

### **a. Concepts and evolution**

As an attempt to tackle the weaknesses of traditional payment systems in the environment of modern commerce, the Electronic Payment Systems (EPS) emerged (Panurach, 1996). An EPS can be generally defined as “any transfer of funds initiated through an electronic communication channel” (Kalakota and Whinston, 1996).

Further developments on EPS emerged, namely Internet Payment Systems (IPS), which is, by its definition, a sub-type of the referred payments class. According to Shon and Swatman (1998), IPS can be defined as “any conventional or new payment systems which enables financial transactions to be made securely from one organization or individual to another over the internet”.

For the purpose of this project and according to the E-commerce and Development Report 2001, by the United Nations (UN), an online payment is defined as “the process of finance or payment mainly using the medium of internet” (UNCTAD, 2001). In line with this evolution, some online intermediates succeeded in fulfilling the modern needs of online merchants and consumers (Dahlberg et al. 2008).

### **b. The impact of online payments in global economy**

The rise of online payments prompts significant impacts on global economy. Data on the report The Economic Impact of Online Payments, published by Deloitte (2013), indicates that, on 2012, the economic impact of online payments European Union (EU) GDP is estimated to be €125 billion.

As reported by McKinsey & Company on Global payments 2018: A dynamic industry continues to break new ground (2018), online payments are growing rapidly, with a global volume exceeding \$3 trillion in 2017 (thirteen percent of total commerce) and is expected to more than double by 2022.

### **c. The growth of online payments in Portugal**

As technology growth increases, also escalate the possibilities to expand businesses by taking advantage of it. According to the study Online Consumer Payment Analytics (SIBS, 2015), in the past

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five years, internet transactions in Portugal have risen by 1.5 billion euros, an average of 375 million euros per year.

In 2014, Portugal online transactions totalled around three billion euros on, an increase of 10.4% compared to the previous year (SIBS, 2015).

Evidence from the Study of the means of online payment in the Portuguese population (2019) revealed that the most used online payment means are Paypal, heading the list, followed by credit cards and bank transfers (Castro, et al., 2019)

### **d. Trust and security in online payments**

The dematerialization of payments has brought several security and trust issues. Furthermore, security and reliability (trustworthiness) are considered the most important determinants in online payments (Shon and Swatman, 1998).

Corroborating this information, research by Oney et.al (2017), advocates that perceived security and perceived trust were found as important determinants for the use of online payments. Moreover, prior finding by Kim et al. (2009), Miyazaki and Fernandez (2000) and Pavlou and Gafen (2004) are consistent with these facts.

According to Featherman and Pavlou (2003), perceived risk can be defined as “the potential for loss in the pursuit of a desired outcome of using an e-service”.

Opposing to that, Yang et al. (2015), in line with prior research by Mayer et al. (1995), defined perceived trust in the field of online payments as “a psychological state of leading to the willingness of customers to perform payment transaction over the internet and expect the payment platform fulfilling its obligations, irrespective of customer’s ability to monitor or control payment platform’s actions”.

Earlier research concerning the effects of perceived trust and perceived risk in online payments argues that: both technical protections and security statements are significant factors for the improvement of consumers’ perceived security. Additionally, consumers’ perceived security is positively related to its perceived trust and in online payments use. Finally, consumers’ perceived trust also has a positive impact on EPS use (Kim et al., 2009). Furthermore, these findings are consistent with prior research by Culnan et al. (1999) and Miyazaki et al. (2000).

Current research on this topic, by Oney et al. (2017) presented consistent results with the above stated, presented in the table below.

	Perceived Security	Perceived Trust
Technical protection	H1 Positive effect	H2 Positive effect
Transactions procedures	H3 NOT Positive effect	H4 NOT Positive effect
Security statements	H5 Positive effect	H6 NOT Positive effect
Past-experience w/EPS use	H7 Positive effect	H8 Positive effect
	Positive effect	Positive effect
	Online Payments	

Figure 2.2 - Summary of results from Oney et al. (2017) empirical research.

Contemporary research on online payments security (Saxena et al., 2019), advocates that the most relevant threats involved in internet-based means of payment are phishing, ransomware, smart cities/ IOT (security and privacy issues), cyber espionage and Distributed Denial of Service (DDoS).

In consideration of the above-mentioned security concerns, arises the requirement for privacy and security measures and policies for prevention. In line with this concern and as an attempt to decrease risk comes the two and three factors authentication. Two factors authentication can be explained as the “security mechanism which uses two of the three factors of credentials for authentication” (Saxena et al., 2019), working with two separate validation mechanism: physical validation token and logical code or password. An ATM machines is a solid example of a two-factor authentication, which requires both valid ATM card and PIN.

As an advance for authentication, it can be performed appealing for three separate factors. This three levels authentication is typically drawn from the categories’ inherence, knowledge, possession (Saxena et al., 2019). For example, if one wants to get access to private information in a platform over the internet, the first authentication step may involve biometric verification, by the use of fingerprint, voice or face recognition. The second authentication step, requires the information in the category of knowledge, asking for user’s personal specific authentication, for instance a PIN, user ID. At last, the third factor authentication, a verification within the category of possession, requires the user to introduce a one-time token passcode (or a similar) in order to gain access.

Efforts from the EU to create safer and more innovative online payments, and to better protect consumers when they pay online, led to the implementation of the Payment Services Directive (PSD2) (Możdzyński, 2017). Overall, and in line with the authentication methods above mentioned, the purpose of the new Regulatory Technical Standards by EU is to increase online payments security to a minimum three factor authentication verification and to stimulate competition in the electronic payments market (Możdzyński, 2017).

**e. Intention to adopt online payments**

Based the well-known Diffusion of Innovation Theory (Rogers, 1995), five innovation characteristics that affect adoption can be drawn: relative advantage, complexity, compatibility, trialability and observability.

Further research argues that factors like intentions, attitudes, trust and perceived risk are critical for online shopping adoption (Bélanger and Carter, 2008; Dinev and Hart, 2006; Featherman and Pavlou, 2003; Kim and Benbasat, 2006; Lopez-Nicolas and Molina- Castillo, 2008; McKnight and Chervany, 2002; Shen and Chiou, 2010). It is legitimate to assume that the above-mentioned factors are also critical in the area of online payments, as they are a key part of e-commerce (Yang et al., 2015).

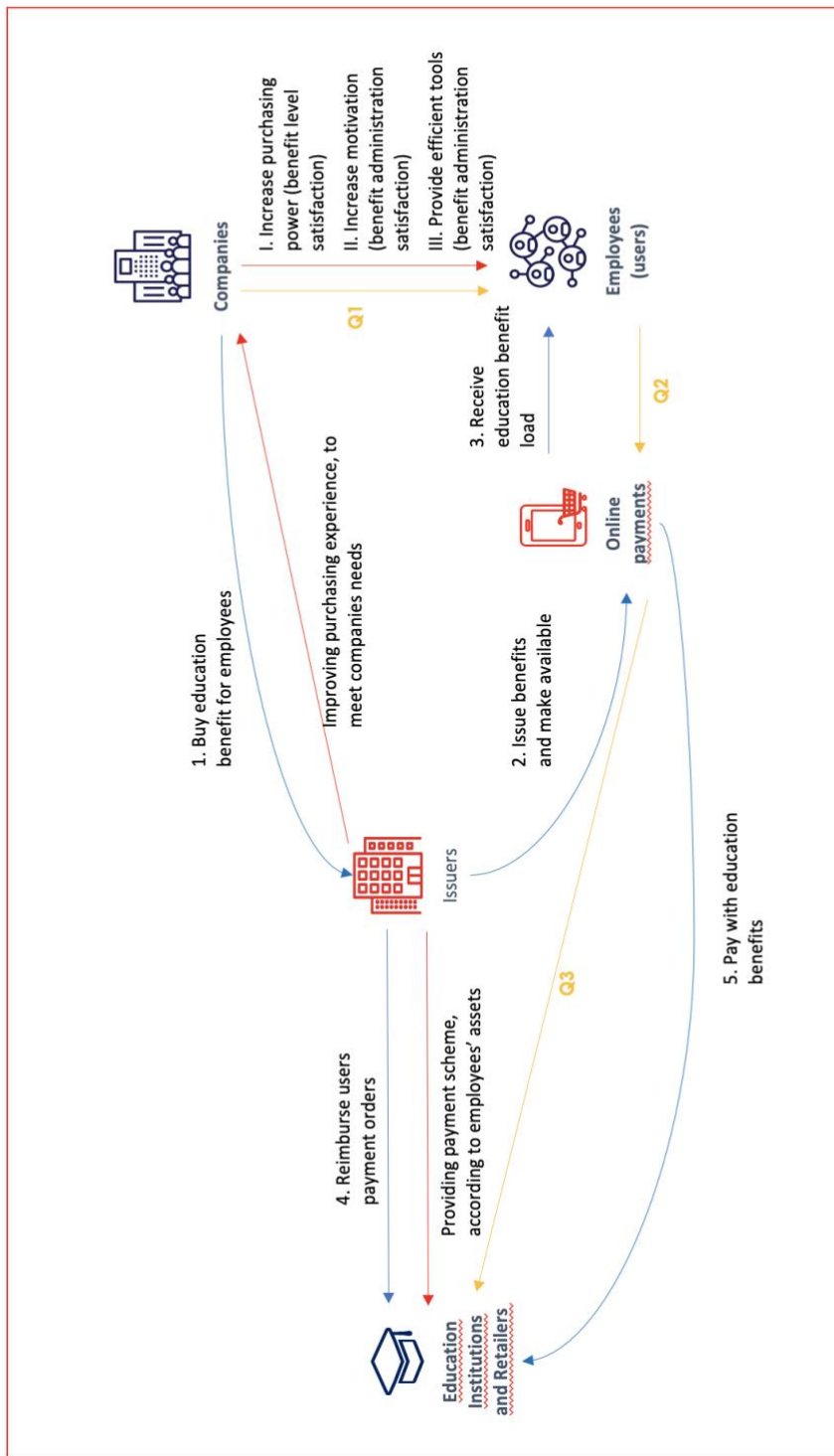


Figure 2.3 – Resume figure of Literature review conclusions and its connection to research questions.

### III. Project Methodology

#### i. Research context

The present research aims to analyze beneficiaries' intention to adopt online forms of payment for the use of education employee benefits. The highest goal of this project is to identify the technological and user experience characteristics that are most valued by the employees, regarding employee benefits. Nevertheless, the approach also takes into consideration the interest of other relevant stakeholder on Employees Benefits business, them being the employers – from now on referred to as clients – and the affiliate education institutions and retailers – from now on referred to as merchants. Hereafter, clients' employees are referred to as users.

To better understand the market, it is important to consider the five most impacting stakeholders, them being:

- The government, as the entity framing the market, and providing the regulation for the usage of education employee benefits;
- The issuers, as the companies, as Edenred, placing these solutions on the market;
- The clients, using these solutions to create attractive and employee-oriented salary packages;
- The users, as the end users of this solutions;
- The merchants, as the education organizations and retailers accepting these solutions as a form of payment.

Since its establishment, employee benefits have always been subject to very restrict and specific law boundaries, which vary between countries, even inside the European Union. At a deeper level, Education Employee Benefits are framed by strict legislation, established early by the Portuguese government, by the means of national budget. Concerning this, legislation was thoroughly reviewed, in order to identify the legal conditions enclosing this online payment solution ideation.

The study of the legal context under which employee benefits can be used, highlights the bellow presented mandatory characteristics to be present in the ideal service mix, according to DL 26/99 from Diário da República Portuguesa (1999). The solution must entail:

- The expression “Vale Social”;
- The identification of the issuing entity;
- Space destined to the identification of the employing entity;
- Space destined to the identification of the affiliate entity in which the benefits is to be used;
- Space destined to the identification of the user;
- Expiring date;

- Number and issuing date.

Considering the above stated legal frame, the target for the present research is limited to Portuguese individuals.

Another conditioning factor for the present research is related to the social and economic circumstances under which part of the data was collected. A virus known by the name of Covid-19 took over the world on the early month of the present year, caused profound impacts on the global economy and consequently, in the country under study, Portugal. Despite all the negative effects related to this virus, UNCTAD (2020) highlighted the role of Covid-19 as a driving force increasing technology adoption, leading to a faster transition to the announced digital economy.

## **ii. Research design**

The present research aims to evaluate beneficiaries' intention to adopt online payments for the use of education employee benefits and the most suitable service mix, according to nowadays markets' needs, from all stakeholders' perspectives.

Attempting to explore this problematic, the following research problem was defined: Do online payments impact employees' preferences, in Employee Benefits business?

As a practical form to solve the above mention research problem, the below presented research questions were settled:

**Q1:** Do employees prefer digital payments for the use of their corporate benefits?

**Q2:** Do employees intend to adopt digital payments for the use of education employee benefits?

**Q3:** Which are the most valued characteristics for an education employee benefit digital payment solution, in clients, users and merchants' perspectives?

The presented research aims to fulfill the gap between studies concerning both fields: Employee Benefits and Online Payments. More precisely, it intends to evaluate the impact of Online Payments in Employee Benefits. Also, it is expected that the results of this research help managers and executives to act more consciously of the target's preferences. At last, this research aims to contribute to the increasing awareness of Employee Benefits, that provide employees better salary conditions, ultimately, contributing to "Economic study".

For this purpose, a thorough literature review on the topics "online payments" and "employee benefits" was held, building a conceptual base for the empirical investigation. As a complement, Edenred internal reports and market research studies were also consulted.

Furthermore, law and regulation concerning these topics were revised, in order to frame the development of the solution.



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Grounded on this conceptual frame and on the company's inside knowledge, acquired through the 65 years as employee benefits issuer, a focus group was designed and carried out, with the purpose of identifying the most relevant topics for a wider survey, distributed among users.

The conclusions drawn from the focus group provided a baseline for the construction of a survey for users, aimed to quantify and confirm the key findings out taken from the focus group.

The conclusions gathered from these collections of data were tested in six focus groups, comprising HR managers and technicians from twenty-one companies.

Furthermore, as a way to better understand merchants needs and acceptance for the potential solution, an informal breakfast and several meetings with diversified merchants were held.

### **iii. Data collection**

The collection of data for the present research has been done by the means of Primary and Secondary Data.

For the primary data collection, all previously identified stakeholders were considered. In order to deepen the knowledge from governments perspective, a legal study has been held. Taking the issuers perspective, an internal analysis to Edenred has been carried out. Regarding companies' perspective, six focus groups, comprising twenty-one companies were performed. For a better understanding of employees' today's needs, a focus group and afterwards an online survey were held. And for the last part of the value chain, the affiliate institutions, several meetings and an informal breakfast were held.

The collection of Secondary Data has been done resorting to online scientific platforms, namely EDS, B-On, Scopus, Web of Science, among others. An array of scientific articles on each of the topics, Online Payments and Employee Benefits, have been analyzed, in order to construct a conceptual frame for the Impact of Online Payments on Employee Benefits.

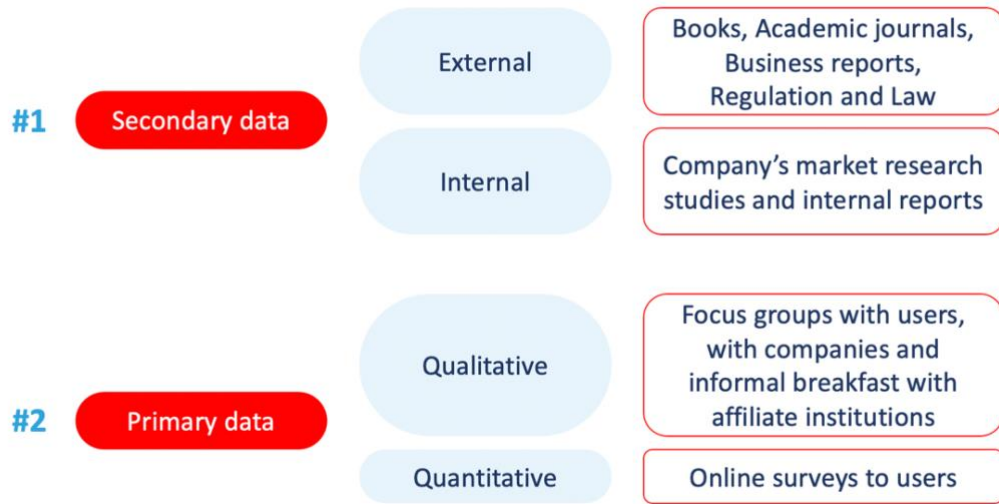


Figure 3.1 – Structure of Data Collection.

## IV. Data analysis

The Data Analysis for the present thesis project comprises four elements:

- A focus group with the education employee benefits users;
- An online survey to a wider sample of users, randomly obtained. The respondents were residents in Portugal;
- Six workshops with Human Resources Managers and Technicians from 21 companies;
- An informal breakfast with merchants.

### i. Focus group

The focus group comprised eight participants, one interviewer and an assistant. The gender distribution of the elements was 50% female and 50% male, aged between 33 and 45 years old. It is also relevant to consider that 63% of the respondents had 1 dependent element and 37% had 2 dependents.

All the participants were beneficiaries of Edenred Education solutions. By the time of the event, Edenred education solutions on the market were: “Cheque Creche”, available in paper and digital support, “Cheque Estudante”, available as paper voucher and physical card and “Cheque Formação”, available in paper support. 50% of the participants reported using “Cheque Creche” in paper voucher format, 25% reported using “Cheque Creche” in digital support and 50% reported using “Cheque Estudante” in paper support. None of the participants reported using “Cheque Estudante” in physical card support or “Cheque Formação”.

The session lasted for one and half hour and was split into three groups of questions:

- Considerations on paper support;
- Consideration on the currently available digital support – digital vouchers;
- Intention to adopt and service mix preferences for a distinct digital support.

Based on the questions’ focusing on paper support, it was possible to ascertain that the majority (75%) of beneficiaries reporting the use of paper voucher format, do it either because the solution they use is not available in digital support, or because their company did not contract the digital support for the product they use, or because their children’s school does not accept digital support. Only 25% of the participants revealed that the support in which the solution is provided is irrelevant, since they pay all school fees at the beginning of the year. As a conclusion, it is possible to state that 75% of the participants revealed a strong preference for digital support, and none of the participants considered the paper format support a suitable solution for nowadays reality.

When debating the above-mentioned topics, the respondents also shared constrains they face when using paper voucher, namely:

- The physical condition of the format requiring them to dislocate to the school bureau, and wait on the line;
- The risk of losing the paper vouchers, forcing them to keep track and repeatedly count them;
- The incompatibility between the school bureau opening hours and the beneficiaries work schedules, forcing them to leave work and go to the school to pay with paper vouchers;

Through the topic focused on the use digital support, the participants revealed that even though the digital format reveals to be a more suitable solution, it still does not match the obstacles they face today. Two arguments were consensual for this position on available digital format, both reflecting the fact that this format is a non-physical form of the paper voucher. The digital voucher mitigates the issue of having to dislocate to the school to make a payment, but apart from that, It requires the exact same steps to attribute a digital voucher, as it takes to deliver a paper voucher. The absence of flexibility for the use of the value, related to the need to attribute voucher by voucher to top-up a school monthly fee, lead to a uneasy and long user experience.

The topic focused in the intention to adopt a full digital journey for the use of education employee benefits. Concerning the frequency of the payments, no pattern was established, since the positions vary according to the family budget needs, to monthly or annual payments. This fact allied to the irregularity of school monthly fees, elevates the importance given to the possibility to flexibly use the value.

When questioned about the reluctance to make online payments, none of the participants shown concern, since the payment is to be made in a platform with limited access to a closed schools' network. Participants revealed a clear preference for a mobile based solution, in form of an app, instead of a web portal. In line with this topic, they also revealed a preference for these payments on the already existing app for Edenred solutions – MyEdenred -, in turn of another app dedicated to payments.

Concluded the above stated groups of questions, the participants were invited to score some feature for the education employee benefits payment solution. The results are reflected in the table below.

## Employee Benefits – Impacts of online payments on the field

Table 4.1 – Users’ focus group ratings of solution features.

	1	2	3	4	5
MAKE PAYMENTS					8
SCHEDULE PAYMENTS			3		5
CHECK BALANCE					8
AFFILIATE SEARCH			2	6	
TRANSACTIONS HISTORY					8
LOAD NOTIFICATION					8
EXPIRING DATE NOTIFICATION					8
PAYMENT CONFIRMATION NOTIFICATION			8		
PAYMENT PROFILES				1	7

In order to provide a better understanding of each feature, they were described to the participants according to the caption below.

- Make payments: the possibility to use an education employee benefit to make a payment to a school, within the closed network affiliated to Edened.
- Schedule payments: the possibility to schedule a payment, to be made in the future, to the specified merchants, of the indicated value and date.
- Check balance: the possibility to check the value of the education employee benefit, still available to be used.
- Affiliate search: the possibility to search merchants, affiliated to Edened private network, where the education employee benefit can be redeemed.
- Transactions history: the possibility to check the history of transactions, concerning the use of education employee benefits.
- Load notification: the possibility to receive a notification, each time an education employee benefit is loaded.
- Expiring date notification: the possibility to receive a notification each time a value of education employee benefit is reaching its expiration date.
- Payment confirmation notification/ receipt: the possibility to receive or withdraw a proof of payment.
- Payment profiles: the possibility to save a payment profile, enclosing a name and a merchant, in order to create a shortcut for future payments.

## ii. Online survey to users

The online survey was produced according to the generic conclusions withdrawn from the focus group with users. The three sections composing the survey are: the characterization of the sample, in terms of demographic and technological literacy; the relevance and valuing of employee benefits, particularly, regarding education; the users' intention to adopt online forms of payment for the use of education employee benefits, as well as the most valued characteristics for the service mix.

### a. Sample analysis

The sample used for the present data analysis was gathered randomly, in agreement with the indicative purpose of this analysis. The sample dimension comprises 214 individuals, all respondents from Portugal. In order to characterize the sample, some demographics and technological literacy indicators were analyzed.

#### Demographics

##### o Gender

The sample is constituted by 142 female individuals and 72 male individuals. This imbalance of participants' gender percentages may represent a limitation to possible extrapolations of the provided conclusions, since the Portuguese population presents a male/ female ratio of 0,9 (INE, 2020).

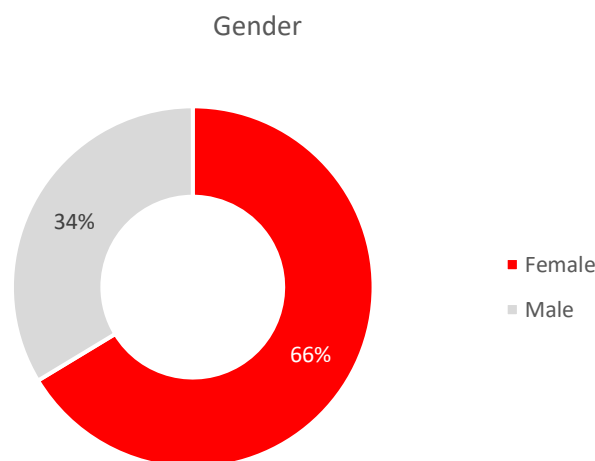


Figure 4.1 – Online survey respondents gender distribution.

##### o Age range

Concerning participants' age, it is possible to identify that most individuals are aged between 36 and 65 years old (59%).

## Employee Benefits – Impacts of online payments on the field

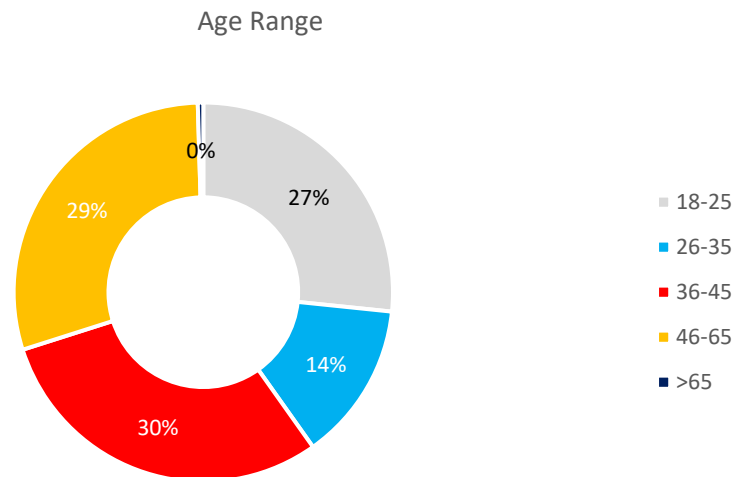


Figure 4.2 - Online survey respondents age distribution.

### ○ Occupation

On regards to participants professional occupation, registers show that 80% of respondents are employed – being 75% are exclusively employed and 5% employed students – counting 171 employed respondents. The high percentage of employed individuals in the sample grants it a relevance for the topics under investigation.

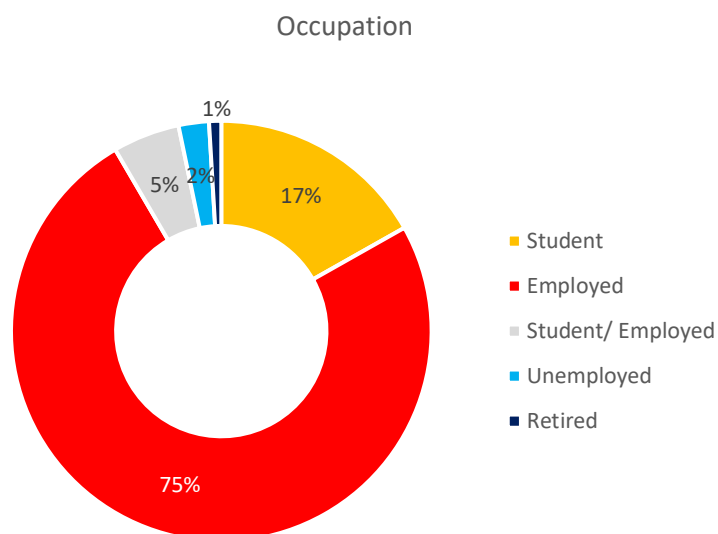


Figure 4.3 - Online survey respondents' occupation.

### Technological literacy

Considering the importance of technological literacy to the adoption of online means of payment, this indicator was analyzed in the sample. When asked about the adoption of online forms of payment, 87% of the employed respondents position themselves as adopters and 13% as non-adopters.

Online payments adoption

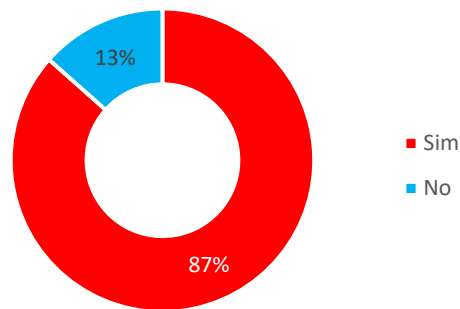


Figure 4.4 - Online survey respondents online payments adoption.

In order to better understand the concerns of non-adopters respondents, they were asked to identify the reasons why they haven't yet adopted these forms of payment. The most frequent justification for not adopting online payments is the fear of fraud. Also not feeling secure during the payment action, revealing concerns with GDPR issues, and not being familiar with online payment actions are justifications for not adopting.

Reasons for not using online payments



Figure 4.5 - Online survey respondents reasons for not using online payments.

For the purpose of exploring online payments adopters' habits, they were asked about their frequency of use for the following methods.

- Mobile wallet: rated with a frequency of use of 1.9 out of 5;
- MBWay: rated with a frequency of use of 3 out of 5;



## Employee Benefits – Impacts of online payments on the field

- Paypal: rated with a frequency of use of 2.1 out of 5;
- Homebanking transactions: rated with a frequency of use of 3.6 out of 5;
- Online payments with credit card: rated with a frequency of use of 3.1 out of 5;

Given the above-mentioned ratings, it may be concluded that Homebanking transactions, online payments with credit card and MBWay are the most used online payment methods. Regarding this, one could state that Portuguese habits for online payments are online platform based, or depending on a physical element as part of the process (credit card).

For a better understanding of the online payments' adopters, a deeper analysis of the purposes and motives of payments was conducted. As exposed in the graph bellow, the most common motives for online payments are booking trips, transactions and payments through the Homebanking and shopping clothing and accessories.

The least common types of online payments are POS payments with MBWay and shopping cosmetics and groceries.

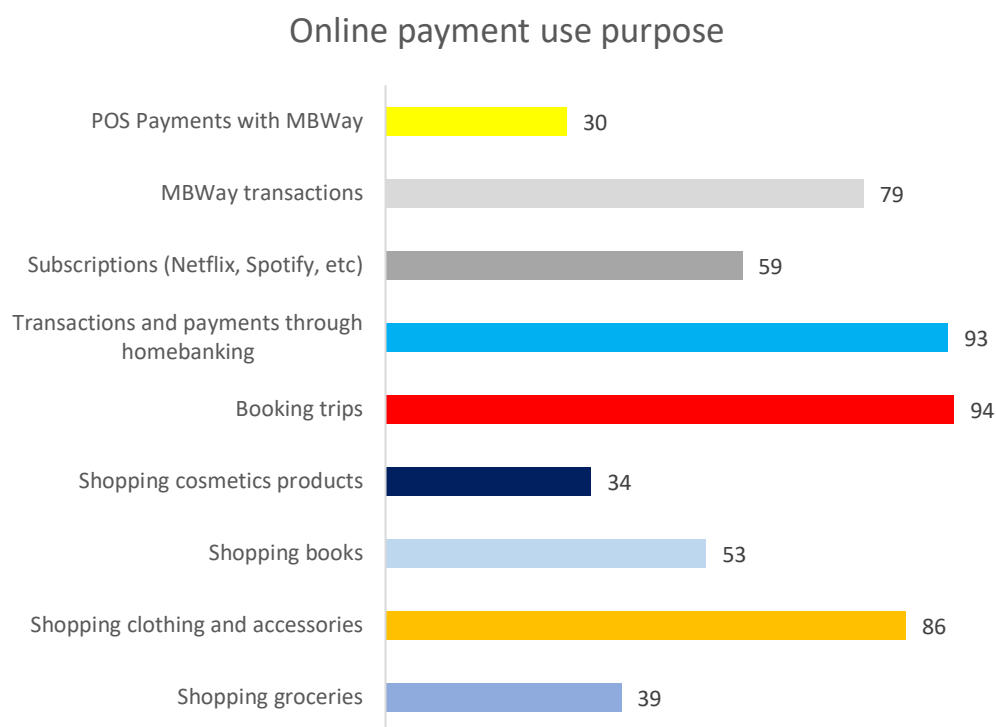


Figure 4.6 - Online survey respondents online payment use purpose.

The above graph brings evidence on respondents' interest on online payments for the acquisition of services and commodities. Also, the payment of bills – in which education bills can be included – is one of the most frequent uses for online payments.

## b. Employee benefits relevance and valuing

### General framework

The following section presents answers from at least 171 respondents out of the 215, these representing the employed individuals, eligible to provide opinions on the presented matters.

In order to better characterize the sample awareness on employee benefit topics, the usage of the most common employee benefit was evaluated. To the question “Does your company attribute meal employee benefit?”, 93% of the employed participants answered “yes”. Having this, one can conclude that the analyzed sample is at least familiar with both the concept and usage of employee benefits.

When questioned on the importance of employee benefits, the respondents rated it as 4.6 on a scale from 1 to 5, highlighting the importance of these, as part of the overall employee compensation package.

Moreover, concerning the format for the use of this type of benefits, 60% of the respondents receiving meal EB (Employee Benefits) reported receiving it through meal card, and 36% by the means of cash (most of the times aggregated with wage).

When asked about the importance of employee benefits distribution support, the respondents rated them as 4.4 out of 5, bringing evidence on the importance of format used to deliver this type of incentives.

Another topic under investigation was the identification of the most provided EB by employers and the most valued by employees. This analysis does not include meal EB, regarding its democratization.

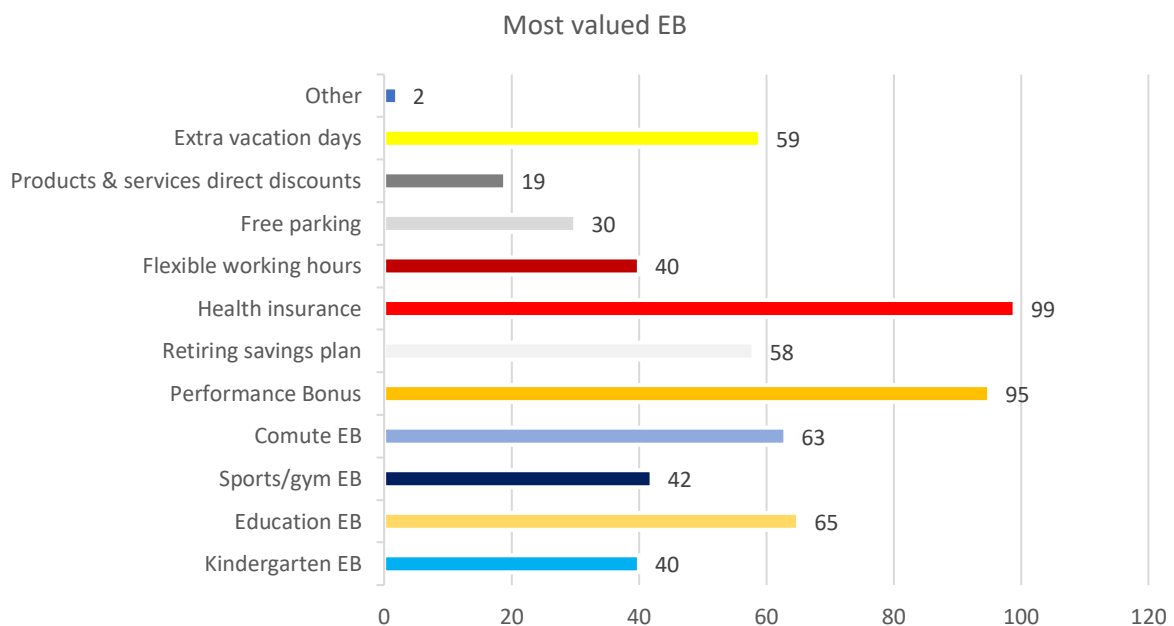


Figure 4.7 - Online survey respondents most valued EB.

## Employee Benefits – Impacts of online payments on the field

The analysis of the above graph, regarding the most valued EB by employees, enables one to conclude that Health Insurance is the most valued by employees - valued by 99 respondents -, followed by the Performance Bonus - valued as the top EB by 95 respondents -, and with Education EB taking the third place on the ranking for the most valued EBs, by employees - valued by 65 respondents.

The EB that register fewer importance among respondents are Free Parking – valued by 30 respondents -, and Products and Services Direct Discounts - valued by 19 respondents.

On the other hand, the most received EBs were also analysed, in order to understand if a match could be found between the most valued and most received EBs.

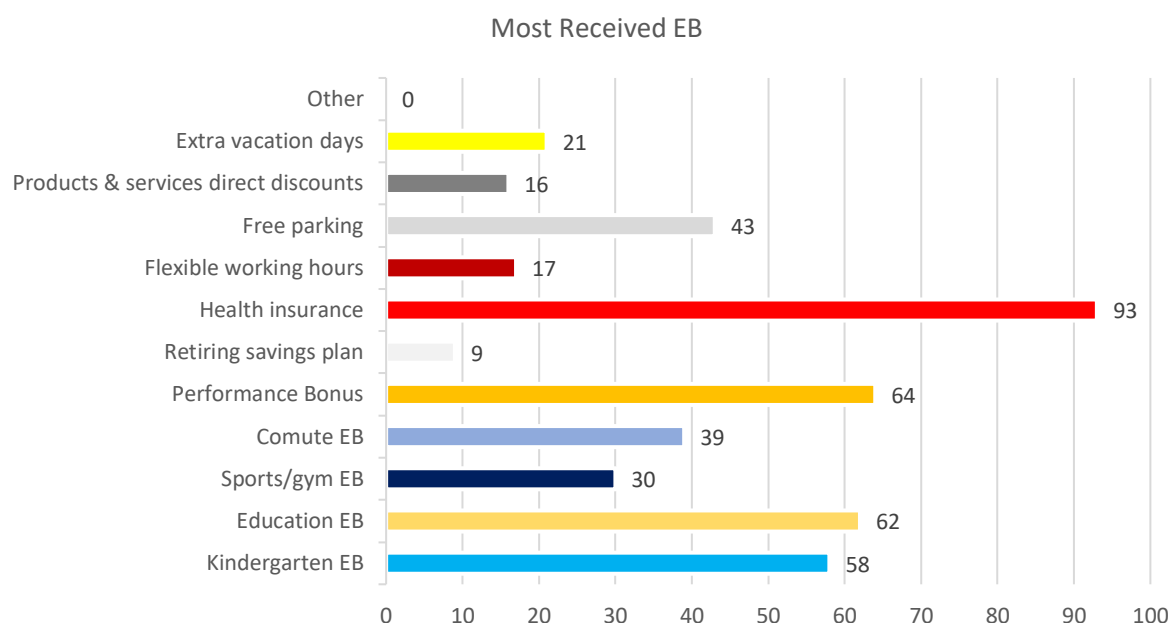


Figure 4.8 - Online survey respondents most received EB.

The analyses of the above graph indicates that the EB valued by the largest number of employees is Health Insurance – highly valued by 93 employees -, followed by Performance Bonus – highly valued by 64 employees – and Education EB occupying the third place on the ranking – top rated by 62 employees.

The comparison of the results on both topics - the most valued and the most received EB - brings the conclusion of a match between employees needs and preferences and employers benefit package choices. Summarizing, health insurance, performance bonus and education EB are the most valued and most received EB.

From this, it is also relevant to outstand that Education EBs are ranked on top three EB, from both perspectives, attesting the importance of the topic under investigation.

### Education Employee Benefits

In order to deepen the knowledge on the use of Education EBs – which are the focus for the present research – respondents receiving these incentives were asked about the supports through which these are delivered to them. All employed respondents were asked about their preferences on Education EB means of payment.

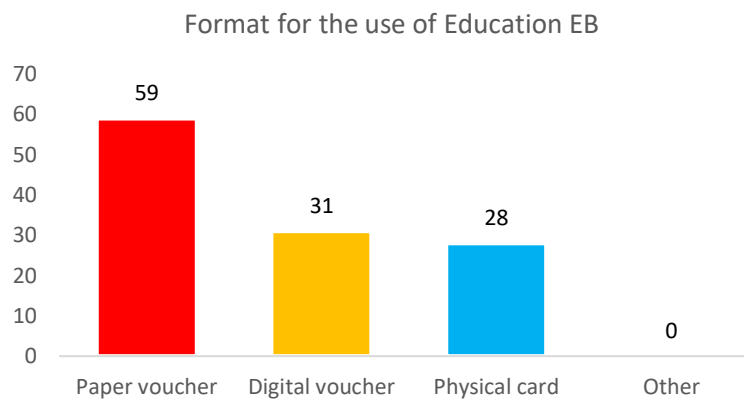


Figure 4.9 - Online survey respondents used formats for Education EB.

The above presented graph reveals the level of usage for each of the formats currently available in the market, regardless of the EB issuing entity. It is possible to conclude that paper support for the use of these solutions is still the most common, presenting adopting levels very distant from the other 2 formats – digital voucher and physical card.

Concerning the different perspectives that might be found from active users of Education EB and non-users, their preferences for the delivery support for Education EB were separately analyzed.

Table 4.2 – Online survey respondents rating of Education EB payment methods – rated by users.

Format for the use of Education EB – rated by users	Average
Paper voucher	2.8
Digital voucher	4
Physical card	3.9
Payment through web portal	4
Payment through mobile app	4

## Employee Benefits – Impacts of online payments on the field

Through the analysis of the ratings provided by Education EB users on means of payment, it is possible to assess that dematerialized solutions – digital voucher, payment through web portal and payment through mobile app – are preferred over physical options of payment – paper voucher and physical card.

Table 4.3 – Online survey respondents rating of Education EB payment methods – rated by non-users.

Format for the use of Education EB – rated by non-users	Average
Paper voucher	2.9
Digital voucher	3.3
Physical card	3.5
Payment through web portal	3.4
Payment through mobile app	3.5

On the other hand, when analyzing the preferences for payment solutions for Education EB, from non-users perspective, it is clear that the absence of using experience impacts the ratings indicated by user - concentrated on the middle of the scale (3 points) - typical of this type of response scenario. Having this, using experience is key when creating an opinion on the most relevant means of payment for the use of these incentives.

In this set of answers, the few and not evident conclusions that can be taken are: paper voucher being the least valued mean of payment for the use of Education EBs, and physical card and mobile app are the most appreciated means of payment for this purpose.

### c. Service mix and intention to adopt

#### Most valued characteristics

In order to identify the most relevant service characteristics for users, they were asked to rate Flexibility, Quickness, Convenience, Ease, Security, Usability and Reliability on a scale from 1 to 5. The table below, presenting the average rating attributed to each characteristic, brings the conclusion that all presented characteristics are very important for employees, being all rated above 4 out of 5.

Table 4.4 – Online survey respondents rating of most valued characteristics.

Most valued characteristics	Average
Flexibility	4.1
Quickness	4.3
Convenience	4.2
Ease	4.4
Security	4.1
Usability	4.1
Reliability	4.2

### Most valued features

Deepening this analysis, employees were also asked to rate in the same scale – 1 to 5 – the bellow presented features. These features were selected from the previously performed users focus group, being elected as the most relevant for the user experience.

Table 4.5 – Online survey respondents rating of most valued features.

Most valued features	Average
Check balance	4.3
Check transaction history	4.2
Load notification	4.1
Make payments	4.4
Schedule payments	3.7
Affiliate Research	3.9

The analysis of the features' relevance ratings enables to conclude that Make payments is the most relevant feature for this solution – 4.4 out of 5. On this ranking, the second spot is occupied by the features Check balance and Check transactions history – respectively 4.3 and 4.2 out of 5 – and Load notification – 4.1 out of 5.

The ratings also led to the conclusion of scheduling payments being the least valued feature – 3.7 out of 5 – taking one to consider it not fundamental for the use of the solution, but rather a nice to have, complementing the core purpose of the service – paying education expenses online by the means of education EB.

## Employee Benefits – Impacts of online payments on the field

### **Intention to adopt**

By the end of the online questionnaire, after being asked about habits of use and future solution's features and characteristics preferences, employees were questioned on their intention to adopt online forms of payment for the use of Education EB. On a scale from 1 to 5, where 1 stands for very unlikely and 5 stands for very likely, users' intention to adopt was scored as 4, revealing a clear relevance and intention to adopt this type of payment for the mentioned purpose.

### **iii. Workshops with companies HR managers and technicians**

Resorting to the conclusions withdrawn from the online survey to users, a workshop with companies HR managers and technicians was designed and held.

The workshop was designed to last one to one and half hour, grouping three to four companies from different sectors at each time. Due to pandemic global context during the year of 2020, workshops were held by the means of online conference calls.

Participants were invited to creatively and critically think of an ideal solution for Education EB as a form of payment, both from users' and companies' perspectives. The sessions were structured with resource to the below presented framework, aiming to summarize conclusions and map withdrawn information.

Table 4.6 – Workshop questions structure, for users’ perspective.

USER PERSPECTIVE		
Advantages and Needs	Characteristics	Features
Social	Status	Digital and modern person - Trendmaker
Emotional	Security	Payment Confirmation PIN
	Ease	Journey online remota (sem necessidade de ir à escola)
		Schedule Payments
Functional	Flexibility	Flexible use of the benefit value Absence of expiring dates
	Quickness	Make a payment within minutes
	Convenience	Online payments Payment receipt Revalidation by the user
	Usability	Multiplatform Vs Unique platform (MyEdenred) Check balance School payment profiles (card with school and name) Check transactions history Search merchants (schools) Load Notification Expiring date notification Payment confirmation notification through email

Table 4.7 – Workshop questions structure, for clients’ perspective.

CLIENT PERSPECTIVE	
Advantages and Needs	Characteristics
Time and resources saving	Online orders
Handling risk mitigation	Online vale delivery to user
Value delivery time - standard	Value delivery SLA
Value delivery time - urgencies	Urgent value delivery SLA - willing to pay?
Organization awereness	Personalized cards
Information	User savings simulator
	Using information to employees



## Employee Benefits – Impacts of online payments on the field

Prior to the selection of participants and arrangement of the groups for the workshops, buyer personas - research-based profiles - were designed. For the buyer personas design, two segments were created, based on organizations dimension and Edenred internal structure: organizations with under 50 employees – Segment I - and organizations with more than 50 employees – Segment II.

The identified personas for segment I are presented below and were defined based on client knowledge of EB solutions and purpose of use.



Figure 4.10 – Segment I clients buyer personas.

For Segment II – organizations with over 50 employees – buyer personas were designed based on their knowledge of EB solutions and their relationship with Edenred. The personas for this segment are presented below.

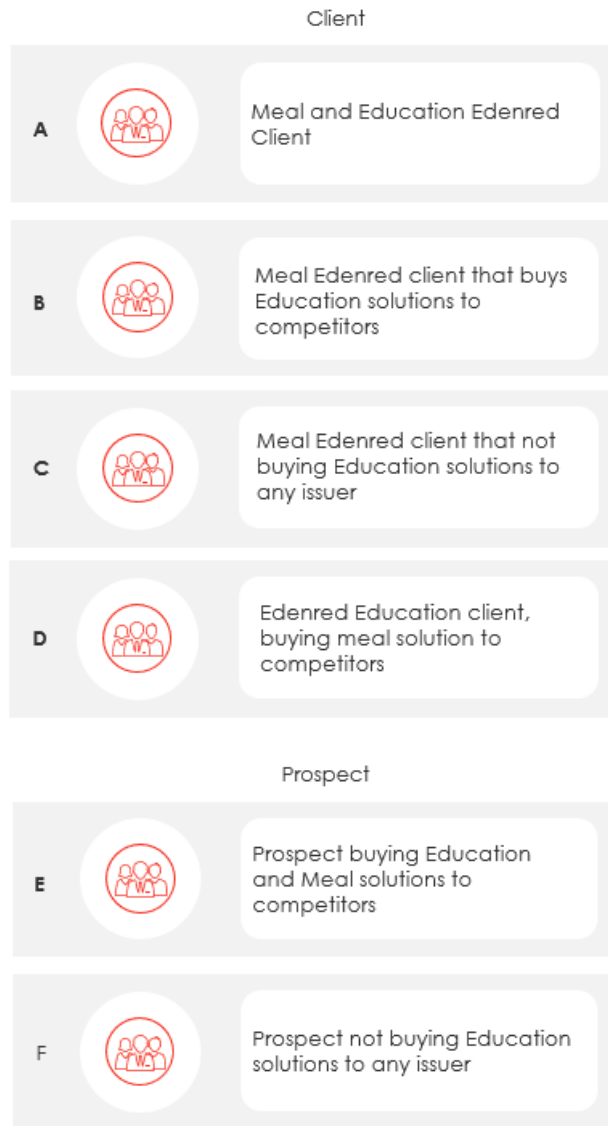


Figure 4.11 – Segment II clients buyer personas.

Workshop #1 gathered three companies from very distinct actuation areas, namely, SIBS – from banking sector -, INDRA – from IT segment – and Evertis Ibérica SA – from industry area. All companies participating on this workshop were selected from segment II, based on buyer personas D, F and C, respectively.

Workshop #2 had the participation of four companies, all from segment II: Everis – representing IT sector, as buyer persona A -, FNAC – from retail sector, representing the buyer persona C -, The Navigator Company and Tabaqueira SA – both from industry sector, representing respectively personas B and D.

Workshop #3 had the presence of four companies, all from segment I: Conqualform – an accounting SME, representing persona A -, Paralelo Zero Investigação e Arquitetura Lda – an

## Employee Benefits – Impacts of online payments on the field

architecture studio, representing persona B -, Portela Wellness – a local gym representing persona E -, and Gestisuces – a tax advising SME, representing persona F.

Workshop #4 gathered three companies, all belonging to segment II: Lactogal – an industrial company, representing persona B -, Douro Azul SA – a company from hospitality sector, standing as persona C -, Milestone Consulting – an IT consulting company, representing persona A -, and Cofina Media SA – a Media company, standing as persona B.

Workshop #5 had the participation of five companies, all from segment II: Perfumes & Companhia SA – a cosmetics retailer, standing as persona A -, Introsys – an automation and consulting company, representing persona A -, Growininsights, SA and ROFF – both IT companies, representing respectively personas A and F -, and The Fladgate Partnership – Vinhos SA – a company from agriculture sector representing persona F.

The last workshop (#6), had the virtual presence of two companies, both from segment I: BRISK – an IT company, representing persona C -, and Mediderme Lda – a medical equipment company, standing as persona D.

Detailed notes concerning each of the 6 workshops can be accessed on annexes, however, a summary of the most relevant conclusions retrieved from the six workshops is exposed in this section.

As explained before firstly participants were invited to answer from a user perspective and only afterwards to place their vision as HR managers and technicians.

### **a. Employee perspective**

This workshop revealed different perspectives, brought by participant companies' opposite technological context. Industry segment revealed concerns regarding online and digital payment solutions, related to employees' low technological literacy. On the other side, IT and Banking sectors revealed high interest in these type of solution for Education EB payments.

On matters related to emotional advantages and needs, exploring security and ease characteristics, participants attribute value to making online payments as a feature, performed remotely, since they allow time and resources saving to user. When questioned about the relevance of the payment scheduling feature, participants considered it to be useful but not critical for the use of the solution, taking to the classification of this feature as a nice to have.

Furthermore, questions related to functional needs and advantages were explored with participants:

## Flexibility

### **Flexible use of the benefit value**

At present, every time companies order Education EB for their employees, an inventory of number of vouchers and respective face values is required, in order to get a match between school bills and vouchers' face values. This situation occurs due to merchants' legal inhibition to provide exchange, since this type of benefit legal frame prohibits its conversion into another type of monetization, rather than Education EB. Having this, companies' HR refer this task as very time consuming, and do not recognize added value to it.

When confronted with a possible solution to this pain point – the existence of an employee Education EB virtual account, that can be flexibly loaded and used according to employee expenses – all acknowledged its relevance, in meeting both HR need for decreasing bureaucratic burden, and employees' need for a more flexible use of their Education EB value.

Participants position on this topic was consistent through all six workshops, both from segments I and II.

### **Absence of expiring dates**

Regarding this matter, participants position varies from neutral to against this feature. For those holding a neutral position when questioned about this, the arguments go from the monthly use of the benefit, not registering unspent values, to annual attribution of the value, that still require co-payment to meet school bills.

On the other side, bigger companies – namely, FNAC, SIBS, INDRA, The Navigator Company, Lactogal, among others – reveal great concern with the absence, or extension for over 18 month of Education EB expiring dates, due to several reasons:

1. As a legally framed employee benefit – with tax advantages for both employees and employers – its dependency on annual government budget, brings discomfort to HRs' on the use of this solution as a compensation element, in case of abrupt changes in the annually volatile legal frame. One of the questioned under discussion, brought up by a participant, in line with this subject was “What if it is set an expiration date of over one and half year and, during this time, legal frame changes? What would be the consequences to the employees' Education Benefits unspent values? This uncertainty is not good for any of the parts, so the existence of a time frame brings stability to the topic”;

2. Another argument was the purpose of the benefit. It is meant to support employees' education expenses, and not being used ends up revealing the lack of need for the benefit. Knowing this, companies feel rather comfortable with the existence of a time frame for the use, guaranteeing that employees value the purpose of the EB.

### Quickness

#### **Make a payment within minutes**

Solutions currently available in the market require, even online, a repetitive and long journey to attribute a voucher to a merchant, regardless of the issuer providing the EB service. When questioned about this part of the journey, participants unanimously believe it can be improved, providing a better user experience.

The possibility of making a payment in three steps, with the flexible use of the value previously explored, was a very welcomed idea. Presenting them this feature as:

1. Select the merchant to which you wish to make a payment, and the name under which the payment must be sent;
2. Introduce the amount of the transaction;
3. Introduce the payment confirmation PIN.

The reaction to this feature as part of the user experience was definitely positive, being highly valued in terms of its simplicity and efficiency.

### Convenience

#### **Make payments online**

Online payments as a feature for this solution, as previously discussed in this section, is a matter of division. For those already embracing technology advantages for payments, this option brings high value to the solution. However, companies' HR are aware of the existing disparities among employees' technological skills, in industrial contexts.

For this topic, the effort relayed on guiding participants away from these cases and placing focus on the possibilities brought by this feature.

Exploring this feature and combining it with the previously debated flexible use of the benefit value, the reaction of the participants revealed to be very positive, acknowledging high value to the time and resources – no need to go to school office – saving for employees. Furthermore, companies also benefit from this feature, by the means of employees not having to leave work earlier to be on school bureau before its closing time.

#### **Payment receipt**

As part of the journey, the possibility to send directly a payment receipt to the selected merchant, by e-mail, was presented to participants. This feature was highly valued, expressed as a confidence and security motive for employees, giving them a proof and confirmation of their action. The opinion on this topic was unanimous through all six workshops.

## **Revalidation requests ordered by employees**

Previous investigation on the matter of Education EB revalidations revealed this part of the journey as a pain point for companies' HR. Due to its complexity of action, ends up being a very time-consuming task in which companies' HR see no added value on their intervention.

Considering this, participants – the companies HR reporting this situation – were asked about the possibility of removing this part of the journey from their responsibilities range, and transforming it into an employee responsibility. Two different positions were identified regarding this topic:

1. A few participants revealed a neutral position towards this topic, explained by the fact that the information they provide to employees states they have a year length to spend the Education EB values, not uplifting the possibility to revalidate benefits.

2. Most participants report occasional cases requiring revalidation, and for those cases reveal a preference to place this responsibility on employees. Furthermore, participants argument that their intervention in this process does not bring any added value, but consumes their valuable time and resources.

Considering both this perspectives, one can conclude that it is better to move revalidation responsibility to employees, improving client experience and not damaging user journey, since this action is already taken by them, by intermediary of employer's HR.

## **Usability**

### **Multiplatform Vs. Unique platform solution**

Two different scenarios were presented to participants concerning this topic. The first, a case were users would access different platforms – app on web based – for the use of different employee benefits. For the second scenario, a unique platform would be used. For those already familiar with Edenred user platform – MyEdenred – was used as an example, for the use of all EB.

Throughout all six sessions participants revealed, without hesitation, a clear preference for a unique platform for the use of all Employee Benefits.

In line with this topic, participants were asked about their preference between computer or mobile based platform. The preference for a mobile based solution was unanimous, based on two arguments:

1. over 75% of the Portuguese population holds a smartphone, a much higher percentage when compared to the number of individuals holding a personal computer or under function requiring computer skills;

2. in daily life, the access to the smartphone is much quicker than the access to a computer, making mobile base a much more attractive solution.

## Employee Benefits – Impacts of online payments on the field

### **Check balance**

Diving into more specific user experience features, participants were asked about the relevance of the balance checking feature. The general opinion classified this feature as fundamental for the use of the solution, considering essential the information for employees. Having this, one can conclude that it is not viable to build a solution without this functionality, which enables a more efficient management of EB.

### **Check transactions history**

In line with the previously explored feature, participants were asked about the relevance of being able to check transactions history. The high relevance of this functionality was unanimous, recognizing it as very helpful for the efficient management of the EB's amounts.

### **School payment profile**

Aiming to meet employees need for an easier user experience, the payment profile card feature was conceived. This feature was presented to participants as a tool enabling employees to save a card – with two recurrent data, a name and an associated merchant – in order to create a faster payment journey. The existence of this tool enables a payment journey of two steps, them being the selection of one of the predefined cards and the indication of the value.

The participants acknowledged high value to this feature, since it defeats one of the employees identified pain points, the long and repetitive payment journey. Adding to this they – companies' HR – value this feature, for the positive experience it provides to employees adding value, at the bottom line, to the employee benefit organizations attribute to their people.

### **Search and request merchants**

The possibility of giving employees the autonomy to search and request merchants meets one of the constraints previously identified by companies' HR. As off today, this search and requests are sent to issuers, from employees, through the intermediary of companies' HR. As referred in some similar situations, HRs' consider their intervention in this process irrelevant, not bringing any added value. For this reason, consider this a very relevant feature, since it eradicates one of the previously identified pain points.

### **Notifications**

The last feature discussed was the possibility of having three different types of notifications – load notification, expiring date notification and payment confirmation notification.

The opinions concerning each of these notifications, considering it relevant or not, was not consistent among participants. While some recognized it high value, for being a positive information, others consider the excess of notifications something disturbing and inconvenient.

Having this, the agreement relayed on having customized notifications, that could be managed by each user, according to its preferences and needs.

### b. Employer perspective

The approach to the organization perspective focused on the improvements that could be done in order to improve client experience with EB management.

Table 4.8 - Workshop participants answers resume, from clients' perspective.

CLIENT PERSPECTIVE		
Advantages and Needs	Characteristics	Contributions
Time and resources saving	Online orders	Recognize high value to this feature, even more if it allows the order of all formats and products on the same platform. Reinforce that every feature permitting time and resources saving, either by employees or companies' HR is certainly valued, by both parts.
Handling risk mitigation	Online vale delivery to user	The handling part of the current process - on regards to paper vouchers, still the most common format - presents high risk for the three parties involved in the process: the organization, when receiving them and distributing them through employees; the employees, holding value on paper voucher, that can be lost; the merchants, that receive paper vouchers as a form of payment and take the risk of losing them either when received from payers and when they are sent to the issuer, for reimbursement. Transitioning all this journey to the online channel, it is possible to mitigate this risk held by three identified stakeholders. For this reason, this feature is very much valued by employers, both from organizations' and employees' perspectives.
Value delivery time - standard	Value delivery SLA	Currently, the existing solutions in the market offer standard delivery times up to 3 days, for digital vouchers and on average 6 days for paper vouchers. When questioned about the ideal standard delivery time for the EBs under discussion, participants unanimous opinion was the standard banking transaction waiting time – 48h.
Value delivery time - urgencies	Urgent value delivery SLA - willing to pay?	Not all organization report experiencing these situations. For those handling these cases, an overnight delivery time would meet the needs. Furthermore, considering this a premium and occasional service, participants revealed being willing to pay for these urgent deliveries.



<p>Organization awareness</p>	<p>Personalized cards</p>	<p>An organizational marketing feature presented to participants was the possibility to personalize the virtual cards presented to employees on the Education EBs payment platform, branding them according to the organization.</p> <p>These was not a feature equally valued by all participants, but those acknowledging its value, reveal being willing to pay for it.</p> <p>In this case, the opinions located in extreme side of the plot, participants either highly value this feature or recognize no value to it.</p>
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#### iv. Breakfast with merchants

Previously identified as one of the business most relevant stakeholders, merchants’ concerns and needs were also taken under consideration. In order to achieve a better understanding of their position, a breakfast with the representatives of six institutions was held. Following this, several individual meetings were settled in order to explore in greater detail the raised topics.

In order to better select the participating institutions, buyer personas were built. Based on this constructs, six merchants were selected to the breakfast, them being:

- Sempre em Flôr, represented by Dr. Carlos Silva;
- Colégio Queen Elizabeth, represented by Dr. Maria da Conceição Oliveira Martins;
- Mimarte, represented by Dr. Paulo Martins;
- Casa das Abelhinhas, represented by Dr. Ana Fanha;
- Redbridge, represented by Isabel Lopes;
- Santa Casa da Misericórdia de Lisboa, represented by Dr. Gabriela Bravo;

The session was initiated with a coffee break for networking, were institutions’ representatives were able to express some concerns, with the hosting team. Following this, all present set around a table, in an informal environment, and the bellow presented topics were discussed.

#### General challenges

Most attendees advocate the reimbursement deadlines are too long and don’t meet institutions accounting processes. To eradicate this constrain, merchants suggest two to three days as the ideal range.

Adding to this, a big concern is revealed about the logistics of paper vouchers, presenting risks in three moments of the journey – to the client ordering the vouchers, to the user holding them as a payment method, and to the merchant that receives and sends it back to the issuers for redemption.

### Format related challenges

The digital format available on the market is considered a replicate of paper vouchers, presenting the same processes duration and constrains – repetitive and long payment journey, no possibility to split values, in order to match school bill. Institutions report this as an increasing factor for billing efforts, since individuals usually use co-payment methods along vouchers. As they are not integrated, a part of the school bill is left unpaid, only being recovered after reactive billing efforts.

Concerning merchant intervention on digital voucher process, the need to approve every digital voucher creates an unnecessary burden for school. In the other hand, they show concerns taking elevated payments, they must not accept. The ideal solution presented by them would be a function that enables to reject a payment, within a time frame, but the absence of need to approve all payments.

## V. Project design and implementation

The implementation of this project, as well as the previous analysis, will address the three most active stakeholders in the process, them being the clients, the users and the merchants. The image below resumes the key take outs from data analysis, to be reflected in the project implementation.

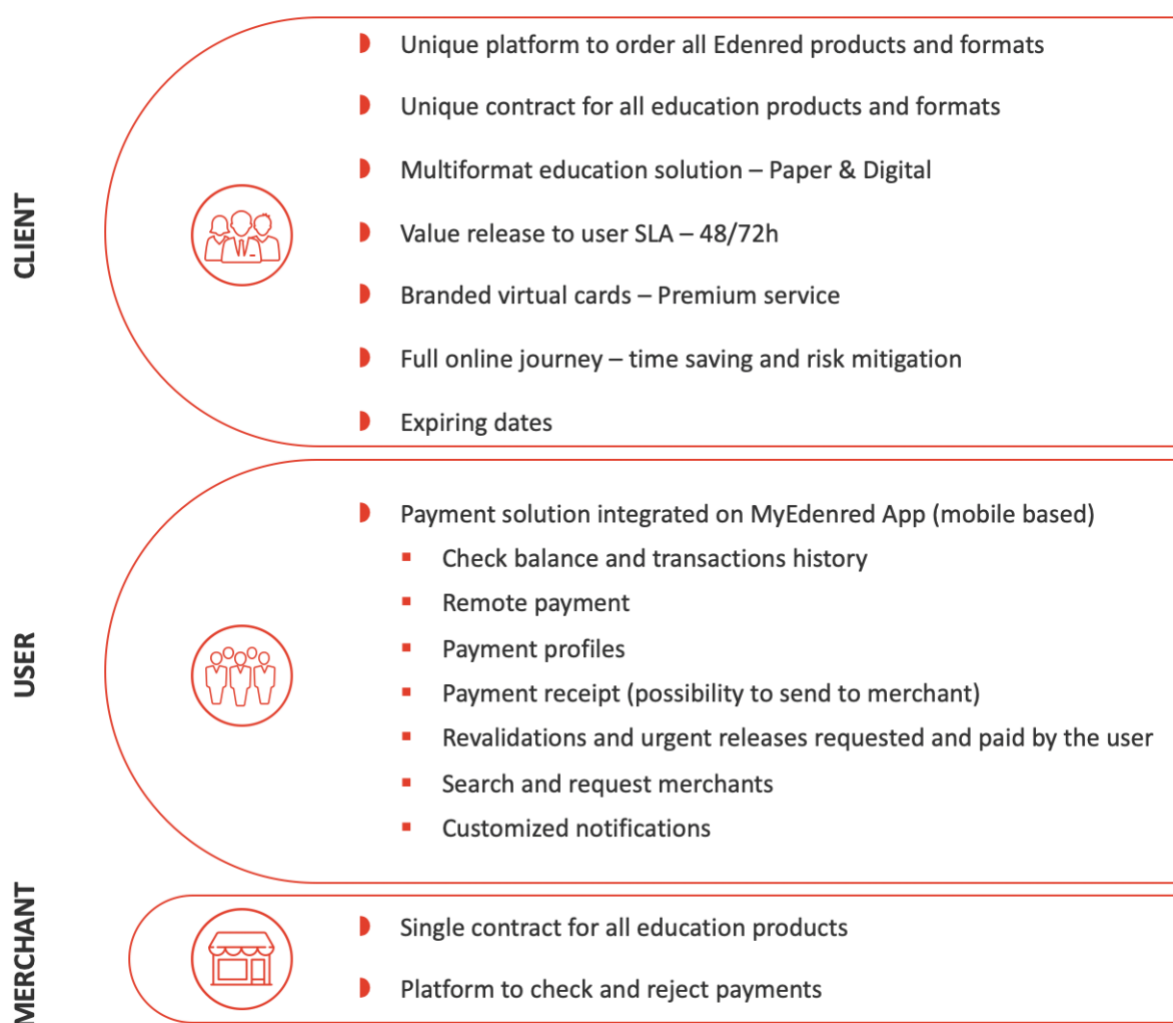


Figure 5.1 – Most adequate service-mix solution, from all stakeholders’ perspective.

### i. Clients

#### Unique Platform to order all Edenred products and formats

Offering clients a unique platform/ portal where they are able to order all employee benefits, in all available formats, including Education Employee Benefits. This enables clients to have an improved user experience, by saving time and resources, and speeding up the all product/ service acquisition journey.

### **Unique contract for all Edenred Education products and formats**

The existence of a unique contract for the acquisition of all Edenred Education products and formats brings ease to the client user experience, at the time of purchase. This unique contract gives the client the possibility to change the buying options throughout time, swapping products and formats, according to employees' preferences and needs.

### **Multiformat education solution – paper & digital**

The data analysis enhanced the importance of provisioning both paper and digital support for the use of Education Employee Benefits. Having this, the offer should make available these two formats for all education products.

### **Value release to user – 48/72h**

The time range between the order payment and the release of benefit value for the employee, should be of 48 to 72 hours. Real time release of the benefit value is not a valued feature, as clients are comfortable with the same time range for these transfers as market presents for bank transfers.

### **Branded virtual cards**

The possibility to order branded virtual cards, embodying clients' logo or branding in the product. This feature is highly valued for some clients and irrelevant to others. For this reason, it should be presented as a premium service, increasing the offer value to a client customized product – clients who value this feature have revealed that are willing to pay for it.

### **Full online journey – time saving and risk mitigation**

Offering a full online journey, where:

1. clients can order all products (and formats) on a unique online portal;
2. employees receive and pay with their education benefits through a mobile app;
3. merchants receive and manage their payments through an online portal.

This product-mix brings time saving and mitigates the risk of loss for all value chain.

### **Expiring dates**

The existence of expiring dates for the use of the benefit value is important for clients (companies buying these benefits to attribute to their employee), considering the possible changes in legal frame for these benefits, early evaluated in national government budget.

## ii. Users

### **Payment solution integrated in MyEdenred App (mobile based)**

The digital format for education products must be available on Edenred users mobile app – MyEdenred. Within this platform, the following features must be available:

- Check balance and transactions history: The possibility to check multiple accounts (products) balance, loads and payment records;
- Remote payment: The possibility to make payments remotely. In MyEdenred app, remotely selecting the merchant, the payment value, and making the payment.
- Payment profiles: The possibility to create profile cards, within the same product account, for dependents or the employee it-self, shortening the payment journey.
- Payment receipt (possibility to send to merchant): The possibility to export and send a receipt to the merchant, as a faster confirmation of the payment action.
- Revalidations and urgent releases requested and paid by the user: The possibility for the user to request urgent releases of the benefit value, being responsible for both the request and the cost associated with it.
- Search and request merchants: The possibility to search merchants and request a merchant affiliation in case of not being available.
- Customized notifications: The possibility to customize the notification received according to users' preferences.

## iii. Merchants

### **Single contract for all education products**

The existence of a single contract for merchants, comprising all education products and formats. This is a service mix characteristic highly valued by the affiliate education institutions, lighting the bureaucratic process.

### **Platform to check and reject payments**

Having a platform that allows merchants to check received payments history, and giving them the possibility to reject unwanted payments, within a specified timeframe. This feature encompasses the needs from non-technological institution, that automatically receive payments attributed to them, without requiring merchant's intervention.



## VI. Conclusions

The present investigation proposed to bring contributions to both theoretical and practical fields, on the topic of Employee Benefits.

The theoretical contribution of the present research focuses on the importance employees attribute to employee benefits, as an element of their compensation package. It was possible to conclude that employees recognize high value to EB, rating its relevance as 4.6 out of 5.

Furthermore, regarding the relevance of the EB distribution support, employees rate it as 4.4 out of 5. These ratings clearly reveal the importance of EB and the support under which they are distributed.

These findings corroborate previous research from Williams et al. (2008) and Torre-Ruiz et al. (2017) regarding the importance and impacts of Employee Benefits on overall employee satisfaction. Moreover, the importance attributed to the support under which the EB are distributed, enhances benefit administration satisfaction stance as one of the three dimensions contributing to overall employees' benefit satisfaction.

The last theoretical contribution from the present research concerns the most valued EB, having been obtained that Health insurance, Bonus Performance and Education EB are both the most attributed and the most valued Employee Benefits, apart from the democratized meal EB.

The practical contributions from this research focused on addressing the management problem concerning employees' intention to adopt online forms of payment for the use of Education EB, as well as identifying the most adequate service mix, from all stakeholders perspective.

Answer to the first research question "Do employees prefer digital payments for the use of their corporate benefits?", the investigation attempted to identify the most valued format by employees, for the administration of Education Employee Benefits. The results revealed that the digital support is the most valued by both employers and employees, emphasizing their preference for mobile app-based solutions. This preference is justified with arguments such as time and resources saving, flexibility, convenience, improved user experience and risk mitigation (linked to traditional existing paper vouchers).

Furthermore, aiming to answer the second research question "Do employees intend to adopt digital payments for the use of education employee benefits?", the present research investigated employee's intention to adopt digital forms of payment for the use of Education Employee Benefits. The results have shown that employees' intention to adopt this payment method is high, ranked as 4 in a scale from 1 to 5.

At last, having accessed the importance of Education Employee Benefits and the preference and intention to adopt digital forms of payment for its use, the research sought to identify the ideal service

mix. Considering the three most partaking stakeholder for this business, the service mix construction was addressed in three perspectives: Clients (employers), Users (employees) and Merchants (affiliate education institutions). The results have shown that it relevant to provide a solution comprising:

- In clients' perspective, a single platform for ordering all products and formats, elevating user experience; a single contract for all Education products – Kindergarten, Student and Training – and available formats; a multiformat solution – digital and paper based -, addressing different users' needs and expectations; an as much as possible online journey, mitigating logistics risk and saving time and resources.
- In users' perspective, a mobile app based solution, integrated on MyEdenred, enabling the user to: check balance and transactions' history, make remote payments, use payment profiles for a faster payment journey, extract a payment receipt, autonomously make revalidations and request urgent value releases, search and request merchants, and customize notification.
- In merchants' perspective, a single contract for all education products and formats, a platform allowing to check and reject payments, and the possibility to be a part of the network with any intervention, automatically receiving the reimbursements.

Overall, the present research has contributed not only to solve the management problem of understanding the relevance of online payment in the employee benefits business, but also to fulfill the research gap concerning the relation between these fields.

### **i. Limitations**

The first identified limitation to the present in-company project is linked with geographic coverage of the investigation. The study has been conducted in Portuguese context, limiting the extrapolations to other regions, regarding the specificity of the topic underlying legal frame.

The second limitation is related to the socioeconomic context under which the research has been developed. During this investigation a pandemic – Covid-19 – has spread around the globe, causing abrupt changes in society, economy and governments. This impact of this changes in employees and employers' perspectives are still not possible to be measured, since the ending of this context is still unknown.

The third identified limitation is related to absence of results from the above presented in-company project. Considering it is to be implemented in the near future, no results are yet available. Despite this, the data analysis has gathered real actors in this field, in order to validate its relevance and implementation.



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