Reshaping the bank experience for GEN Z in France

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Abstract
The objective of this research is to understand the service e-quality dimensions that contribute to creating value for Generation Z (Gen Z) consumers when choosing Internet-Only Banks (IOBs) services. The data were collected from a sample of Gen Z IOB users in France. Structural Equation Modeling was used to test the hypotheses. Results suggest that reliability, customer service and support, product portfolio, bank transparency, personalization, and security and privacy are positively related to IOB’s consumer perceived value and that consumers’ perceived value positively affects IOB’s consumer loyalty. This study reveals that IOBs in France should focus on those dimensions to tailor a unique customer experience to Gen Z.

Keywords Internet-only banks · Gen Z · Service quality · France · Customer loyalty

Introduction
Over the last few years, the economic development of financial technology firms has led to the creation of neo-banks in France. Neo-banks are financial technology firms offering digital or mobile-only financial services. This new type of bank attracts increasing numbers of French customers, notably due to its attractive pricing, quick account opening, and real-time account management. The number of neo-banks in France has tripled in the last 3 years. By the end of December 2019, neo-banks represented a market of approximately 3.5 million active accounts, and, in 2 years, the number of accounts has more than doubled (KPMG 2020). Gen Z is becoming an increasingly interesting target for neo-banks since people aged between 15 and 24 represent 28% of neo-bank customers and more than 60% of 18 to 30 year olds reportedly considered changing banks in 2021 (Efma 2021). Gen Z consumers are less likely than other generations to be brand loyal and will quickly switch to a competitor if brands are slow to engage with them or break promises. Gen Z-ers are very open to using alternative providers and services if traditional ones fail to satisfy their needs and expectations and consider GAFA (Google, Amazon, Facebook, and Apple) banking as an attractive alternative to traditional financial providers (Accenture 2017). Today, Internet-Only Banks are competing against the GAFAs, which are gradually moving deeper into the financial sector.

Gen Z is displaying different financial needs and expectations compared to other generations. Outside of fee and rate considerations, they expect a stronger banking experience and better quality of service. They want efficient transaction processing, ease of access to relevant information, better functionality, and a wider range and personalization of products and services. The IOB value proposition for clients is simple: convenience, high interest rates on standard savings products, and attractive fees on brokerage services. Nevertheless, the increased competition in the sector and changes in customers’ demand for services made the IOB value proposition not sufficient to gain a better positioning and achieve a competitive advantage. Given the importance of e-banking services for Gen Z, understanding the way Gen Z judges the value of the IOB service quality is crucial to helping financial providers create and deliver a high value-added banking experience.

The purpose of this paper is, therefore, to understand which banking e-service quality dimensions contribute the most to creating customer value for Gen Z. To our
knowledge, there have been no attempts to understand the e-service quality dimensions in the context of IOBs and particularly for Gen Z. Several studies have explored these relationships in the context of e-tailing (Bressolles et al. 2015), but none of them has tested the model with IOBs. While online users who choose bricks-and-mortar banks have the option to visit the bank and to evaluate bank service quality through face-to-face interaction with bank employees, internet-only bank users do not have that choice and rely only on website design and some interactions with a virtual advisor to evaluate bank service quality. It is then important to understand what Gen Z internet-only bank users value the most in the e-service quality of IOBs. Our research fills this gap and contributes to the literature by extending the quality-value-loyalty chain model in the IOB setting. From a practical standpoint, this study will help IOBs develop a meaningful value proposition that satisfies Gen Z’s needs and differentiates them from their counterparts. Thus, IOBs should focus on the right e-service qualities and develop the right metrics to assess them.

The organization of this paper is as follows. First, we will review the literature pertaining to Gen Z’s financial behavior, e-banking service quality, and perceived value. Next, we propose a conceptual framework that integrates the underlying dimensions of e-banking service quality, customer-perceived value, and customer loyalty. Third, the methodology is discussed and analyzed followed by research implications, limitations, and directions for future research.

Literature review

Gen Z financial behavior

Born between 1995 and 2010, Gen Z is typically a new generation of customers for financial institutions. The youngest are likely beginning to take an interest in their first checking and savings accounts while the oldest are thinking about loans, mortgages, and insurance. People aged between 15 and 24 accounted for 11.79% of the total French population (INSEE 2021). Gen Z-ers started their financial journeys far earlier than any other generation (Target 2020). Significant financial decisions take place early in life and well before any serious, stable employment. Financing higher education, buying a car, and securing their first job with the associated costs incurred (housing, moving, etc.) all involve significant and costly financial decisions (Gartner 2020). Yet, Raddon Research (2017) highlighted that Gen Z-ers are not homogeneous in their attitude toward online banking and distinguished three different segments of Gen Z consumers. Conventionals, who are distrustful of technology companies that entered the banking industry, prefer to conduct their banking face to face at traditional providers. Digital natives and are looking for an omnichannel banking experience, they still seek and value personal exchanges when it comes to financial topics (Target 2020). For them, receiving advice and support from their financial provider is important (Target 2020). Because of their lack of financial maturity, Gen Z-ers are more likely to look for human interaction and use branches compared to other generations, particularly when setting up higher-value products. Besides data security and 24/7 service, which are undoubtedly important to them when choosing a financial service provider, Gen Z-ers place high expectations upon their providers. They value the competence and accuracy of the banking service and expect a highly personalized banking experience. Gen Z-ers hold different values than other generations, to which financial providers must adapt. They hold traditional values of freedom, friendship, health, ethics, and transparency. They also value the availability of information and choices and are constantly seeking self-realization.

Customer perceived value

Consumer perceived value is commonly defined as a consumer’s overall evaluation of product or service benefits based on their perceptions of what is received and what is given (Zeithaml 1988). Research has consistently demonstrated that consumer perceived value is a multidimensional construct. Sánchez-Fernández et al. (2009) have developed an approach to understanding and measuring consumer value in a service context, including six dimensions: efficiency, quality, play, esthetics, social value, and altruist value. In the e-tailing context, Bressolles et al. (2015) defined online customer value as functional (the utility derived from the perceived quality and expected performance of the website), economic (the utility derived from the website through the reduction of its perceived short-term and long-term costs), social (the utility derived from the web site’s ability to enhance social self-concept) and emotional (the utility derived from the feelings or affective states that a website generates) dimensions. In the banking sector, Izquierdo et al. (2006) identified three dimensions of consumer’s perceived value in Spanish retail banking including...
functional value, affective value associated with social and emotional benefits, and saving value concerned with lower search and information cost. Similarly, Roig et al. (2006, 2009) used the GLOVAL instrument to measure the value perceived by retail banking customers. Six dimensions were identified: the functional value of the bank, contact personnel, service quality, price, social value, and emotional value. These dimensions have also been adopted by other researchers (Ivanauskiene et al. 2012). In addition, Titko and Lace (2012) defined bank value based on five dimensions: value of product (diversity, innovation, usability, quality of bank products), value of bank's staff, image value (reputation, bank safety, trust, and bank environment), money expenses (service costs), and time and energy. Similarly, Parente et al. (2015) defined customer-perceived value in Brazilian retail Banking based on bank reputation, service quality, convenience, and monetary sacrifice. Recently, Ponnam and Paul (2017) identified customer intimacy, product leadership, service equity, perceived sacrifice, operational efficiency, service quality, and technical quality as the main dimensions of consumer perceived value in Indian retail banking. Moorthi and Mohan (2017) revealed that the value proposition for bank customers in India is based on functional, emotional, and self-expressed benefits.

While past research has focused on retail banks or brick-and-mortar banks, this study focuses on internet-only bank. Moreover, contrary to previous research, our study follows a unidimensional approach as suggested by Jiang et al (2015). Jiang et al. (2015) have investigated perceived value on IOB and have adopted a unidimensional measurement and a utilitarian approach to perceived value. Based on equity theory, they consider that customers are likely to feel treated fairly if they believe that the ratio of their outcome to inputs is comparable to the ratio of outcome to inputs accruing to the company (Oliver and DeSarbo 1988).

Since Gen Z members ranked “a good value” as their top reason for choosing a financial institution (PWC 2021) and value convenience, free banking services, and low prices in using IOB, this research retains Jiang et al.’s, (2015) approach. From this perspective, customer-perceived value results from a comparison between what they received from an IOB in terms of service performance (1) with what traditional banks could offer and (2) what they pay (charges and costs) associated with the banking transaction.

**IOB service quality**

Given the differences between traditional banks and IOBs, extensive research has investigated the factors that impact IOBs’ service quality. Jun and Cai (2001) highlighted three key quality dimensions that are important to IOBs and traditional banks offering internet banking services. The dimensions are customer service quality (responsiveness, reliability, and access), online systems quality (ease of use, accuracy), and banking service product quality (product variety and diverse features). Bauer et al. (2005) investigated the perceived quality of e-banking portals and concluded that security and trust, financial products and services variety, transaction support, responsiveness, and enjoyment are the main dimensions that consumers rely on to evaluate e-banking portals’ quality. Yang et al. (2004) revealed that reliability, responsiveness, competence, ease of use, security, and product portfolio are the main factors considered by consumers when they assess an internet banking portal service quality. Yang and Fang (2004) assessed the online securities brokerage service quality and identified eight dimensions including responsiveness, service reliability, ease of use, competence, access, system reliability, timeliness, and security. Jiang et al. (2015) explored e-service quality in the context of e-banking and online stock brokerage by considering care (i.e., employee responsiveness and competence), reliability, product portfolio, security, and ease of use. In a similar vein, Lee and Moghavvemi (2015) have considered empathy, reliability and security, price, online banking, and convenience as the main dimensions of bank service quality in Malaysia. Jain and Jain (2015) defined perceived service quality of Indian banks through functional quality (reliability, personal interactions, and tangibles) and outcome quality (i.e., what the customers think they are eventually getting out of their transactions with the service provider). Amin (2016) evaluated internet banking service quality by taking into consideration consumers’ personal needs, site organization, userfriendliness, and efficiency. Similarly, Hamzah et al. (2017) revealed that tangibles, empathy, internet banking, reliability, and security are all important factors influencing customer perception of the bank’s overall service quality. Srinivasan et al. (2002) investigated the antecedents and consequences of customer loyalty in an online business-to-consumer (B2C) context. They identify eight factors (the 8Cs—customization, contact interactivity, care, community, convenience, cultivation, choice, and character) influencing e-loyalty.

A comparison of these various research showed that reliability, product portfolio, security and privacy, and responsiveness are the main dimensions that consumers rely on to evaluate e-banking portal quality (Yang et al. 2004; Jiang et al. 2015). Nevertheless, as indicated previously, while Gen Z-ers place higher importance on support and advice, combining a desire for security, authenticity with an expectation of speed, convenience and seamless service, transparency about fees and services, and personalized service through online banking or mobile are also considered among the most important factors affecting how they choose a financial service provider. Therefore, to adapt the concept of e-service quality to Gen Z-ers expectations toward IOB service quality, we added to the dimensions of reliability, product
portfolio, security, privacy, and responsiveness two new dimensions which are bank transparency and personalization. As Gen Z-ers are digital natives and feel comfortable managing their finances using online tools, we have considered ease of use as not being a relevant variable for evaluating IOB service quality by Gen Z-ers.

As indicated previously, Gen Z-ers place higher importance on support and advice, combining a desire for security and authenticity with an expectation of speed, convenience, advice, transparency, personalization, and seamless service.

**IOB loyalty**

Customer loyalty has been defined through two dimensions: behavioral and attitudinal loyalty. Behavioral loyalty refers to consumers’ choice to repurchase because they like a brand or service (Zeithaml et al. 1996). Attitudinal loyalty reflects the emotional and psychological desire of the customer to repurchase and recommend to other people (Baumann et al. 2012). The concept of e-loyalty enlarges the traditional concept of loyal to online behavior. It reflects the customer’s online repeat purchase with the company while maintaining a good relationship and developing a positive attitude toward it (Toufaily et al. 2013). The importance of establishing a loyal customer base for long-term financial success has been recognized by both academics and practitioners since loyal customers will engage in favorable behavioral intentions, such as repeat purchases, positive word of mouth, and referrals (Aksoy 2013). Consumer loyalty toward e-banks has been defined as a consumer tendency to frequently visit the e-bank website and spread a positive word of mouth about it (Amin 2016).

**Conceptual model and hypotheses development**

**Relationship between perceived service quality and perceived value**

Based on the extant literature on IOBs and Gen Z’s typical financial behavior, we developed a conceptual model (Fig. 1) using six dimensions of e-service quality that are most relevant to IOBs. Namely, we focus on (1) reliability, (2) customer service and support, (3) product portfolio, (4) bank transparency, (5) personalization, and (6) security and privacy.

**Reliability**

In the banking context, research has shown a positive impact of reliability on perceived value (Chang and Tseng 2010;
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Lee and Moghavvemi 2015; Jiang et al. 2015). In the e-banking context, reliability is related to accurate online transactions, accurate records, correct performance, and fulfillment of promises (Yang et al. 2004). Moreover, reliability is considered by online consumers as the most important factor in achieving high service quality and perceived value. We posit that this relationship will be particularly relevant to Gen Z-ers because they are relatively inexperienced in the world of financial products. Gen Z-ers express a clear preference for excellent digital services, and consequently, reliability will positively impact the perceived value of IOBs in Gen Z consumers. Thus, we hypothesize that:

**H1** Reliability is positively related to IOBs consumers’ perceived value.

**Customer service and support**

Customer service and support consist of the bank’s ability to resolve customers' problems, answer their emails, and provide them with prompt service (Yang et al. 2004). It has been supported that responsiveness (Chang and Tseng 2010), care dimension (Jiang et al. 2015), and personal skills and proficiency (Faryabi et al. 2012) are important drivers of customer-perceived value in retail banking. Customer service and support appeared to be the most influential satisfying or dissatisfying factor for online banking consumers (Jun and Cai 2001; Yang et al. 2004; Yang and Fang 2004). Thus, we posit that customer service and support is likely to impact the perceived value of IOBs in Gen Z consumers:

**H2** Customer service and support is positively related to IOBs consumers’ perceived value

**Product portfolio**

In comparison to traditional banks, IOBs provide highly innovative services by focusing on part of their consumers’ needs for everyday banking products (KPMG 2020). Gen Z-ers prefer internet banking because it is more convenient than traditional banking. They want to make a variety of financial transactions, pay their bills electronically and automatically, view and print their monthly bank statements, and purchase stocks, insurance, and other financial offerings on one site (Latimore 2000). Numerous studies have pointed out that providing a wide range variety of products and a suitable selection of products/services are important ingredients for gaining internet consumer satisfaction, loyalty, and developing value in online companies (Cho and Park 2001; Chen et al. 2013; Jiang et al. 2015). Therefore, we posit that:

**H3** Product Portfolio is positively related to IOBs consumers’ perceived value.

**Bank transparency**

Bank transparency reflects the extent to which customers view the information provided by firms about their services as accessible and objective (Liu et al. 2015). Seeking information entails costs to consumers such as expenditure of time, money, and energy (Erdem and Swait 1998). As a consequence, performance transparency creates value for customers by reducing their information processing costs. In fact, being seen as transparent plays an important role for service firms in reducing customers’ uncertainty about service quality. Having grown up in a time in which “fake news” generates over 33 million results on Google (as of June 2017), Gen Z-ers are looking for their brands to be transparent, to be “real,” and deliver on their promises. Brand authenticity is core to brand value and is key to engaging Gen Z in a long-term relationship. Accordingly, we hypothesize that:

**H4** Bank transparency is positively related to IOBs consumers’ perceived value.

**Personalization**

Chellappa and Sin (2005, p. 181) define personalization as the “ability to proactively tailor products, services, information, and product purchasing experiences to tastes of individual consumers based upon their preference and personal information.” Personalization allows companies to serve the unique needs of customers, which leads to greater customer-perceived value (Gilmore and Pine 1997). Coelho and Henseler (2012) indicated that customization is positively related to customer loyalty in the banking industry since a highly customized product or service will create switching costs and diminish the attractiveness of competing alternatives. Gen Z-ers’ constant search for self-realization and products that offer opportunities to realize one’s individuality means that personality is likely to be in high demand for this demographic. According to Zafin (2020), Gen Z-ers place great importance on personalized banking and expect banks to provide recommendations relevant to consumers based upon individual financial product usage and behaviors. Thus, we posit that:

**H5** Personalization is positively related to IOBs consumers’ perceived value.

**Security and privacy**

Security and privacy encompass low risk associated with online transactions, safeguarding of personal information, and safety in completing online transactions. It is one of the main service quality dimensions of e-banking portals
(Yang et al. 2004) and an important source of satisfaction or dissatisfaction in the case of internet-only banks (Jun and Cai 2001). Some research suggests that security and privacy contribute to perceived value in the banking context (Jiang et al. 2015; Lee and Moghavvemi 2015). This may be of particular relevance to Gen Z-ers since this generation expresses the strongest desire to protect their personal data online and rate data security as the most desirable attribute in financial providers (Target 2020). Thus, we hypothesize that:

**H6** Security and privacy is positively related to IOBs consumers’ perceived value

**Perceived value and IOB loyalty**

The relationship between perceived value and loyalty has been supported by many studies (Yang et al. 2004; Chuah et al. 2014; Sun et al. 2016). Perceived value contributes to loyalty toward an e-business by reducing an individual’s need to seek alternative service providers (Chang and Chen 2009). Alternatively, when customers feel that they are not getting the best value for their money, they will begin searching for alternatives, which means that their loyalty often declines dramatically. In the context of financial services, some scholars have found a significant positive relationship between perceived value and customer loyalty (Roig et al. 2009; Jiang et al. 2015). It has been shown that online bank customer loyalty is driven by the functional value of service variety, the functional value of convenience, the functional value of money, the emotional value of trust, and the corporate value of reputation (Leelakulthanit and Hongcharu 2011). Thus, we posit that:

**H7** Perceived value is positively related to IOB loyalty.

**Research methodology**

**Questionnaire and sampling**

This study uses a convenience sample of Gen Z, IOB users. We selected this subset of Gen Z consumers because 18 to 24 year olds in particular face important life changes: going to university, leaving home, taking their first job, starting a relationship, and increasingly gaining financial independence. Subjects were self-selected from undergraduate students in three French business schools based in Paris. 300 respondents were invited by e-mail and through social networks to complete the questionnaire in December 2020. As an incentive to participate, students were offered two extra credit points on their term average for a given course. To make sure that the sample consists of only IOB users, we asked that only consumers who had internet-only bank accounts participate. 265 responses were collected but only 200 surveys could be used due to missing data and incomplete surveys. Demographic information and IOB usage frequency of the respondents are shown in Table 1. Approximately 60% of the respondents were male and 40% female. A large majority of respondents have adopted IOBs for more than one year (52.5%). N26 (a German-based IOB), Revolut (based in Britain), and Nickel (based in France) are the main IOBs adopted by respondents. Interestingly, respondents seem more attracted to international digital neo-banks since 45% of them have an account in either N26 or Revolut.

**Data analysis**

The questionnaire consisted of 8 scale items adapted from previous studies to ensure content validity. Table 2 displays all questionnaire items. The independent variables were composed of the e-banking service quality dimensions, including reliability (Yang et al. 2004; Sohn and Tadisina 2008), customer service and support (Shankar and Jebarajakirthy 2019), product portfolio (Jiang et al. 2015; Yang et al. 2004), personalization (Srinivasan et al. 2002), bank transparency (Liu et al. 2015), security and privacy (Yang et al. 2004; Pikkarainen et al. 2004). The reliability construct was measured by five items, the first three items were adapted from Yang et al. (2004), and the two last items were "The company’s system is always working well" and "the account information is updated immediately as soon as the transaction is finished" were obtained from the scale of reliability and the scale of the speed of delivery of Sohn and Tadisina (2008). Five items taken from Shankar and Jebarajakirthy (2019) were used to operationalize customer service and support. Product portfolio was operationalized using four items which the first three were taken from Jiang et al. (2015) and the remaining item, "The bank provides most of

| Table 1 Sample demographics | Frequency | % of Respondents |
|-----------------------------|-----------|------------------|
| **Gender**                  |           |                  |
| Male                        | 120       | 60%              |
| Female                      | 80        | 40%              |
| **IOBs used**               |           |                  |
| Hello Bank                  | 5         | 2.50%            |
| Orange Bank                 | 10        | 5.00%            |
| Revolut                     | 75        | 12.50%           |
| N26                         | 85        | 37.50%           |
| Nickel                      | 25        | 42.50%           |
| **Years of IOB account holding** | |                  |
| − 1 year                    | 95        | 47.50%           |
| + 1 year                    | 105       | 52.50%           |
| **Total N**                 | 200       |                  |
the service functions that I need," from Yang et al. (2004).
Personalization was measured using three items adapted from Srinivasan et al. (2002). Four items taken from Liu et al. (2015) were used to assess bank transparency. Four items were used to operationalize security and privacy in which the first item is adopted from Yang et al. (2004) and the remaining from Pikkarainen et al. (2004).

We also measured perceived value (Jiang et al. 2015; Roig et al. 2009) and IOB Loyalty (Jiang et al. 2015). The scale of perceived value consisted of six items. The first four items were adapted from Jiang et al. (2015). The fifth item was obtained from Roig et al. (2009) and the last item, "compared to alternative financial providers, this (IOB name) offers a lot of benefits," was designed for this research. Finally, three items taken from Jiang et al. (2015) were used to measure IOB loyalty.

All survey items used in the study were measured on a five-point Likert scale from 1 (Strongly Disagree) to 5

| Constructs                  | Measures                                                                 | Sources                        |
|-----------------------------|---------------------------------------------------------------------------|--------------------------------|
| Perceived value             | Compared to alternative financial providers, the (IOB name) offers attractive products and services | Jiang et al. (2015)            |
|                            | Compared to alternative financial providers, the (IOB name), the company charges me fairly for similar products/services | Roig et al. (2009)             |
|                            | Compared to alternative financial providers, the (IOB name) provides more free services | Designed for this research     |
|                            | Comparing what I pay to what I get, I think the (IOB name) provided me with good value |                                |
|                            | Compared to alternatives financial providers, the quality has been maintained all of the time |                                |
|                            | Compared to alternatives financial providers, this (IOB name) offers a lot of benefits |                                |
| Reliability                 | My online transactions are always accurate                                | Yang et al. (2004)             |
|                            | When the bank promises to do something by a certain time, it does so       | Sohn and Tadisina (2008)       |
|                            | The bank keeps my records accurately                                       |                                |
|                            | The bank’s system is always working well                                   |                                |
|                            | the account information is updated immediately as soon as the transaction is finished |                                |
| Customer service and Support| Customer service personnel are knowledgeable of e-banking services        | Shankar and Jebarajakirthy (2019) |
|                            | Customer service personnel are always willing to help me on matters relating to e-banking |                                |
|                            | My queries relating to e-banking are answered promptly                     |                                |
|                            | E-banking customer care team has customers’ best interests at heart        |                                |
|                            | E-banking customer care team can be accessed at any time (24/7 operating hours) |                                |
| Product Portfolio           | The bank provides wide ranges of service packages                          | Jiang et al. (2015)            |
|                            | The bank provides services with the features I want                        | Yang et al. (2004)             |
|                            | The bank provides me many useful free services (e.g., message board)       |                                |
|                            | The bank provides most of the service functions that I need                |                                |
| Personalization             | (IOB name) makes purchase recommendations that match my needs              | Srinivasan et al. (2002)       |
| Bank transparency           | This (IOB name) enables me to order products and services that are tailor-made for me | Liu et al. (2015)              |
| Security and Privacy        | The advertisements and promotions that this (IOB name) sends to me are tailored to my situation | Yang et al. (2004)             |
| IOB Loyalty                 | (IOB name) offers access to other customers’ comments or ratings of its services | Pikkarainen et al. (2004)      |
|                            | (IOB name) compares the pros and cons of its services versus competitor offerings | Jiang et al. (2015)            |
|                            | The language of the financial terms and conditions were clear              |                                |
|                            | Information provided by [IOB name] about its services is easily understood |                                |
|                            | The bank will not misuse my personal information                          |                                |
|                            | Using this online bank website is financially secure                      |                                |
|                            | I am not worried about the security of this online bank                    |                                |
|                            | The bank website protects my privacy                                      |                                |
|                            | I intend to continue to do business with the present [IOB name]            |                                |
|                            | I would recommend the [IOB name] to those who seek my advice about such matters |                                |
|                            | I would encourage friends and relatives to use the [IOB name]              |                                |
(Strongly Agree). The questionnaire was translated and back translated to French, ensuring that the meanings of words and sentences did not change across cultures (Craig and Douglas 2000). The final questionnaire adopted in this research is presented in Table 2. We performed a validity and reliability analysis for each measure in the structural model (see Table 3), where all the item loadings were satisfactory, and Cronbach’s α exceeded the recommended 0.6 level for each construct (Nunnally and Bernstein 1994). Results confirmed that our instrument has satisfactory construct validity. The average variance extracted (AVE) was higher than 0.5 for all constructs and all variables achieved good discriminant validity (see Table 4).

### Results

To test the hypotheses, structural equation modeling on IBM AMOS 25 was performed. The results of structural equation modeling obtained for the proposed conceptual model indicate the acceptable goodness-of-fit model. The results show that $\chi^2/df$ of 1.282 ($p<0.001$), RMSEA (0.034), CFI (0.980), NFI (0.918), RFI (0.895), GFI (0.897), AGFI (0.860) were above or quite close to the cut-of criteria (Hair et al. 2009). In this study, GFI and the AGFI values are lower than the commonly cited thresholds (0.9); however, they were

### Table 3 Construct reliability and convergent validity

| Constructs                       | Items | Loading | Cronbachs alpha (α) | Convergent Validity | AVE  |
|----------------------------------|-------|---------|---------------------|---------------------|------|
| IOB Loyalty                      | LOY1  | 0.709   | 0.875               | 0.96                | 0.801|
|                                 | LOY2  | 0.861   |                     |                     |      |
|                                 | LOY3  | 0.835   |                     |                     |      |
| Perceived value                  | PV1   | 0.736   | 0.801               | 0.85                | 0.721|
|                                 | PV2   | 0.814   |                     |                     |      |
|                                 | PV3   | 0.799   |                     |                     |      |
|                                 | PV4   | 0.797   |                     |                     |      |
|                                 | PV5   | 0.742   |                     |                     |      |
|                                 | PV6   | 0.609   |                     |                     |      |
| Personnalization                | PER1  | 0.732   | 0.800               | 0.93                | 0.71 |
|                                 | PER2  | 0.685   |                     |                     |      |
|                                 | PER3  | 0.718   |                     |                     |      |
| Bank transparency               | BT1   | 0.735   | 0.807               | 0.70                | 0.65 |
|                                 | BT2   | 0.711   |                     |                     |      |
|                                 | BT3   | 0.891   |                     |                     |      |
|                                 | BT4   | 0.877   |                     |                     |      |
| Reliability                     | REL1  | 0.942   | 0.906               | 0.85                | 0.73 |
|                                 | REL2  | 0.862   |                     |                     |      |
|                                 | REL3  | 0.779   |                     |                     |      |
|                                 | REL4  | 0.876   |                     |                     |      |
|                                 | REL5  | 0.831   |                     |                     |      |
| Customer service and Support    | RES1  | 0.822   | 0.843               | 0.83                | 0.62 |
|                                 | RES2  | 0.810   |                     |                     |      |
|                                 | RES3  | 0.825   |                     |                     |      |
|                                 | RES4  | 0.742   |                     |                     |      |
|                                 | RES5  | 0.737   |                     |                     |      |
| Product Portfolio               | PP1   | 0.914   | 0.940               | 0.96                | 0.84 |
|                                 | PP2   | 0.956   |                     |                     |      |
|                                 | PP3   | 0.942   |                     |                     |      |
|                                 | PP4   | 0.867   |                     |                     |      |
| Perceived security and privacy  | SP1   | 0.843   | 0.814               | 0.85                | 0.796|
|                                 | SP2   | 0.854   |                     |                     |      |
|                                 | SP3   | 0.785   |                     |                     |      |
|                                 | SP4   | 0.740   |                     |                     |      |

Note 1: BT Bank transparency, SP Security and Privacy, PP Product Portfolio, REL Reliability, CS Customer service and Support, PER Personnalization, PV Perceived Value, LOY Loyalty
Within range of the recommended levels (Kline 2005). This indicates that the research model is valid and fits the data. Table 5 shows the path coefficients $\beta$ of all research hypotheses. As expected, the six independent variables, reliability, customer service and support, product portfolio, bank transparency, personalization, and security and privacy, have statistically significant and positive relationships with consumers’ perceived value at the significant level of $p < 0.05$. The customer service and support dimension is the most significant independent variable with the largest standardized beta coefficient ($\beta = 0.322$), followed by bank transparency ($\beta = 0.280$), personalization ($\beta = 0.262$), product portfolio ($\beta = 0.258$), reliability ($\beta = 0.254$), and security and privacy ($\beta = 0.123$). Thus, H1, H2, H3, H4, H5, and H6 are supported. Moreover, consumers’ perceived value exerts a significant and positive effect on Gen Z-ers’ loyalty toward IOBs ($\beta = 0.513$). Thus, H7 is supported.

Results show that perceived value plays an important role in enhancing Gen Z loyalty toward internet-only banks. These results are in agreement with previous studies highlighting the crucial role of perceived value on consumer bank loyalty (Roig et al. 2009; Jiang et al. 2015). These results go hand in hand with Windasari et al. (2022) who found that economic value and rewards enhance Gen Z-ers’ willingness to use digital-only banking.

Our results suggest that banks should provide high added value banking experience to Gen Z consumers to maintain a competitive advantage. Also, IOBs should create a meaningful value proposition that enables a continuous value exchange for all interactions with Gen Z-ers. To achieve this, banks should identify the most valuable service quality dimensions for their customers and develop the right analytical tools.

This study helps IOBs to have a better understanding of the relative importance of various e-quality dimensions considered by Gen Z-ers when evaluating bank service value. Our results suggest that IOBs can create higher perceived service value to Gen Z-ers if they consistently provide high-quality services with particular attention to customer service and support, transparency, personalization, and product portfolio dimensions that can be used as core propositions. Providing added value means banks need to develop more customer-focused culture across their value chain. More innovative strategies should be implemented to cater to GEN Z.

Due to COVID, Gen Z has experienced a decline in income and loss of jobs (Euromonitor study 2020). Thus, creating value becomes a critical factor to influence their choices. Thus, IOBs should reconsider their offerings taking into consideration affordability and implementing new pricing strategies to create value for them.

### Table 4: Discriminant validity of constructs

| Construct | BT  | SP  | PP  | RE  | CS  | PER | PV  | LOY |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| BT        | 0.65|     |     |     |     |     |     |     |
| SP        | 0.150 | 0.79|     |     |     |     |     |     |
| PP        | 0.01 | 0.004 | 0.84|     |     |     |     |     |
| REL       | 0.150 | 0.350 | 0.106 | 0.73|     |     |     |     |
| CS        | 0.162 | 0.259 | 0.044 | 0.290 | 0.62|     |     |     |
| PER       | 0.118 | 0.158 | −0.001 | 0.183 | 0.178 | 0.71|     |     |
| PV        | 0.126 | 0.204 | 0.08 | 0.320 | 0.213 | 0.166 | 0.72|     |
| LOY       | 0.126 | 0.181 | 0.035 | 0.210 | 0.157 | 0.114 | 0.195 | 0.56 |

*Note 1: Diagonal elements (in bold) are the square root of average variance extracted (AVE)

Off-diagonal elements are the correlations among constructs. For discriminant validity, diagonal elements should be larger than the off-diagonal elements.

*Note 2: BT Bank transparency, SP Security and Privacy, PP Product Portfolio, REL Reliability, CS Customer service and Support, PER Personnalization, PV Perceived Value, LOY Loyalty

### Table 5: Assessment of the structural model

| Hypothesis path | Parameter estimate ($\beta$) | t-Value | p-Value | Results |
|-----------------|-----------------------------|---------|---------|---------|
| H1 REL → PV     | 0.254                       | 4.328   | 0.000** | Supported |
| H2 CS → PV      | 0.332                       | 2.914   | 0.004** | Supported |
| H3 PP → PV      | 0.258                       | 2.952   | 0.003** | Supported |
| H4 BT → PV      | 0.280                       | 3.508   | 0.000*** | Supported |
| H5 PER → PV     | 0.262                       | 2.132   | 0.033** | Supported |
| H6 SP → PV      | 0.123                       | 2.668   | 0.008*** | Supported |
| H7 PV → LOY     | 0.513                       | 7.254   | 0.000*** | Supported |

*Note 1: **Significance at p < 0.001, *Significance at p < 0.05
Customer service and support emerged as the most influential determinants of consumers’ perceived value. This finding supports Abu Daqar et al. (2020), which showed that better service, ease of use, and the speed of the service were the most important factors that Gen Z-ers consider when choosing financial services.

IOBs should invest heavily in providing support and customer care to Gen Z-ers. Gen Z consumers are likely to seek expert advice from financial providers and want to experience the security of one-on-one professional advice (Target 2020). Customer value creation should become the employees’ priority in IOBs every day’s interaction. Therefore, employees should be responsive to Gen Z-ers’ complaints, be able to understand and anticipate their needs, and guide consumers toward the best offers quickly. By providing prompt responses to Gen Z requests, bank personnel could create a positive atmosphere and make the customers feel at ease (Yavas et al. 2014). Given the behavior of Gen Z, IOBs will need to find ways to earn their trust and engage them with online banking using digital methods through TikToks, games, and personalized videos.

While information about financial decision making is available, it is often too abstract for Gen Z-ers. Therefore, information and advice offers must also be conceptualized and developed in a way that they are understood by the target group. Employees should be trained to adapt to GenZ’s financial behavior and to their expectations in terms of service quality. Particularly, they need to adopt a more educational and pedagogical approach when they explain the functioning of complex financial services by using online video tutorials. Indeed, IOBs should invest heavily in providing correct and accurate services while making sure that all banking transactions are done effectively. It should also ensure that the service delivered is consistent with the service promised to earn GenZ’s trust in the bank’s reliability. Therefore, IOBs should try to optimize the customer service delivery process by focusing on internal process excellence and smoothness and efficiency of the customer experience.

Gen Z-ers seek transparency, simple explanations, authenticity, and credibility when choosing a financial provider (Finleap 2020). They want to impart their trust in an established financial provider with good ethics. With an abundance of financial products on the market, they feel overwhelmed by the available information, which leads to increased stress in decision making. Our results confirm the extent to which Gen Z-ers value bank performance transparency in their relationships with IOBs. Therefore, to build a successful relationship with customers, IOBs need to be transparent and authentic. They should provide transparent pricing, transparent statements about privacy and security, and transparent information about their quality. For example, IOBs should highlight both the pros and cons of their services compared to other firms’ offerings and clearly communicate (examples) the value of the products and services offered. Because Gen Z-ers are less experienced in managing their money and more influenced by their peers, they value any input from experienced and knowledgeable people (Target 2020). Therefore, IOBs could motivate Gen Z-ers to share their banking experiences and could give them access to customer reviews and ratings. Since Gen Z-ers consider authenticity as a core brand value, IOBs should ensure transparency and brand authenticity at every touchpoint.

Growing up in the Netflix, Amazon, and TikTok era, Gen Z-ers expect very personalized banking experiences, (Fin-tech Futures 2020). Yet, most of them indicated that their current interactions with their bank are either not personalized at all or only slightly personalized. Gen Z-ers also report that their current banks do not proactively offer them products, pricing, and other services relevant to their financial situation, needs, and goals (Zafin 2020). Since personalization contributes strongly to IOB’s perceived value, IOBs should be able to view Gen Z-ers as a segmented group, recognizing customer uniqueness and tailoring offerings, incentives, rewards programs, communications, products, and recommendations to consumer needs and life circumstances. For example, programs offering rewards for defining and achieving financial goals such as saving for a down payment or paying down student loans are valuable services for Gen Z-ers and may play a large role in their relationship with a bank. Financial education is another key aspect of personalized offerings on which IOBs should focus. Given Gen Z-ers' strong desire for financial education, IOBs can also personalize the Gen Z banking experience by providing personalized budgeting advice and money management tips. Gen Z-ers can request trusted advisors, who will provide them with financial solutions that fit their life stage. To achieve that, advanced analytics capabilities and data intelligence are key to guiding their personalized banking recommendations. If banks can better understand Gen Z-ers' priorities, goals, and expectations, they can deliver customized, value-added services. For instance, if a Gen Zer is planning to buy a house his/her bank could first educate them about the mortgage market, and then go beyond to identify and share methods to help them plan and save to reach the goal.

Gen Z-ers are looking for personalized services. Banks will need to stay at least several steps ahead of their Gen Z customers. By using data analytics, banks can offer a personalized experience. This will help them develop a customer-centric experience. Gen Z-ers consumers are constantly looking for tailored offerings, products, and services that are new, exciting, and accessible and value rewards when they use Digital-only Banking (Winda-sari et al. 2022). Therefore, to enhance perceived value, boost Gen Z engagement, and avoid switching behavior, IOBs should offer rewards to their customers. Perhaps IOBs...
in France can partner with some retailers to offer awards points to their customers and get a percentage off.

Gen Z-ers are mobile and omnichannel banking users that value convenience, autonomy, and freedom. This implies that IOBs should continue to expand their range of digital, online, and mobile services and build their portals as integral problem solvers for Gen Z-ers customers. IOBs need to come up with innovative proposals to their clients around key moments of life and create products, services, and solutions that improve Gen Z-ers’ ability to manage and make better decisions about their finances. To attain this goal, data management and analytics are necessary to help banks understand what really drives Gen Z-ers’ behaviors and needs, and satisfy those needs with innovative products and services.

Moreover, Gen Z-ers want to be a part of the innovation process, collaborating with businesses to get what they want and need. Therefore, IOBs should invite them to shape and co-create their product portfolio. In the banking sector, co-creation participation influences brand experience, and through that, brand satisfaction and loyalty (Nysveen and Padersen 2015). Gen Z-ers should be continually solicited to propose new ideas, test new products, and give feedback to improve existing products and services. Since Gen Z IOB users seek simple, useful products and services, and a convenient bank experience, IOBs should also facilitate decisions for customers by offering bundled services, which increase convenience and generate more service use. For example, IOBs can extend their offerings by developing partnerships with traditional actors of the financial services sector (e.g., payment, insurance) as well as with non-banking players (e.g., aggregators, loyalty programs, travel) that can facilitate consumer’s access to a wide range of both financial and non-financial services.

To our surprise, Gen Z-ers appear to be least concerned with privacy and security concerns. These results can perhaps be explained by the fact that privacy and security are not an option but rather a prerequisite in the online banking context. However, security and privacy make up one of the main service quality dimensions of e-banking portals (Yang et al. 2004) and Gen Z-ers are also particularly sensitive to the security of their banking data and payments and refuse to share personal data with their bank. This suggests a lack of trust in providers due to a lack of transparency about how personal data can be used or stored. Thus, IOBs should introduce additional trusted services, such as identity protection to enhance Gen Z-ers’ trust and loyalty and offer a secure data protection service in case of a fraudulent transaction. Moreover, IOBs could provide clear and prominent statements about privacy and security matters on their websites.

Conclusion, limitations and future research

This study contributes to the e-banking literature by focusing on the perception of IOBs service value by French Gen Z users. It confirms that perceived value plays an essential role in developing Gen Z-ers’ loyalty toward IOBs and also supports the notion that e-service quality features such as customer service and support, bank transparency, personalization, and product portfolio are key antecedents of IOB perceived value. Moreover, while security, privacy, and reliability showed relatively weaker influences on IOB perceived value, they were still significant determinants.

Our findings can help IOBs formulate a unique and appropriate value proposition by focusing on the service attributes that are most valued by their consumers. IOBs must rethink how they deliver value to Gen Z-ers and should create distinct propositions through customer-centricity and service design. IOBs must focus on the quality of customer experience, particularly on the outcome quality and interaction quality. Indeed, banks should pay attention to making all offerings simple, transparent, and tailored to Gen Z-ers’ lifestyles and needs. Generation Z expects IOBs to deliver digital customer experiences that are social, authentic, highly personalized, seamless, secure, educational, and entertaining.

While care was taken to increase the validity of our findings, there were some limitations in our study. First, we utilized convenience sampling of college students from a single geographic region. Therefore, caution should be taken when generalizing these findings to other Gen Z groups. Future researchers should aim to replicate this study using a large representative sample of Gen Z IOBs users. Moreover, in this study, we have considered Gen Z as a homogeneous target, but this cohort is heterogeneous since the attitudes, opinions, and expectations of those 15–17 years of age will be different from those aged 18–25. Age as a segmentation criterion should be considered by future research exploring Gen Z banking behavior.

This research adopts a cross-sectional data collection method and focuses on post-purchase value because the selected respondents are IOBs users. Several researchers pointed out the dynamic nature of the consumer value (Ponnam and Paul 2017), follow-up studies can collect longitudinal data to investigate how the age and the stage of the relationship can moderate the relationship between service quality dimensions and IOBs perceived value. This study focuses only on IOBs. Moorhi and Mohan (2017) have established the relationship between the structure of ownership of a bank and its value proposition. Thus, further research should test our conceptual model for different types of direct banking business models. In addition, our study defines customer-perceived value as a
unidimensional concept whereas previous research in the banking sector highlighted the necessity to consider perceived value as a complex formative construct including both functional and emotional dimensions (Laukkanen 2006; Heinonen 2007). In this regard, subsequent research could extend the model tested by including these variables.

**Declarations**

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

**References**

Abu Daqar, M., S. Arqawi, and S. Abu Karsh. 2021. Fintech in the eyes of Millennials and Generation Z (the financial behavior and Fintech perception). Banks and Bank Systems 15 (3): 20–28.

Accenture. 2017. Financial providers: Transforming distribution models for the evolving consumer. https://www.accenture.com/t20170111T041601__w__/us-en/_acmedia/Accenture/next-gen-3/DandM-Global-Research-Study/Accenture-Financial-Services-Global-Distribution-Marketing-Consumer-Study.pdf

Aksoy, L. 2013. How do you measure what you can’t define? Journal of Service Management 24 (4): 356–381.

Amin, M. 2016. Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. International Journal of Bank Marketing 34 (3): 280–306.

Bauer, H.H., M. Hammerschmidt, and T. Falk. 2005. Measuring the quality of e-banking portals. International Journal of Bank Marketing 23 (2): 153–175.

Baumann, C., H. Hamin, and R.L. Tung. 2012. Share of wallet in retail banking. International Journal of Bank Marketing 30 (2): 88–101.

Bressolles, G., F. Durrieu, and K.R. Deans. 2015. An examination of the online service-profit chain. International Journal of Retail and Distribution Management 43 (8): 1–20.

Chang, H.H., and S.W. Chen. 2009. Consumer perception of interface quality, security, and loyalty in electronic commerce. Information and Management 46 (7): 411–417.

Chang, H.S., and C.M. Tseng. 2010. The matrix composition of banking customer value. Journal of International Consumer Marketing 22 (4): 347–362.

Chellappa, R.K., and R.G. Sin. 2005. Personalization versus privacy: An empirical examination of the online consumer’s dilemma. Information Technology and Management 6 (2): 181–202.

Chen, M.H., K.M. Tsai, Y.C. Hsu, and K.Y. Lee. 2013. E-service quality impact on online customer’s perceived value and loyalty. China-USA Business Review 12 (5): 473–485.

Cho, N., and S. Park. 2001. Development of electronic commerce user-consumer satisfaction index (ECUSI) for internet shopping. Industrial Man-Agement and Data Systems 101: 400–405.

Chuah, H.W., M. Marimuthu, and T. Ramayah. 2014. The effect of perceived value on the loyalty of generation Y mobile internet subscribers: A proposed conceptual framework. Procedia - Social and Behavioural Sciences 130: 532–541.

Coelho, P., and J. Henseler. 2012. Creating customer loyalty through service customization. European Journal of Marketing 46 (3/4): 331–356.

Craig, S.C., and S.P. Douglas. 2000. International marketing research, 2nd ed. New York: Wiley.

Criteo Study. 2018. Gen Z Report. Available at: URL: https://www.criteo.com/wp-content/uploads/2018/05/GenZ-Report.pdf (accessed on April 20 2020).

Efma. 2021. France: More than 60% of 18–30 year olds are considering changing banks in 2021. https://www.efma.com/article/4719-france-more-than-60-of-18-30-year-olds-are-considering-changing-banks-in-2021.

Erdem, T., and J. Swait. 1998. Brand equity as a signaling phenomenon. Journal of Consumer Psychology 7 (2): 131–157.

Euromonitor study. 2020. New Strategies to Engage Millennials and Generation Z in Times of Uncertainty. https://www.euromonitor.com/article/new-strategies-to-engage-millennials-and-generation-z-in-times-of-uncertainty.

Faryabi, M., F. Kaviani, and H. Yasrebdooz. 2012. The relationship between customer perceived value and customers Satisfaction in the Banking Industry in Iran. Australian Journal of Basic and Applied Sciences 6 (12): 76–85.

Fintech Futures. 2020. Personalisation: the Gen Z banking imperative. https://www.fintechfutures.com/2020/12/personalisation-the-gen-z-banking-imperative/.

Finleap. 2020. GenZ: The financial future is now. https://finleap.com/genz-the-future-of-financial-services/.

Gartner. 2020. How Can Financial Services Marketers Reach Gen Z? https://blogs.gartner.com/ross-cosner/2020/10/21/how-can-financial-services-marketers-reach-gen-z/.

Gilmore, J.H., and J. Pine. 1997. The four faces of mass customization. Harvard Business Review 75: 91–101.

Hair, J.F., W.C. Black, and B.J.R.E. BabinAnderson. 2009. Multivariate data analysis, 7th ed. Upper Saddle River: Prentice Hall.

Hanzah, Z.L., S.P. Lee, and S. Moghavvemi. 2017. Elucidating perceived overall service quality in retail banking. International Journal of Bank Marketing 35 (5): 781–804.

Heinonen, K. 2007. Conceptualizing online banking service value. Journal of Financial Services Marketing 12 (1): 39–52.

INSEE. 2021. https://www.insee.fr/fr/statistiques/2381474#figure1_ radio2.

Ivanauskiene, N., V. Auraskeviciene, V. Skudiene, and V. Nedzinkas. 2012. Customer perception of value: Case of retail banking. Organizations and Markets in Emerging Economies. 3 (5): 75–88.

Izquierdo, C.C., S. Rodríguez, and R.S. José. 2006. Customers’ perception of value in financial services relationships: A Spanish case. Journal of International Consumer Marketing. 19 (1): 57–77.

Jain, S., and S.K. Jain. 2015. Does outcome quality matter? An investigation in the context of banking services in an emerging market. Journal of Consumer Marketing 32 (5): 341–355.

Jiang, L., M. Jun, and Z. Yang. 2015. Customer-perceived value and loyalty: How do key service quality dimensions matter in the context of B2C e-commerce? Service Business 10 (2): 301–317.

Jun, M., and S. Cai. 2001. The key determinants of internet banking service quality: A content analysis. International Journal of Bank Marketing 19 (7): 276–291.

Kline, R. 2005. Principles and practices of structural equation modeling, 2nd ed. New York: Guilford Press.

KPMG. 2020. Panorama of neobanks and challenger banks in France, https://kpmg.view-docs.com/v/5cbcd2ec5_cab77f7308de099e688ce48ad7b79f3c938cf23.

Latimore, D. 2000. Real options: Another way to value internet initiatives. Financial Executive 16 (3): 23–23.

Laukkanen, T. 2006. Customer-perceived value of e-financial services: A means-end approach. International Journal of Electronic Finance 1 (1): 5–17.

Lee, S.P., and S. Moghavvemi. 2015. The dimension of service quality and its impact on customer satisfaction, trust, and loyalty: A case of Malaysian banks. Asian Journal of Business and Accounting 8 (2): 91–120.
