

## The Paradox of Fintech and Gen Z Consumption in Sustainable Development: Implications for Community Development Planning in Gorontalo Province

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### Abstract

Fintech transformation in Gorontalo accelerates Gen Z transactions, but raises a paradox between ease of consumption and sustainability demands; This study aims to map strengths, weaknesses, opportunities, threats and formulate WT interventions for community development planning. Exploratory qualitative research involved 67 Gen Z students (18–27 years old) who are financially autonomous and regular users of e-wallets, paylater, or digital investments; Data were collected through focus group discussions and semi-structured face-to-face interviews and analyzed with SWOT thematization. The results show that the main strengths of fintech are understood to be transaction efficiency and withdrawal monitoring, while the dominant weaknesses are frictionless spending, promotional impulsivity, and the illusion of paylater's affordability. Interpretation shows that self-control is strengthened when the monitoring feature is consciously activated. Gen Z considers the biggest opportunities to be in budget control features, microlearning, and impact feedback, but feel the threat in the form of consumptive debt, FOMO, e-commerce overconsumption, and consumer protection risks. Research emphasizes that fintech can be a behavioral infrastructure for sustainable development if supported by choice design (limits, transaction breaks, notifications) and literacy-protection governance; Further studies are suggested to test the effectiveness of WT packages on regional programs and measure changes in consumption behavior over time.

**Keywords:** Community Development Planning; Fintech; Generation Z; Sustainable Consumption; SWOT

### Abstrak

Transformasi fintech di Gorontalo mempercepat transaksi Gen Z, namun memunculkan paradoks antara kemudahan konsumsi dan tuntutan keberlanjutan; studi ini bertujuan memetakan *strengths*, *weaknesses*, *opportunities*, *threats* serta merumuskan intervensi WT untuk perencanaan pembangunan masyarakat. Penelitian kualitatif eksploratoris melibatkan 67 mahasiswa Gen Z (18–27 tahun) berotonomi finansial dan pengguna rutin e-wallet, paylater, atau investasi digital; data dikumpulkan melalui diskusi kelompok terfokus dan wawancara tatap muka semi-terstruktur dan dianalisis dengan tematisasi SWOT. Hasil menunjukkan bahwa

kekuatan utama fintech dipahami sebagai efisiensi transaksi dan pemantauan pengeluaran, sedangkan kelemahan dominan adalah frictionless spending, impulsivitas promosi, dan ilusi keterjangkauan paylater. Interpretasi menunjukkan kontrol diri menguat ketika fitur monitoring diaktifkan secara sadar. Gen Z menilai peluang terbesar ada pada fitur kontrol anggaran, microlearning, dan umpan balik dampak, tetapi merasakan ancaman berupa utang konsumtif, FOMO, overconsumption e-commerce, serta risiko perlindungan konsumen. Penelitian menegaskan fintech dapat menjadi infrastruktur perilaku bagi pembangunan berkelanjutan jika didukung desain pilihan (limit, jeda transaksi, notifikasi) dan tata kelola literasi–perlindungan; studi lanjut disarankan menguji efektivitas paket WT pada program daerah dan mengukur perubahan perilaku konsumsi dari waktu ke waktu.

**Kata Kunci:** Fintech; Generasi Z; konsumsi berkelanjutan; SWOT; perencanaan pembangunan masyarakat.

## INTRODUCTION

The transformation of the digital economy is driving changes in the way young households manage money, transact and make consumption decisions. In Gorontalo Province, Generation Z—which is demographically defined as a group born 1997–2012—is an active user of various fintech services, so their consumption behavior is relevant to be read as economic development issues, not just individual behavior (BPS Gorontalo, 2025; Forum Ekonomi Digital Indonesia, 2023). Demographically, Gorontalo recorded approximately 335,659 Gen Z residents based on the 2020 Population Census, representing one of the smallest Gen Z concentrations in Indonesia, yet constituting a strategically significant youth cohort within a total provincial population of 1.23 million (BPS Provinsi Gorontalo, 2024). Nationally, Gen Z accounts for 27.94 percent of the Indonesian population (BPS Provinsi Gorontalo, 2024), and their digital financial behavior increasingly shapes regional economic dynamics even in smaller provinces such as Gorontalo. On the digital finance adoption side, the penetration of QRIS-based payment systems has expanded across Gorontalo's MSME sector, as evidenced by studies documenting its adoption for financial transparency among Kota Gorontalo's small businesses (Hasanani et al., 2024). At the national level, financial inclusion reached nearly 84 percent in 2023, with 74 percent driven by fintech innovations such as e-wallets and QRIS (Boston Consulting Group (BCG), 2023; DOKU, 2024), yet spatial inequality persists, as eastern Indonesian provinces including Gorontalo remain below the national average in formal financial inclusion indices (Otoritas Jasa Keuangan-OJK, 2023). In this context, fintech is perceived to expand the ease and efficiency of transactions while forming a new consumption ecosystem that is increasingly integrated with e-commerce.

This digital acceleration, however, occurs against the backdrop of significant regional development challenges. Gorontalo Province recorded an extreme poverty rate of approximately 2.03 percent (3,380 individuals), a stunting prevalence of 26.9 percent—above the national average of 21.5 percent—and persistent urban-rural disparities in its Human Development Index (HDI) across districts (BPS Provinsi Gorontalo, 2024; Gorontalo Post, 2024). These conditions make it both urgent and complex to assess whether fintech adoption among Gen Z reinforces consumptive behavior that deepens welfare gaps, or whether it can be redirected as a behavioral infrastructure for sustainable community development. This shift shows that financial digitalization can be an instrument to strengthen people's economic access, but it can also change the "taste" and control over daily spending. At this point, community development licensing needs to view fintech as a structural variable that affects long-term welfare.

Financial technology (fintech) has revolutionized the consumption paradigm dramatically, especially among Gen Z who are growing up as digital natives. Payment platforms, digital wallets, buy-now-pay-later (BNPL) services, and online lending have driven substantial growth in online shopping, with digital transactions in Indonesia increasing by 41.2% throughout 2022-2023 (Bank Indonesia, 2024). Bank Indonesia, (2024a), the value of electronic money transactions in Indonesia grew 43.45 percent year-on-year in 2023, reaching IDR 835.84 trillion, while digital banking transactions reached IDR 58,478.24 trillion—a growth of 13.48 percent over the same period. This transformation has intensified in the wake of the COVID-19 pandemic, creating digital consumption habits that persist even after social restrictions end. Research by Nielsen, (2023) reveals that 87 percent of Gen Z in Indonesia conduct online purchases, with 65 percent of them doing so at least once a week—reflecting a digital shopping intensity that far exceeds that of previous generations. Nationally, Gen Z aged 18–25 recorded the highest financial inclusion index among all youth groups at 79.21 percent in 2024, indicating deep integration of digital financial services into their daily lives (Otoritas Jasa Keuangan (OJK) & Badan Pusat Statistik, 2024).

One form of fintech that is growing rapidly in Indonesia is QRIS (Quick Response Indonesian Standard). QRIS is a QR code standard for the digital payment system in Indonesia, developed jointly by Bank Indonesia and the Indonesian Payment System Association (ASPI), designed to provide a fast, easy, affordable, secure, and reliable payment system (Bank Indonesia, 2023). According to Buluati et al., (2023), QRIS is a standardization of QR codes for digital payments through server-based electronic money applications, electronic wallets, or mobile banking. The main goal of QRIS is to make digital payments easier for the public and can be supervised by one-stop regulators because they have been standardized. Bank Indonesia requires the use of QR Code-based QRIS with the aim of creating transaction efficiency, advancing MSMEs, and accelerating financial inclusion, which can ultimately boost Indonesia's economic growth. By the end of 2023, QRIS had recorded 45.78 million users and 30.41 million merchants—the majority of whom are MSMEs—with transaction volumes growing 130.01 percent year-on-year, reaching IDR 229.96 trillion (Bank Indonesia, 2024a).

On the other hand, Generation Z is often associated with having pro-sustainability aspirations, but their digital consumption practices can move in the opposite direction when faced with platform promotions and designs that drive quick transactions. The concept of "environmental impact invisibility" discovered by Zhang et al., (2023) explains why the environmental impact of digital consumption is often less pronounced than physical consumption, thus triggering dissonance and behavior that is inconsistent with sustainability values. This phenomenon confirms the presence of a paradox: the easier transactions occur, the greater the chance of increased consumption without reflection on sustainability. Therefore, "Swipe Green" becomes an important metaphor for reading the negotiation between digital convenience and the demands of sustainable development.

The core problem arises when the ease of fintech meets impulsive behavior, creating a frictionless spending pattern that increases consumption without adequate control. In the BNPL ecosystem, the structural design of installment payments psychologically lowers the barrier to spending: research by Hayashi & Routh, (2024) using the Federal Reserve's Survey of Household Economics and Decisionmaking confirms that BNPL users tend to be more financially vulnerable

than non-users, with evidence suggesting consumers spend approximately 20 percent more when a BNPL option is available, with the strongest effect found among those with weaker credit profiles. In Indonesia specifically, BNPL financing grew 47.59 percent year-on-year by November 2024, reaching IDR 30.36 trillion, and OJK data show that Gen Z (aged 18–25) and millennials together account for the dominant share of paylater users, with the majority of transactions concentrated in consumptive—rather than productive—spending categories such as e-commerce and lifestyle purchases (Kompas.id, 2025; OJK, 2024).

The transmission from individual consumption behavior to broader socio-economic vulnerability operates through at least four interconnected channels. First, frictionless spending displaces savings: when discretionary income is routed into recurring installment obligations before any savings commitment is made, the capacity to build emergency reserves is systematically eroded, weakening household financial resilience against income shocks (Financial Health Network, 2022; Hayashi & Routh, 2024). Second, debt accumulates silently: because BNPL typically requires no hard credit check and is not always reported to credit bureaus, multiple simultaneous obligations can compound undetected, leading to a cycle in which new installments are opened to service existing ones (Otoritas Jasa Keuangan-OJK, 2023; Z. Wang, 2025). In Indonesia, the non-performing loan rate for BNPL reached 6.66 percent in September 2023, before declining to 3.21 percent by November 2024—a trajectory that still signals systemic stress among younger, lower-income cohorts (PEFINDO Biro Kredit (IdScore), 2024). Third, consumptive debt directly constrains access to productive financial instruments: OJK officials have noted that young adults with outstanding paylater obligations—sometimes as small as IDR 300,000–400,000—are being rejected for first-home mortgage applications due to poor credit scores, illustrating how micro-level consumption debt forecloses macro-level asset accumulation (Bloomberg Technoz, 2023). Fourth, reduced savings and elevated debt burdens lower the capacity for productive investment, whether in education, microenterprise, or long-term assets, thereby weakening the human capital and economic formation potential of the young productive-age cohort that Gorontalo's community development planning depends on (Financial Health Network, 2022; Z. Wang, 2025). If this pattern becomes entrenched among the young productive-age group, the problem extends far beyond individual "spending preferences" to become a structural socio-economic vulnerability that must be mapped in the regional development agenda. From a development economics perspective, excessive consumption financed by debt does not merely reflect poor financial behavior—it actively erodes the economic capacity-building of young households, undermines their long-term welfare trajectory, and ultimately constrains the human capital formation that sustainable community development requires.

The next problem is the low integration of sustainability impact indicators in fintech services, which makes the ecological and social costs of consumption invisible at the moment of transaction decision. The study by Wang et al., (2023) places financial-ecological literacy as a strong moderator that can suppress excessive consumption in very easy transaction conditions, thus confirming the importance of the adaptive capacity of young people. When this literacy is weak, digital innovation actually widens the attitudinal-behavioral gap between pro-environmental values and actual consumption actions. This means that community development planning programs need to include aspects of literacy, choice design, and control mechanisms, not just expanding fintech adoption.

The misalignment between digital consumption and sustainability aspirations has cross-dimensional implications. Environmentally, the rapid growth of fintech-facilitated e-commerce may contribute to an enlarged ecological footprint through increased carbon emissions from logistics and delivery chains, accelerated production–consumption cycles, and accumulation of short-lived product waste—patterns that United Nations Conference on Trade and Development-UNCTAD's, (2024) identifies as key environmental risks associated with the global expansion of online commerce. Research on the fintech–carbon nexus further suggests that digital financial systems that lower transaction friction can be associated with higher consumption volumes, which potentially amplifies demand-side pressures on energy use and material throughput, though the direction and magnitude of this effect depends strongly on the governance and design of the fintech ecosystem in question (Thangaiyarkarasi & Vanitha, 2025; Z. Wang et al., 2024). Economically, the expansion of accessible digital credit carries the potential to contribute to personal financial destabilization among lower-income and younger cohorts, a risk reflected in Indonesia's BNPL non-performing loan rate which reached 6.66 percent in September 2023 before declining to 3.21 percent by November 2024—a trajectory that still signals structural financial stress among the young productive-age group (OJK, 2023; PEFINDO Biro Kredit - IdScore, 2024). Within the framework of sustainable development, these potential impacts demand interventions that protect the financial resilience of young households while moderating rates of consumption that are environmentally unsustainable.

Previous research has generally explored fintech, Gen Z consumer behavior, and the green economy as separate domains. For example, Pratama et al., (2023) emphasized the determinants of fintech adoption such as ease of use, financial incentives, and social influence, but have not integrated the sustainability dimension as the main focus of the analysis. Meanwhile, the findings of Zhang et al., (2023) on the invisibility of environmental impact and the findings of Richardson & Campos, (2023) on the effect of BNPL on purchase volume reinforce the idea that financial technology can shift consumption patterns, but have not yet automatically directed behavior towards sustainability. Thus, the literature provides an important foundation for "what drives use" and "what are the effects", but it does not adequately answer how the paradox is negotiated in everyday life.

Efforts to connect fintech and sustainability are gaining momentum in the latest literature through behavioral design and choice architecture approaches. Research on digital nudging demonstrates that specific framing strategies—such as social norm displays, default option changes, and feedback mechanisms—can be associated with measurable increases in eco-friendly purchasing decisions, with a 2024 OECD review of pilot programs finding that digital nudging interventions may increase sustainable product selection by up to 25 percent (OECD, 2024; Ullah et al., 2024). In the fintech domain specifically, green digital banking platforms have begun embedding carbon footprint tracking tools within payment applications to provide users with real-time feedback on the environmental implications of their transactions, though empirical evidence on the behavioral effectiveness of such tools remains mixed and context-dependent (Gargano, 2023; IMF, 2024). These emerging design principles point toward fintech's potential as a behavioral infrastructure for sustainable consumption, but their relevance and effectiveness in local community contexts—particularly among Gen Z users in provincial settings such as Gorontalo—remain empirically untested.

The main research gap lies in the lack of qualitative evidence explaining how Gen Z is actively negotiating the fintech–sustainable consumption paradox, including their adaptation strategies when faced with ease of transactions, digital promotion, and consumptive credit risks. The document confirms the "scarcity of research" that integrates holistic understanding—as well as the limitations of studies that distinguish the impact of different types of fintech services on sustainable consumption behavior—thus opening up space for a SWOT-based qualitative approach as a planning diagnostic tool. The practical implication is that the SWOT results can help local governments map internal strengths and opportunities, and then formulate WT interventions that suppress the most critical risks to young households. At the implementation stage, these findings can be used as the basis for the preparation of financial-ecological literacy programs, consumer protection, and choice architecture that are more sustainable in the digital transaction ecosystem. This study aims to: (1) analyze how Generation Z in Gorontalo Province interprets the strengths of fintech in supporting more responsible and sustainable consumption practices; (2) analyze how Generation Z's experience explains fintech's weaknesses—such as frictionless spending and impulsive impulses—that trigger unsustainable consumption; (3) analyze the opportunities perceived by Generation Z to direct fintech as an instrument of sustainable development and how these opportunities can be integrated in community development planning in Gorontalo Province; (4) analyze the threats felt by Generation Z from certain fintech services to the financial resilience of young households and the sustainable development agenda in Gorontalo Province; and (5) analyze the most priority interventions within the framework of the World Trade Organization to simultaneously minimize weaknesses and threats, as well as translate them into community development planning programs in Gorontalo Province.

## METHODOLOGY

### *Research design*

This study uses an exploratory qualitative design to understand the meaning, experience, and reasoning of Generation Z in using fintech and its relationship with sustainable consumption and community development planning. The choice of qualitative design is epistemologically grounded in the interpretivist tradition, which holds that human behavior—including financial decision-making—is not reducible to measurable variables alone, but is embedded in subjective meanings, social contexts, and lived experiences that can only be adequately accessed through direct, in-depth engagement with participants (Creswell & Poth, 2018). Three specific characteristics of this study's research problem make a qualitative approach not only appropriate but necessary. First, the phenomenon under study—the paradox between fintech ease and sustainability demands among Gen Z—is an emergent and contextually situated experience that has not been adequately theorized in the Gorontalo context; qualitative inquiry is best suited to explore phenomena where existing frameworks are insufficient and new understanding must be constructed from the ground up (Creswell & Poth, 2018). Second, the study seeks to understand *why and how* Gen Z users perceive, rationalize, and navigate the tensions between consumption convenience and financial sustainability—questions of meaning and process that surveys or numerical instruments are structurally unable to capture with sufficient depth. Third, the community development planning orientation of the study requires that findings be translated into contextually specific and locally actionable interventions, which demands the kind of thick, interpretive data that qualitative methods uniquely generate (Adler, 2022). A quantitative design, while useful for measuring the

prevalence of fintech behaviors, would not illuminate the behavioral logic, social influences, or contextual constraints that shape Gen Z consumption patterns in ways relevant to regional planning.

The strategic analysis framework used is SWOT (Strengths, Weaknesses, Opportunities, Threats) to map internal–external factors from participants' experiences, and expanded with TOWS to formulate alternative strategies—specifically WT strategies as the focus of priority interventions (Gürel & Tat, 2017). As elaborated in the data analysis section, SWOT in this study functions not as a descriptive business tool but as a diagnostic planning framework that translates qualitative user experience data into structured, actionable priorities for community development program design.

### *Participants*

Informants are Generation Z with the status of students aged 18–27 years old who come from various universities in Gorontalo Province. The selection of informants uses criteria-based purposive sampling, because the research requires participants who have direct and relevant experience with the use of fintech on a regular (Palinkas et al., 2015; Patton, 2015). Inclusion criteria include: (1) having financial autonomy (having their own income or at least managing their own pocket money); (2) domiciled in urban/sub-urban areas with high penetration of digital services; and (3) using at least one of the fintech applications (e-wallet, paylater, and/or digital investment) regularly every week. The recruitment target is set at 100 people, but 67 people can attend and be interviewed directly. In qualitative research, the adequacy of the number of informants is considered based on information power and thematic stability, not mere statistical representation (Malterud et al., 2016; Saunders et al., 2018).

### *Data collection*

Data collection was carried out by means of FGDs and direct interviews in a semi-structured format so that researchers can maintain topic consistency while remaining flexible in exploring informant narratives (Creswell & Poth, 2018). The interview guide was structured based on the SWOT domain to capture: (a) perceived fintech strengths; (b) weaknesses such as frictionless spending and impulsivity; (c) opportunities to direct fintech to become a sustainability instrument; and (d) threats to the financial resilience of young households as well as the regional sustainability agenda (Gürel & Tat, 2017).

### *Data analysis*

Data analysis is carried out in stages and oriented towards the final output in the form of SWOT themes, TOWS strategies, and WT intervention designs that can be translated into community development planning programs. In the initial stage, all interview and focus group discussion results are transcribed verbatim, verified against the original audio recordings, and read repeatedly to ensure contextual understanding and meaning consistency across informants.

Regarding the coding process and its transparency: coding was conducted by the primary researcher, with a second independent coder—a researcher familiar with qualitative financial behavior studies—coding a randomly selected 25 percent subsample of the transcripts independently to establish intercoder reliability. Coding disagreements were resolved through a systematic consensus discussion procedure: the two coders first compared their coded segments independently, then met to discuss all discrepant codes, examining the relevant transcript context

until consensus was reached on the final code assignment (O'Connor & Joffe, 2020). The intercoder agreement rate was calculated by dividing agreements by the sum of agreements and disagreements, with a target threshold of at least 80 percent agreement, consistent with established standards for qualitative reliability (O'Connor & Joffe, 2020). Theme finalization followed an iterative review process: candidate themes were first reviewed internally by the research team, then subjected to peer debriefing with an external colleague in the field of community development studies who had not participated in data collection, and finally cross-checked against the raw transcript data to verify that each theme was well-grounded in the informants' actual statements (Adler, 2022; Nowell et al., 2017). A reflexive journal was maintained throughout the process to document coding decisions, emerging analytical choices, and potential researcher biases, ensuring the availability of an auditable decision trail (Nowell et al., 2017).

The researcher applies thematic analysis through data familiarization, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report, following the reflexive thematic analysis framework (Braun & Clarke, 2022) and the trustworthiness practices described above (Nowell et al., 2017). Second, the themes that have been stabilized through this process are mapped into a SWOT matrix to group internal factors (strengths–weaknesses) and external factors (opportunities–threats) (Gürel & Tat, 2017). Third, the researcher compiled the TOWS matrix to generate SO, ST, WO, and WT strategy options, with an emphasis on WT strategies as the basis for intervention design that minimizes weaknesses while reducing threats (Wehrich, 1982). To avoid SWOT being only descriptive—as the SWOT literature has consistently noted, one of its core limitations is the absence of a structured prioritization mechanism that can hinder translation into actionable strategies (King et al., 2023)—this study adds a prioritization step by considering (i) the frequency of theme occurrence across informants, (ii) the level of risk to financial security and sustainability, and (iii) the feasibility of implementing within community development programs. The final output of the analysis consists of: (1) a table of thematization-based SWOT findings, (2) a table of threats and opportunities relevant to sustainable development, (3) a list of priority WT interventions, and (4) a design for the direction of community development planning programs aligned with local needs.

### *Trustworthiness*

The validity of the findings is maintained using a trustworthiness framework that includes credibility, transferability, dependability, and confirmability (Denzim & Lincoln, 2018). Credibility is strengthened through analytical discussions between researchers and assistants (peer debriefing), as well as member checking limited to summarizing findings to some informants to test the suitability of meaning (Nowell et al., 2017). Dependability and confirmability are maintained with trail audits that document the recruitment process, changes in interview guidelines, coding decisions, and SWOT–TOWS mapping processes (Nowell et al., 2017). Transferability is improved through thick descriptions related to the informant's character (status, age, financial autonomy, intensity of fintech use, and urban/sub-urban context) so that readers can assess the applicability of findings in similar contexts (Denzim & Lincoln, 2018). The reporting of research results is directed to follow the principle of transparent qualitative research reporting (O'Brien, 2014).

### *Ethical considerations*

This study applied the ethical principles of social research: participation was voluntary, informants

obtained an explanation of the research objectives and procedures, and gave consent before the interview began. The identity of the informant is anonymized (using codes I01–I67), and the data is stored securely with limited access. The informant has the right to stop the interview at any time without consequences. These principles are in line with ethical practices in qualitative research that emphasize consent, confidentiality, and participant protection (Creswell & Poth, 2018).

## DISCUSSION AND FINDINGS

Based on the findings of the FGD results that were conducted, the findings of themes or indicators that affect the Strengths of SWOT were obtained.

**Table 1.**  
**Identify Fintech and Consumption 'Strengths' Indicators in Gen Z**

| Code | Strengths Indicator                                                        | Gen Z form of experience/meaning                                                                                                                                                         | n  |
|------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| S1   | Ease & speed of transactions (e-wallet/QRIS)                               | Fintech is understood as a tool that makes routine transactions more efficient, thereby reducing the "cost of time" and encouraging more planned spending behaviors                      | 52 |
| S2   | Ease & speed of transactions (e-wallet/QRIS)                               | Fintech is interpreted as a "mirror" of expenditure because transaction records help evaluate and control waste, especially at the meal/transport post                                   | 41 |
| S3   | Financial management features (balances, summaries, categories, reminders) | Some informants interpret this feature as a <i>self-monitoring</i> mechanism to limit impulsive spending and maintain consistency in spending                                            | 36 |
| S4   | Promo/cashback for priority savings                                        | Promos are understood to be positive when used to reduce the cost of basic necessities (e.g. credit, data packages, transportation, daily shopping), thus helping consumption efficiency | 38 |
| S5   | Integration of bill payments (electricity, water, internet, BPJS, etc.)    | Fintech is interpreted as a reminder tool and facilitator of timely payments, thereby encouraging financial discipline and reducing late fines                                           | 33 |
| S6   | Small-value digital investment access (mutual funds/gold)                  | Fintech is interpreted as an entrance to the formation of saving/investment habits that strengthen long-term orientation, so that consumption is more controlled                         | 29 |
| S7   | Price transparency and comparison (top-ups, service fees, etc.)            | Informants assessed that fintech makes it easier to compare costs and choose more economical options, thus helping more rational consumption decisions                                   | 27 |
| S8   | Minimum cash and reduction of physical transactions                        | Fintech is interpreted as a way to reduce the need to carry cash and reduce the risk of loss, so that expenses are more "recorded" and easy to supervise                                 | 31 |

Source : primary data, 2026

The table above shows that Gen Z in Gorontalo Province generally interprets fintech as a tool of efficiency as well as an instrument of control that can support more responsible consumption. The most dominant theme is the ease and speed of transactions (Q1; 77.61%), which is interpreted as not only practical, but also helps routine expenses to be more planned because transactions can be carried out on time without obstacles. The second most prominent strength is transaction history and automated recording (Q2; 61.19%), which is understood as a self-evaluation mechanism because informants can see spending patterns and identify sources of waste. In addition, promos/cashback (Q4; 56.72%) are perceived as a strength when directed to priority needs so that they can increase consumption efficiency, not encourage excessive spending. In terms of long-term sustainability orientation, access to low-cost digital investment (S6; 43.28%)

is interpreted as an opportunity to build healthier financial habits—curbing impulsive consumption and encouraging savings/investment. Overall, these findings confirm that the "strength" of fintech for Gen Z lies not only in transaction technology, but also in its ability to provide information trails and management features that can strengthen consumption discipline and long-term onboarding, which is an important foundation for more responsible and sustainable consumption.

**Table 2.**  
**Identifying Fintech and Consumption 'Weakness' Indicators in Gen Z**

| Code | Weaknesses Indicators                                      | Gen Z form of experience/meaning                                                                                                              | n  | %     |
|------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| W1   | <i>Frictionless spending</i> (small but frequent shopping) | Digital transactions feel "light" so that recurring micro-expenses (food, shipping, top-up, <i>in-app purchases</i> ) pile up unknowingly     | 49 | 73,13 |
| W2   | Impulsive push from promos & platform design               | <i>Flash sales</i> , cashback, notifications, and <i>one-click checkout</i> drive quick decisions without needs evaluation                    | 46 | 68,66 |
| W3   | Paylater creates the illusion of affordability             | Small installments are perceived as "safe," but cross-application obligations pile up and reduce the consumption space of priority needs      | 39 | 58,21 |
| W4   | Poor understanding of fees and maturity                    | The informant admitted that he did not carefully read the service fee, interest, and bill date, so it was easy to be fined/overdue            | 33 | 49,25 |
| W5   | Priority distortion: need vs desire escape                 | The integration of e-commerce makes "recreative" shopping increase; Consumption shifts from need-to-want-based trends                         | 37 | 55,22 |
| W6   | Normalization of consumption through social proof digital  | Reviews, ratings, and influencer content form the perception of "reasonable buying", so that consumption standards increase                   | 32 | 47,76 |
| W7   | Cross-application spending fragmentation                   | The large number of applications (e-wallets, paylater, investments) makes spending large and difficult to monitor as a monthly total          | 35 | 52,24 |
| W8   | Low reflection of environmental impact                     | The speed of transactions makes the impact of packaging, shipping, and the purchase of goods quickly perishable rarely considered at checkout | 30 | 44,78 |

Source : primary data, 2026

Based on the table of weakness indicators above, it shows that the experience of Gen Z most often places fintech as a trigger for unsustainable consumption through two main mechanisms: (1) the loss of a "sense of payment" and (2) the acceleration of shopping decisions. The most dominant theme was W1 (*frictionless spending*, 73,13%), which describes how repetitive small transactions become difficult to detect because digital payments do not pose the psychological barriers of cash equivalent; As a result, micro-expenditure accumulates and enlarges total consumption. The second strong weakness is W2 (impulsive due to promos and platform design, 68.66%), where informants assess that notifications, *flash sales*, and the ease of checkout encourage quick shopping without evaluating needs, so consumption is more reactive and less responsible.

In addition, W3 (paylater affordability illusion, 58.21%) confirms a financial paradox: small installments are considered safe, but the accumulation of cross-application liabilities suppresses financial capacity and potentially shifts spending from priority needs to consumptive debt

payments. Other equally important weaknesses are W4 (lack of understanding of fees/interest/maturity, 49.25%) and W7 (fragmentation of expenses across applications, 52.24%), which together weaken budget control because informants are not always able to see the total picture of actual liabilities and costs. At the sustainability level, W8 (low environmental impact reflection, 44.78%) shows that digital consumption is fast so that environmental footprint considerations (packaging, shipping, and shelf life of goods) tend to be delayed or ignored. Overall, these weaknesses explain why fintech can drive unsustainable consumption: not because of the technology itself, but rather because of the combination of convenience design, promotional incentives, and limited controls/literacy that shape Gen Z's daily consumption behavior.

**Table 3.**  
**Fintech Opportunities according to Gen Z**

| Code | Opportunities                                                                     | The form of opportunity that Gen Z perceives                                                                                               | Directions of integration into community development planning                                                                                                            | n  | %     |
|------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| O1   | Real-time <i>budgeting/limit</i> and expense notifications                        | Fintech is considered to be able to "restore control" to spending through daily/weekly limits and warnings when passing the budget         | Digital Transaction Control Program (budget literacy + activation of the limit feature as <i>default</i> for the target of students/young households)                    | 44 | 65,67 |
| O2   | <i>Financial-ecological literacy microlearning in applications &amp; campuses</i> | Brief education (fees, installments, consumption impact) is considered more effective because it is close to the moment of the transaction | Campus-based Gen Z Financial Literacy–Ecological Literacy –Pem-fintech program (modules, short classes, behavioral challenges)                                           | 42 | 62,69 |
| O3   | <i>Impact dashboard</i> (carbon/waste footprint) & label "green product"          | Informants see opportunities for impact transparency so that spending decisions are more environmentally conscious                         | Integration of green consumption indicators in local government campaigns and marketplace/fintech collaboration for environmentally friendly product labels              | 31 | 46,27 |
| O4   | Green <i>incentives (green cashback/points)</i> for sustainable choices           | Cashback is directed not for excess consumption, but for environmentally friendly products/services or priority needs                      | Behaviour-based incentive schemes: cashback on public transport, local products, refills, or sustainable MSMEs                                                           | 28 | 41,79 |
| O5   | Collaboration between local governments – campuses – fintech providers            | Gen Z assesses that multi-stakeholder synergy can expand the reach of education and behavioral interventions                               | Cross-actor program: Gorontalo Green Swipe Movement (pilot project at the university, expanded to urban/sub-urban communities)                                           | 35 | 52,24 |
| O6   | Promo notification settings & "smart shopping mode"                               | Gen Z assesses the chances of a mode that suppresses impulsive triggers (e.g. disabling certain promos)                                    | Regulation/partnerships for notification control features + "planned shopping" campaigns at productive age targets                                                       | 37 | 55,22 |
| O7   | <i>Cooling-off period</i> before checkout/paylater                                | The short pause feature is perceived to help reflect needs before the final transaction                                                    | Optional design-based interventions: pause checkouts for certain transactions (e.g. paylater/discretionary products) through the MoU of the Regional Government–platform | 30 | 44,78 |
| O8   | Payment integration of "sustainable local products & MSMEs"                       | Fintech is perceived to be a channel for expanding the local MSME market that is more environmentally friendly                             | Sustainable MSME digitalization program: QRIS/e-wallet onboarding + curation of local MSMEs + targeted promotion                                                         | 26 | 38,81 |

Source : primary data, 2026

The opportunity table shows that Gen Z sees fintech not necessarily as synonymous with

overconsumption, but can be "flipped" into a tool for strengthening financial resilience and directing sustainable consumption if its features and ecosystem are designed appropriately. The most dominant opportunities were O1 (65.67%) and O2 (62.69%), which emphasized two main needs: spending control mechanisms (limits, notifications, summaries) and financial-ecological education inherent in the transaction context. This means that in community development planning, the most operationalized intervention is a program that combines literacy (campus/community) with the activation of control features in fintech applications.

The next opportunities that are quite prominent are O6 (55.22%) and O5 (52.24%), which shows that Gen Z is aware of the influence of promotional design and digital norms, as well as assessing the collaboration between the local government and campuses as a realistic implementation channel. In terms of ecological sustainability, O3 (46.27%) and O4 (41.79%) show the hope that environmental impact will be more visible through *impact dashboards/green labels* and incentives directed at environmentally friendly consumption choices. Overall, this opportunity provides policy direction that community development planning in Gorontalo can utilize fintech as a behavioral infrastructure: not only accelerating transactions, but also forming a *choice architecture* (notifications, checkout breaks, labels, incentives) that strengthens responsible consumption and supports the sustainable development agenda.

**Table 4.**  
**Fintech Threats according to Gen Z to Gen Z's financial resilience**

| Code | Threats                                               | The form of threat that Gen Z feels                                                                                | Impact on the financial resilience of young households                                                     | Impact on the sustainable development agenda                                                         | n  | %     |
|------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----|-------|
| T1   | Consumptive debt risk from paylater/BNPL              | Installment schemes trigger the accumulation of liabilities; Cross-app billing is considered "small" but stacks up | Reduces spending space on basic necessities; triggers late payments, fines, and <i>cash flow pressures</i> | Strengthen overconsumption patterns; weakening the orientation of responsible consumption            | 40 | 59,70 |
| T2   | Online lending exposure & aggressive marketing        | Advertisements/push notifications are easily accessible; Fast processes trigger decisions without calculation      | Increased risk of default, financial stress, and short-term financing dependency                           | The risk of socio-economic vulnerability increases, thus disrupting the quality of human development | 34 | 50,75 |
| T3   | Digital social pressure (FOMO, consumption standards) | Influencer content, <i>haul</i> , and <i>reviews</i> raise the "normal" standard of consumption                    | Spending increases for discretionary goods; Shifting savings priorities                                    | Encouraging a culture of consumption that is not in line with the principles of sustainability       | 45 | 67,16 |
| T4   | Fraud, data leaks, and account abuse                  | Phishing, <i>OTP</i> , and <i>identity misuse</i> concerns                                                         | Sudden financial losses; Lowering trust in the digital financial system                                    | Hindering healthy digital financial inclusion; increasing the cost of social protection              | 26 | 38,81 |
| T5   | Overconsumption due to fintech–e-commerce integration | Shopping has become too easy; repetitive, "mindless" transactions                                                  | Recurring expenses are rising; this is fueling consumerist behavior                                        | Increased packaging waste and carbon footprint from shipping goods                                   | 36 | 53,73 |
| T6   | Promo/cashback dependency                             | Shopping habits of "waiting for promos"                                                                            | Unstable spending patterns; Waste                                                                          | Strengthening consumption based on momentary incentives,                                             | 30 | 44,78 |

| Code | Threats                                             | The form of threat that Gen Z feels                                                                          | Impact on the financial resilience of young households                              | Impact on the sustainable development agenda                                                  | n      | %         |
|------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------|-----------|
|      | and price distortion                                | or buying because of promos                                                                                  | when the promo appears                                                              | not needs/sustainability                                                                      |        |           |
| T7   | Lack of consumer protection & information asymmetry | Cost, condition, and risk information is not always understood; Digital contracts are considered complicated | Easily caught up in hidden fees, fines, and service conflicts                       | Increase the vulnerability of young people; hindering inclusive development                   | 3<br>2 | 47,7<br>6 |
| T8   | Social stigma and psychological impact of default   | Reputational worries, embarrassment, and stress when bills pile up                                           | Lowering subjective well-being; interfere with productivity and academic/work focus | Reducing the quality of human capital, which has an impact on the regional development agenda | 2<br>2 | 32,8<br>4 |

Source : primary data, 2026

The threat table shows that Gen Z views fintech risks not solely on the technical aspect, but especially on financial vulnerabilities and excessive consumption patterns that can undermine the sustainable development agenda. The most dominant threat was T3 (digital social distress/FOMO, 67.16%), which describes how consumption standards are shaped by social media content and influencers, thereby triggering discretionary purchases and shifting priorities away from savings or long-term needs. The second strongest threat is T1 (paylater/BNPL consumptive debt, 59.70%), where informants assess that installment schemes can accumulate across applications and disrupt *the cash flow* of young households through fines, late payments, and reduced spending space for priority needs.

In terms of ecological sustainability, the T5 threat (fintech-e-commerce integration, 53.73%) confirms that ease of transactions accelerates the buy-use-dispose cycle, which has the potential to increase packaging waste and shipping emissions. Other threats that are also important are T2 (loan exposure, 50.75%) and T7 (consumer protection that is not yet strong, 47.76%), as both increase the risk of default and unexpected costs due to information asymmetry. Meanwhile, T4 (fraud/data leak, 38.81%) and T8 (psychological impact of default, 32.84%) emphasized that fintech threats can also disrupt the psychological well-being and productivity of Gen Z as human capital. Overall, these findings indicate that the threat of fintech to Gorontalo does not only have implications for individuals, but has the potential to affect the quality of community development through the weakening of the financial resilience of young households and the strengthening of a consumption culture that is not in line with the principles of sustainable development.

**Table 5.**  
**Priority interventions of the WT framework**  
**(minimizing weaknesses and threats at the same time)**

| Code | Priority WT interventions                                     | Weaknesses – Suppressed threats | Form of implementation                         | Meaning to community development planning program (program name & key output)                       | n  | %     |
|------|---------------------------------------------------------------|---------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------------------------|----|-------|
| WT1  | Default limit & transaction pause (cooling-off) for impulsive | W1, W2, W3<br>↔ T1, T3, T5      | Daily/weekly limit, 10–30 seconds pause before | Gen Z Digital Transaction Control Program (campus pilot): activation of transaction limits & pauses | 50 | 74,63 |

| Code | Priority WT interventions                                                                                | Weaknesses – Suppressed threats | Form of implementation                                                                                      | Meaning to community development planning program (program name & key output)                                                                                        | n  | %     |
|------|----------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|      | shopping and paylater                                                                                    |                                 | checkout/paylater, "confirm needs" pop-up                                                                   | on participant accounts; output: feature activation module + short training + compliance dashboard                                                                   |    |       |
| WT2  | Real-time budget notifications & weekly summaries (reduce fragmentation of expenses across applications) | W1, W7 ↔ T1, T6                 | Weekly spending recap, border crossing alerts, major shopping post mergers                                  | Financially Resilient Young Households Program: app-based budgeting assistance; output: education package + budget template + "30-day savings challenge"             | 46 | 68,66 |
| WT3  | BNPL-Pinjol cost/risk literacy based on total installment simulation                                     | W4, W3 ↔ T1, T2, T7             | Simulation of total costs (fees/interest/fines), due calendar, "read terms" module                          | Protective Financial Literacy Program (campus–Regional Government–OJK/partner): output: micro class + consultation clinic + BNPL/loan risk material                  | 44 | 65,67 |
| WT4  | Notification control & restriction of aggressive promotions (anti-trigger impulse)                       | W2, W6 ↔ T3, T6                 | "Shop wisely" mode, strict promo notification default, promo hour setting, "pause before purchase" reminder | Responsible Consumption Nudging Program: behavioral campaign + platform cooperation for notification mode; output: SOP notification setting + public campaign        | 39 | 58,21 |
| WT5  | Strengthening consumer protection & account security                                                     | W4, W7 ↔ T4, T7                 | OTP/phishing education, quick complaint channels, victim assistance, account security protocols             | Young Digital Consumer Protection Program: complaint posts, hotlines, digital security classes; outputs: case referral flow + security literacy + report monitoring  | 33 | 49,25 |
| WT6  | Targeted Green Incentive (Reducing Overconsumption & Waste)                                              | W8, W5 ↔ T5, T6                 | Cashback/points only for priority needs & eco-friendly options (local products, refills, public transport)  | "Swipe Green" Incentive Program: green merchant/MSME partnership; output: green merchant list + incentive scheme + green shopping event                              | 31 | 46,27 |
| WT7  | Financial counselling & psychosocial support for the risk of default                                     | W3, W4 ↔ T1, T8                 | Counselling, personal restructuring plans, referral support services, financial stress management education | Student Financial Resilience Support Program: periodic on-campus consultation clinics; outputs: counseling sessions + coping materials + risk mapping                | 28 | 41,79 |
| WT8  | Curating sustainable local consumption–MSMEs to contain the culture of FOMO                              | W5, W6 ↔ T3, T5                 | Curation of "durable local products", needs-based promotions, "buy less buy better" challenge               | Digital-Based Sustainable MSME Strengthening Program: QRIS onboarding + product curation + "local & sustainable" campaigns; output: MSME training + catalog curation | 26 | 38,81 |

Source : primary data, 2026

The table shows that the most priority WT interventions according to informants are WT1 (74.63%) and WT2 (68.66%), emphasizing that the problem of unsustainable consumption is mainly triggered by a combination of *frictionless spending*, impulsivity, and accumulated paylater liabilities. Therefore, the most "direct to the root of the problem" strategy is a choice architecture-based intervention—such as *default limits*, transaction breaks, and real-time notifications—that reduces spontaneous decisions while strengthening budget control. The next interventions that were also strong were WT3 (65.67%) and WT4 (58.21%), which emphasized the need to reduce BNPL/loan risk and digital social pressure (FOMO) through protective literacy and promotional exposure arrangements.

In the framework of community development planning, the results of this WT can be interpreted as a program package that is operational through three steps: (1) determination of priority + target programs (Gen Z urban/sub-urban students who regularly use fintech), (2) elaboration of output-indicators (e.g. number of participants activation limit/transaction pause; number of BNPL literacy participants; number of complaint reports handled; number of curated "green" merchants/MSMEs), and (3) cross-actor partnerships (Regional Government–campus-provider fintech–merchant/MSMEs–relevant authorities). Practically, WT interventions can be bundled into *the following program clusters* : (a) Gen Z Digital Transaction Control (WT1–WT2) for control of daily shopping behavior; (b) Protective Financial Literacy & Counseling (WT3–WT7) to prevent debt traps and strengthen the financial resilience of young households; (c) Digital Consumer Protection (WT5) to reduce losses due to fraud and information asymmetry; and (d) Swipe Green Incentive & Sustainable MSMEs (WT6–WT8) to direct consumption to more environmentally friendly options and strengthen the local economy. Thus, the WT strategy does not stop at conceptual recommendations, but becomes a portfolio of programs that can be included in the community development planning agenda in Gorontalo through clear targets, indicators, and collaboration schemes.

## DISCUSSION

### **The meaning of *fintech's strengths* for responsible and sustainable consumption**

The finding that Generation Z in Gorontalo interprets fintech primarily as a tool that reduces transaction costs and accelerates daily economic activities can be situated within transaction cost theory (Coase, 1937; Williamson, 1985), which posits that lowering the costs of search, negotiation, and execution in economic transactions enables more efficient resource allocation. When applied to household consumption behavior, fintech operationalizes this reduction by eliminating the friction of cash handling, queue-waiting, and geographic access barriers — what participants described as a shift from a fragmented to an orderly daily transaction experience. Critically, this study extends transaction cost theory beyond the firm-level context to the household level: for Gen Z users in a provincial setting, reduced transaction costs do not merely increase consumption volume, but — when the monitoring features of fintech are consciously activated — create the cognitive and practical conditions for more disciplined consumption planning. This nuance is consistent with the argument that efficiency gains from digital payments can translate into household welfare improvements when accompanied by adequate financial literacy (Demirgüç-Kunt et al., 2018).

The role of QRIS as perceived "standardization infrastructure" adds a further theoretical dimension rooted in financial inclusion. The Global Findex Database 2021 establishes that access to formal digital payment systems is associated not merely with transaction convenience, but with expanded financial resilience — the capacity of households to absorb economic shocks and maintain consumption stability (Demirgüç-Kunt et al., 2018). In the Gorontalo context, where spatial and income inequalities persist alongside a young demographic majority, fintech's inclusion function carries particular developmental weight: it positions Gen Z not merely as consumers of digital services, but as agents whose integration into formal payment ecosystems builds the micro-level socioeconomic capital that community development planning depends upon. This aligns with the broader literature on digital financial inclusion in developing economies, which identifies access to traceable, regulated payment systems as a foundational determinant of household financial resilience (Ozili, 2022; Sahay et al., 2020).

The second dominant strength — the digital transaction footprint as a behavioral "mirror" — engages directly with concepts from behavioral economics, particularly the role of information feedback in moderating consumption decisions. Research on fintech and spending behavior demonstrates that real-time visibility of transaction data activates reflective cognitive processes that counterbalance the impulsive tendencies otherwise reinforced by frictionless payment design (Potrich et al., 2024; Strömbäck et al., 2017). When Gen Z participants in this study described using transaction summaries to evaluate and correct their spending patterns, they were enacting what behavioral economists identify as a *feedback loop mechanism* — a structured information return that transforms passive spending into a monitored and self-correctable behavior. This mechanism is theoretically significant because it suggests that fintech can function not only as an enabler of consumption but, under conditions of conscious engagement, as a behavioral infrastructure for self-regulation. From a sustainable development standpoint, this finding reinforces the argument that responsible consumption is not solely a function of normative intention but of *design-enabled behavioral capacity* — a distinction with direct implications for how community development programs in Gorontalo should be framed: not as literacy campaigns alone, but as interventions that leverage existing fintech architectures to institutionalize spending reflection as a default, rather than an exceptional, behavior.

### **Fintech weaknesses : frictionless spending and impulsivity that fuels unsustainable consumption**

A conceptually critical distinction must be established before analyzing these weaknesses: the problems identified in this study do not arise from fintech as payment technology — that is, the infrastructure that enables fast, secure, and traceable digital transactions — but from fintech as a platform ecosystem, which bundles payment infrastructure together with algorithmic promotion, one-click checkout design, social proof mechanisms, and embedded credit instruments such as BNPL (Gomber et al., 2018; Sampat et al., 2024). This distinction matters because it relocates the source of the problem: not in the act of paying digitally, but in the deliberate architectural design of consumption environments that exploit behavioral vulnerabilities. When payment is seamlessly embedded within a shopping, social media, or entertainment interface, the cognitive boundary between browsing and buying collapses, and what was once a deliberate financial decision becomes a near-automatic behavioral response (Sampat et al., 2024).

Within this ecosystem architecture, the experience of Gen Z in Gorontalo can be theoretically situated within the pain of paying framework from behavioral economics. Prelec & Loewenstein, (1988) demonstrated that the psychological discomfort of expenditure normally functions as a natural brake on consumption decisions — a self-regulatory mechanism that is systematically weakened when payment methods reduce the salience and tangibility of money leaving the consumer's account. Digital payment platforms operationalize this attenuation by abstracting money into points, cashback notifications, and deferred obligations, thereby reducing the "sense of paying" that informants described as disappearing with each tap and click. This attenuation is structurally compounded in the e-commerce context, where algorithmic personalization surfaces products calibrated to individual behavioral profiles, flash promotions create artificial time urgency, and one-click checkout eliminates every deliberative friction point that would otherwise allow a consumer to pause and evaluate necessity — producing shopping decisions that are reactive rather than deliberative. The result is a pattern that the sustainable consumption literature identifies as the attitude-behavior gap: the measurable divergence between consumers' pro-sustainability values and their actual purchasing conduct, which is reliably widened by convenience-maximizing choice architectures (Carrington et al., 2021).

The BNPL component of this ecosystem warrants separate theoretical attention because it introduces a qualitatively distinct layer of behavioral vulnerability. Unlike conventional payment instruments, BNPL is structurally embedded at the moment of peak purchase motivation — the checkout point — where it exploits mental accounting biases by reframing large expenditures as small, manageable installments (Thaler, 1999). This framing creates an illusion of affordability that persists even as multiple BNPL obligations accumulate across applications, generating invisible cash flow pressure that only becomes visible when installment due dates arrive simultaneously. Empirically, Kumar et al., (2024) provide retailer-level transaction evidence that BNPL adoption increases online spending by 6.42 percent on average, with the effect strongest among younger, lower-income, and promotion-sensitive customers — precisely the demographic profile of Gen Z in Gorontalo. At the macroeconomic level, Indonesia's BNPL non-performing loan rate reaching 6.66 percent in September 2023 confirms that this design-enabled affordability illusion generates aggregate household financial stress, not merely individual behavioral lapses (OJK, 2023).

In the sustainability dimension, the platform ecosystem architecture compounds these financial vulnerabilities by rendering the ecological consequences of consumption invisible at the moment of transaction. When a purchase is completed through a single tap on a mobile screen, the environmental costs — packaging waste, last-mile delivery emissions, accelerated product obsolescence, and the carbon intensity of logistics infrastructure — are entirely absent from the decision interface (United Nations Conference on Trade and Development - UNCTAD, 2024). This invisibility is not merely a knowledge deficit; it is an architectural feature of platform design that structurally decouples the hedonic reward of purchasing from its ecological and financial downstream consequences. As a result, shopping decisions consistently prioritize convenience and price, while the impact of packaging, shipping, and product lifespan remains unconsidered at the point of decision — a pattern that accelerates the buy-use-throw cycle and deepens the misalignment between Gen Z's expressed sustainability values and their actual consumption conduct. The weakness of fintech must therefore be read not as a technology problem, but as a governance problem of consumption architecture — one that demands choice design-based

interventions and protective literacy that restructure the ecosystem itself, rather than placing the full burden of behavioral change on individuals.

### **Fintech opportunities for sustainable development and its integration in community development planning**

Gen Z in Gorontalo identifies the greatest opportunity to redirect fintech toward sustainable development through the strengthening of behavioral control features — spending limits, transaction summaries, and real-time budget notifications — that operate directly at the point of financial decision-making. The theoretical significance of this opportunity lies in its alignment with choice architecture, as formulated by Thaler et al., (2021): rather than relying on normative campaigns or post-hoc financial education, interventions embedded in the transaction interface can predictably guide behavior without restricting individual freedom or requiring heightened cognitive effort from users. When spending limits, cooling-off pauses, or budget summary notifications are configured as default settings — activated automatically unless the user actively opts out — they function as systemic behavioral guardrails that shift the "cost of self-control" from the individual to the platform architecture. This distinction is theoretically important because it addresses a fundamental limitation of voluntary financial literacy programs: behavioral control embedded in system defaults is structurally more reliable than control that depends on individual willpower at the moment of transaction, particularly under the high-stimulus conditions of promotional e-commerce environments (Thaler et al., 2021; Ullah et al., 2024).

This theoretical insight has direct implications for how community development planning in Gorontalo should be designed. A critical question raised by this finding is whether these interventions can be realized through individual voluntary action, or whether they require institutional collaboration with fintech providers. The evidence points strongly toward the latter. Default-based behavioral interventions — such as automatically activating spending limit features for new users, requiring an explicit opt-in for BNPL above a certain transaction threshold, or embedding mandatory cooling-off notifications before one-click checkout — cannot be implemented through literacy campaigns alone; they require formal partnerships between local governments, OJK as regulator, campus institutions, and fintech platform operators through mechanisms such as Memoranda of Understanding (MoU), regulatory sandbox arrangements, or consumer protection mandates (ADB & SNKI, 2023; OJK, 2024). Indonesia's existing institutional infrastructure — including OJK's National Strategy for Financial Literacy and Inclusion (SNLKI) 2021–2025, the TPAKD (Regional Financial Access Acceleration Team) framework, and the Eastern Indonesia Financial Innovation Lab (EIFIL) — provides precedent for exactly this kind of multi-actor, sub-national fintech governance collaboration, and Gorontalo's community development planning can leverage these frameworks as institutional entry points (ADB & SNKI, 2023; OJK, 2024).

In terms of ecological sustainability, the second cluster of opportunities — impact transparency, feedback mechanisms, and green consumption incentives — follows a similar institutional logic. Digital nudging research consistently demonstrates that default eco-options, real-time carbon footprint displays, social norm cues, and feedback loops increase sustainable product selection by measurably significant margins when embedded at the point of purchase decision (Ullah et al., 2024). These mechanisms work not because they prohibit conventional choices, but because they make sustainable alternatives more salient, visible, and cognitively accessible without

requiring consumers to seek out environmental information independently. The effectiveness of such interventions, however, is not uniform: Ullah et al., (2024) identify cross-cultural applicability as a key research gap, noting that nudging outcomes vary substantially depending on cultural context, digital literacy levels, and institutional trust — conditions that make locally contextualized co-design between Gorontalo's regional government, campus partners, and platform providers essential rather than optional.

At the community development planning level, these opportunities can be operationalized through a structured progression of institutional steps. First, local government can pilot opt-in default features (transaction limits, budget reminders) through MoU with fintech providers targeting university student populations — a low-cost, high-reach entry point given Gen Z's existing platform penetration. Second, campus-based financial-ecological literacy programs can be designed to train users not merely in financial knowledge but in the conscious activation and use of the control features already available in their fintech applications, making literacy education complementary to, rather than a substitute for, systemic design change. Third, green incentive schemes — redirecting cashback and points toward local sustainable MSMEs, eco-friendly products, and public transportation — require collaboration with merchant partners and OJK to ensure the incentive architecture does not inadvertently stimulate volume consumption. Fourth, the full "Swipe Green" program can be progressively institutionalized through inclusion in Gorontalo's regional development planning documents (RPJMD and RKPD), positioning fintech behavioral infrastructure as a formal pillar of community development strategy rather than a peripheral digital literacy initiative. Thus, fintech's opportunities for sustainable development are not realized through platform features alone, but through the deliberate institutional architecture that embeds those features into a governance framework with clear targets, indicators, cross-actor responsibilities, and accountability mechanisms.

### **Fintech threats to young households' financial resilience and sustainable development agenda**

The main threats identified in this study center on the risk of consumptive debt from paylater and rapidly accessible online loans, whose application processes are deliberately simplified to minimize deliberation, enabling credit decisions to occur before adequate financial calculation has taken place. This threat becomes structurally serious as it encourages the accumulation of cross-application liabilities that gradually suppress household cash flow, reduce the spending space available for priority needs, and — when installment burdens compound — normalize "buy now, think later" behavioral patterns that increase financial stress (Hayashi & Routh, 2024; OJK, 2023). The psychological dimension of this risk is confirmed empirically: BNPL users consistently exhibit higher debt loads and worse delinquency rates compared to non-users, with the vulnerability most concentrated among younger, lower-income cohorts (Hayashi & Routh, 2024). When the burden of installments increases, young households tend to delay saving, investing, or productive spending — an erosion of long-term economic capacity that directly undermines the human capital development goals that community development planning in Gorontalo depends upon.

It is essential, however, to qualify the scope of this finding precisely. The informants in this study are university students aged 18–27 with financial autonomy, domiciled in urban or sub-urban areas of Gorontalo Province, and regular users of at least one fintech service. This profile represents only one — arguably the most digitally exposed — segment of the broader Gen Z population. In qualitative research, the appropriate evaluative criterion is transferability rather than

statistical generalization: findings speak meaningfully to contexts sufficiently similar to the study setting, but should not be extended uncritically to groups with substantially different characteristics (Korstjens & Moser, 2018; Nowell et al., 2017). Three important sub-group distinctions are worth acknowledging explicitly.

First, working Gen Z with independent incomes may face a different BNPL risk profile: greater purchasing power combined with more aggressive platform targeting can generate higher absolute debt accumulation, while the absence of campus-based financial literacy support networks increases isolation when repayment difficulties arise. Second, rural Gen Z may face the inverse problem: lower financial inclusion (70.13 percent in rural areas versus 78.41 percent urban according to SNLIK 2024) and lower financial literacy (59.25 percent rural versus 69.71 percent urban) leave them more exposed to illegal fintech lending platforms rather than regulated paylater instruments — a qualitatively different and potentially more severe threat vector (Otoritas Jasa Keuangan - OJK & Badan Pusat Statistik, 2024). Third, non-student Gen Z in informal employment — including gig workers, seasonal laborers, and small traders — may experience the sharpest income volatility when installment due dates conflict with irregular earnings cycles, making their financial resilience to BNPL accumulation structurally more precarious than that of students with relatively predictable expense patterns. SNLIK 2024 data confirm this differentiated vulnerability landscape explicitly: among occupational groups, students and university students are among those with the lowest financial inclusion indices, alongside unemployed persons, farmers, and fishers — underscoring that the student profile studied here represents a high-access but not necessarily lower-risk entry point into fintech exposure (Otoritas Jasa Keuangan - OJK & Badan Pusat Statistik, 2024). These distinctions reinforce a critical implication for community development planning: programs designed on the basis of student informant data must be disaggregated and adapted before application to working youth, rural communities, or informal sector groups, whose fintech risk environments differ structurally from those documented here.

The second cluster of threats — digital social pressures and fintech-e-commerce integration accelerating the consumption cycle — similarly requires contextual qualification. When consumption standards are shaped by influencer content, haul culture, and algorithmically curated promotional feeds, the student informants in this study reported FOMO-driven repetitive discretionary purchases that deepen their financial vulnerability. This pattern is consistent with national evidence: OJK has specifically identified FOMO and YOLO consumption norms as structural financial vulnerability factors for Indonesian Gen Z, who are at elevated risk from both consumptive paylater use and illegal online lending (Otoritas Jasa Keuangan - OJK & Badan Pusat Statistik, 2024). In the ecological dimension, the acceleration of digital consumption driven by these social pressures contributes to increased packaging waste, higher carbon footprint from last-mile logistics, and accelerated product obsolescence — consequences made invisible at the transaction point by platform design that systematically omits environmental cost information (IISD, 2024; UNCTAD, 2024). Data security threats and fraud compound this picture by eroding trust in the digital ecosystem, potentially deterring healthy financial inclusion — particularly among rural and lower-literacy Gen Z sub-groups who lack the technical confidence to distinguish legitimate from predatory digital financial services. Taken together, these threats demand that community development planning in Gorontalo treat fintech not merely as a consumer technology issue, but as a differentiated socio-technical ecosystem governance challenge — one that

requires behavioral regulation, protective literacy, and consumer protection mechanisms calibrated to the heterogeneous vulnerability profiles of the young population it seeks to serve.

### **WT (Weakness-Threats) priority interventions and their translation into community development planning programs in Gorontalo**

The WT synthesis places priority interventions at the intersection of "behavioral control" and "risk protection", since the main weaknesses identified — frictionless spending, impulsivity, and the illusion of paylater affordability — are structurally connected to the main threats of consumptive debt, FOMO-driven overconsumption, and ecological impact invisibility. Conceptually, the formulation of the WT strategy departs from the TOWS logic that suppresses weaknesses while simultaneously neutralizing threats, as originally formulated by Weihrich, (1982). In order for the strategy not to remain as a descriptive list, this study adds a prioritization step consistent with the critique that SWOT without prioritization mechanisms generates analytically inert outputs (King et al., 2023).

In the context of the findings, the most rational and highest-priority intervention is one built on choice architecture — a concept from behavioral economics that refers to the deliberate design of decision environments in ways that predictably guide individuals toward better choices without eliminating their freedom to choose otherwise (Thaler et al., 2021). Choice architecture does not prohibit any option or impose normative directives; instead, it restructures the context in which decisions are made — through default settings, strategic placement of information, friction introduction, and feedback mechanisms — so that the path of least resistance leads toward outcomes aligned with the individual's own long-term interests (Thaler et al., 2021; Ullah et al., 2024). Applied to the fintech context, this means that interventions such as default spending limits, mandatory cooling-off pauses before checkout or paylater activation, and real-time budget notification alerts do not restrict users from transacting freely — they restructure the decision environment so that impulsive, unreflective spending requires deliberate override, while planned and controlled spending is the default experience. This approach is theoretically significant because it shifts the "cost of self-control" from the individual — who is systematically disadvantaged by platform design optimized for transaction volume — to the system architecture itself, making behavioral governance a design responsibility rather than an individual moral obligation (Thaler et al., 2021).

This choice architecture intervention is most effective, however, when combined with financial-ecological literacy as a complementary moderator. As Ullah et al., (2024) demonstrate in their comprehensive review of behavioral sustainability interventions, the combination of structural nudges with literacy education produces stronger and more durable behavioral change than either element alone: nudges create the initial behavioral pathway, while literacy builds the reflective capacity that sustains and expands that change over time. This means the control feature activation must be accompanied by education on how to use monitoring tools consciously, how to interpret BNPL total cost simulations, and how to connect daily spending decisions to longer-term financial resilience and ecological consequences. Thus, the WT strategy can be understood as one that simultaneously restructures the decision environment and builds the adaptive capacity of users — a dual-lever approach that is both more ethical and more durable than either regulatory restriction or literacy campaigns deployed in isolation.

The translation of WT interventions into community development planning programs in Gorontalo can be operationalized through a portfolio of programs that bind choice architecture, literacy, and multi-actor governance into a coherent implementation framework. First, the "Gen Z Digital Transaction Control" program can be piloted at universities through formal MoU with fintech providers, activating default transaction limits and cooling-off pauses on participants' accounts, with compliance and behavior change tracked through a dashboard — then progressively expanded to urban and sub-urban communities through platform partnerships. Second, the "Protective Financial Literacy" program can combine total cost simulations of BNPL and online loan obligations, installment due-date calendars, and microlearning modules embedded close to the moment of transaction, thereby reducing the risk of consumptive credit accumulation — a need directly confirmed by Indonesia's BNPL NPL dynamics (OJK, 2023). Third, the "Nudging Responsible Consumption" program can adopt digital message design, gain-loss framing, and impact feedback mechanisms to guide consumption in a more sustainable direction, consistent with evidence that well-designed digital nudges can increase sustainable product selection by measurable margins (Ullah et al., 2024). Fourth, the "Young Digital Consumer Protection" program strengthens complaint channels, OTP and phishing security education, and assistance SOPs so that the threat of fraud and information asymmetry does not hinder healthy digital financial inclusion. Fifth, the "Swipe Green Incentive" program redirects cashback and loyalty points toward local products, environmentally friendly MSMEs, and sustainable consumption options — ensuring that incentive architecture channels rather than stimulates consumption volume, aligning with the sustainable development goals relevant to Gorontalo's regional development agenda.

With this framework, the WT synthesis transforms from a conceptual recommendation list into a programmatic governance portfolio with clear goals, measurable output indicators, and cross-actor partnership schemes that can be formally incorporated into Gorontalo's regional planning documents (RPJMD and RKPD) and cross-sectoral action plans. The overarching policy implication for local government is a necessary shift of focus: from simply expanding fintech adoption to governing the *quality* of use — through integrated choice architecture, protective literacy, impact transparency, and consumer protection — so that digital financial transformation in Gorontalo strengthens rather than erodes the long-term financial resilience and sustainable development capacity of its young productive-age population (Bank Indonesia, 2024a; BPS Gorontalo, 2025; OJK, 2023).

## CONCLUSION

This study contributes original empirical and analytical evidence to three interconnected domains: the behavioral economics of Gen Z fintech use, the governance of sustainable consumption in developing regional contexts, and the application of SWOT–TOWS as a diagnostic planning instrument for community development. The central novelty of this study lies in its qualitative mapping of how Generation Z in Gorontalo Province actively negotiates the fintech–sustainability paradox — the condition in which the same digital financial infrastructure that enables transaction efficiency, spending monitoring, and disciplined financial management simultaneously creates the architectural conditions for frictionless overconsumption, BNPL debt accumulation, and ecological impact blindness. Rather than treating fintech adoption and sustainable consumption as independent variables, this study shows that they are structurally entangled through platform design, and that the direction of their relationship — toward resilience or vulnerability — depends

on whether behavioral governance is embedded in the system or left entirely to individual willpower.

A second contribution lies in the methodological translation of qualitative user experience data into a structured planning output through SWOT thematization and TOWS strategy formulation. Existing research has generally explored fintech adoption determinants or sustainable consumption attitudes as separate inquiries, without providing a diagnostic framework that converts micro-level behavioral findings into operationalizable community development program priorities. This study fills that gap by demonstrating how SWOT findings — grounded in the lived experiences of 67 Gen Z informants — can be systematically elevated through TOWS into a portfolio of WT interventions that have clear targets, measurable indicators, and multi-actor partnership schemes relevant to Gorontalo's regional development planning context. This positions the study not merely as a descriptive behavioral account, but as a planning-oriented research contribution that local governments, campus institutions, fintech providers, and regulators can draw upon directly.

Substantively, the findings show that Generation Z in Gorontalo perceives fintech's strengths primarily through the lens of decision infrastructure: transaction efficiency, automated spending records, and monitoring features are understood not merely as practical conveniences, but as tools that — when consciously activated — can strengthen consumption discipline and support longer-term financial resilience. At the same time, the ease of transactions creates structural space for less controlled consumption behavior because shopping decisions become too fast, too frequent, and too easily triggered by promotional stimuli embedded in the platform ecosystem. Critically, the problem is not digital payment technology per se, but the broader platform architecture that bundles payment infrastructure with algorithmic promotion, one-click checkout, and embedded credit instruments — a distinction with direct implications for how interventions should be designed.

The findings further show that meaningful opportunities exist to redirect fintech as a behavioral infrastructure for sustainable development, particularly through choice architecture-based control features, financial-ecological literacy integrated at the point of transaction, and multi-stakeholder governance that embeds responsible design requirements into platform operation agreements. Threats, however, are real and differentiated: consumptive debt accumulation, FOMO-driven digital social pressure, e-commerce-accelerated waste cycles, and data security vulnerabilities do not affect all Gen Z sub-groups uniformly — student, working, rural, and informal-sector youth face structurally distinct risk profiles that community development programs must disaggregate and address separately.

Based on the WT synthesis, the most impactful interventions are those that work simultaneously at the transaction decision point — through default limits, cooling-off pauses, and real-time budget notifications — and at the literacy level, building users' capacity to interpret financial risks, recognize ecological consequences, and navigate consumer protection mechanisms. The translation of these WT strategies into Gorontalo's community development planning therefore represents not an incremental program addition, but a structural repositioning of fintech from a neutral adoption metric to a governed behavioral infrastructure whose design, literacy ecosystem, and regulatory environment are treated as central determinants of young household welfare and

regional sustainable development outcomes.

### **Suggestions**

First, local governments need to develop a program package that places choice architecture at the core of transaction behavior governance — specifically through default spending limits, mandatory cooling-off pauses before paylater activation, and routine spending summary notifications — so that behavioral control is embedded in system design rather than dependent solely on individual willpower. Pilot implementation through university MoU partnerships with fintech providers provides a cost-effective, high-reach entry point that can be progressively scaled to urban and sub-urban community settings.

Second, campuses and local governments need to build protective financial-ecological literacy programs that go beyond general financial knowledge to focus on three specific competencies: the ability to calculate the true total cost of BNPL and online loan obligations including fees and penalties; the capacity to recognize and resist promotional design triggers such as flash sales, one-click checkout, and social proof mechanisms; and the ability to connect daily spending decisions to longer-term ecological consequences. Short training modules integrated into student activities — rather than standalone financial literacy courses — are more likely to reach informants at the moment their behavioral decisions are made.

Third, formal cooperation agreements with fintech providers and digital business actors need to be directed toward the design of more responsible choice environments, including responsible default configuration of promotional notifications, introduction of pre-checkout reflection prompts for high-risk transaction categories, and provision of clear, readable total cost disclosures at the point of BNPL commitment — consistent with OJK's existing consumer protection mandate and the SNLKI 2021–2025 framework.

Fourth, regional sustainability programs can incorporate targeted green incentive schemes that redirect cashback and loyalty points toward local sustainable MSMEs, environmentally friendly products, and public transportation — ensuring that incentive architecture channels consumption quality rather than stimulating consumption volume. The design of these incentives requires curation partnerships with local merchants and MSME associations to build a credible "green merchant" ecosystem in Gorontalo.

Fifth, a clear, accessible, and youth-oriented digital consumer protection mechanism must be established, including dedicated complaint channels for young users, account security education covering OTP protection and phishing recognition, and structured assistance SOPs for cases involving hidden fees, payment disputes, and BNPL default stress — so that digital financial transformation continues to support rather than undermine the socio-economic resilience and sustainable development goals of Gorontalo Province.

Sixth, future research should address the limitations of this study's student-centered sample by extending inquiry to working youth, rural Gen Z, and informal-sector young adults in Gorontalo — groups whose fintech risk profiles and behavioral negotiation strategies are likely to differ substantially from those documented here. Longitudinal and mixed-methods designs that measure changes in consumption behavior over time following WT intervention implementation

would further strengthen the evidence base for community development planning in the region.

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