The buy-now-pay-later ecosystem: new (algo)rhythms of spending and reframed relationships

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Abstract

Buy-now-pay-later (BNPL) is changing young consumers' spending and relationship to credit through an integrated digital ecosystem predicated on algorithmic marketing. Whilst BNPL has the capacity to liberate young consumers by fostering a more entrepreneurial disposition to credit, this position is founded on the supposition that consumers have the necessary knowledge and capability to make informed financial decisions. However, the use of algorithms means that young consumers are, perhaps, more accurately framed as being constrained and any inherent patterns of damaging behavior maintained. Therefore, while the provision of BNPL appears to offer opportunities such as greater accessibility and flexibility, it inevitably evidences numerous disadvantages, such as impulsive borrowing and financial vulnerability, which are intensified by a lack of regulation. These complexities create a challenging operational space for consumers, service providers, retailers, and regulators alike – arguably changing the relationships between them and necessitating continued consideration of the evolving nature of digital consumer credit solutions.

Introduction

This chapter discusses the interlock of buy-now-pay-later (BNPL) consumption and social media platforms to consider the development of an integrated ecosystem that currently circumscribes credit usage for many young consumers, reshaping their approach to spending, and to the relationships with the other actors present in the system. The chapter also delves into how the application of algorithms across both domains is creating a space fraught with differential outcomes – leading to the possible amplification of inequalities.

The promotion of new digital consumer credit solutions

Marketing has long helped normalize consumer credit through ubiquitous advertising and the extensive provision of new credit solutions (Husz, 2021). Through this, several possible problems emerge that relate to the pervasive promotion of new digital consumer credit products: push marketing fosters impulsive borrowing that lacks prior intention or clarity of purpose; there is poor product disclosure; digital delivery can change repayment dynamics, and digital credit raises consumer protection concerns – particularly in relation to data usage and sharing (Mazer & McKnee, 2018). These complexities create a challenging operational space for consumers, service providers, retailers, and regulators alike. Additionally, such concerns generate a novel climate where interactions and exchange are reframed and combined to create the specter of manipulation and possible exploitation.

However, such drawbacks do not belie the opportunities that are also present in this emerging market. The possibly progressive outcomes of digital consumer credit have been extolled in much research (see for example: Hasan et al., 2021 Li et al., 2020; Zhong, & Jiang, 2021). Such benefits have particular salience for consumers previously excluded by traditional financial services (Bourreau & Valletti, 2015). This is because such digital forms of credit, ostensibly, make financial access 'easier' – namely making it more convenient and swifter – this simultaneously generates new consumption opportunities.

Therefore, these financial products concomitantly intensify household borrowing and increase the risk of over-indebtedness (Yue et al., 2022). Risk here is predicated on excluded consumers often experiencing more restricted financial well-being in terms of their current money management stresses and expected future financial security (Netemeyer et al., 2018) and their having lower financial literacy, both in relation to objective and subjective knowledge (Sun et al., 2022). Lower financial literacy is particularly significant in relation to digital consumer credit, as many such products, and their management, are more complex than those to which excluded consumers will previously have been exposed or used. This discrepancy can substantially diffuse the benefits wrought by reduced information asymmetry between lenders and borrowers in digital consumer credit services. This is because a lack of knowledge means that, whilst information may be found more easily, the borrower is not able to utilize it effectively to make an informed choice. So, potentially financially vulnerable consumers can engage with digital consumer credit services with relative ease, without apprehending the possible unintended consequences that may transpire.

Therefore, the overall picture is one where the extensive development of digital consumer credit products, the relatively low consumer adoption barriers and the intricate interplay between benefits and risks creates a complex context where consumers' approach to spending is being reshaped (Koskelainen et al., 2023). As are consumers' relationships with the other actors present in the system, be they the digital credit provider, the retailer, or others who generate content that promotes, or cautions against, the use of such financial services. Hence, consumers are now surrounded by a digital ecosystem, powered by digital credit, that serves up a myriad of opportunities to purchase.

Buy-now-pay-later – a distinctive digital consumer credit product

BNPL products can be defined as third-party short-term credit agreements, that consumers access through dedicated provider apps or as one of the payment options at retailers' checkout. The agreements usually enable deferred payment of the purchase price or split it into instalments spread across a few months, consumer preference differs between countries as to which BNPL form predominates. Most BNPL providers do not charge interest or fees unless a repayment is missed, or borrowers elect a longer settlement period (Relja et al., 2023). In many countries, there is no requirement for extended credit checks and regulation of BNPL is negligible, as lawmakers are yet to address this new digital format. Conversely, many BNPL providers use significant technological capabilities to embed this digital credit product within an enhanced service proposition, seeking to make it ubiquitous.

Therefore, BNPL with its adept application of Fintech and sophisticated digital marketing utilization, has become a quintessential contemporary form of unregulated short-term digital consumer credit (Johnson et al., 2021). BNPL largely adheres to the precepts that consumers now "…demand intelligent, however easy-to-use financial services independent of location and time, and at continually decreasing costs" (Gomber et al., 2017, p. 537). But rather than simply becoming another new digital credit solution, BNPL has morphed, in many instances, into a consumption platform, where the customary relationships between customer, retailer and payment provider are renegotiated (Relja et al., forthcoming) and are increasingly intertwined with social media content and influencers, specifically 'Finfluencers' (de Regt, 2023).

The growth and potential of BNPL as a form of consumer credit is evident in recent figures from GlobalData (2023), which suggest that, by the end of 2023, the digital credit product will account for nearly 60 percent of the transaction values across five primary categories (food and drink, health and beauty, media and entertainment, electrical goods and home appliances, clothing and footwear). Currently, GlobalData (2023) suggests that the global BNPL "…market size will be valued at 309.2 billion [US Dollars] in 2023 and [that it] is expected to grow at a compound annual growth rate (CAGR) of 25.5% over the forecast period [to 2026]." Given this scale and anticipated trajectory, there is little doubt that BNPL is a substantial consumer credit mechanism, although it is still significantly smaller than the global credit card payment market, which reached 521.8 billion US Dollars in 2022 (Imarc Group, 2022).

BNPL services are now operated by numerous companies. These include Afterpay Ltd., Klarna Bank AB, Sezzle Inc., Splitit Payment Ltd., BNPL pioneers and now synonymous with this form of short-term credit; PayPal Holdings Inc. and Openpay Group Ltd., digital payment specialists; alongside Amazon Payments Inc. and Apple Pay Ltd., and other providers rooted in various forms of technological innovation and solutions. However, BNPL services are increasingly being offered by traditional credit providers too, including American Express Co., Barclays Plc., Citigroup Inc., and Monzo Bank Ltd. The entry of providers with established reputations potentially increases consumer trust and reduces perceived risk in this form of online payment, especially when the retailer is unfamiliar (Cardoso & Martinez, 2019). The diversification of market players demonstrates that BNPL has become an established digital consumer credit product and one that is likely to form a major part of the contemporary consumption landscape for the foreseeable future.

This is particularly the case as BNPL use is widespread among younger cohorts (Statista, 2022), such as Millennials (born 1980–1994) and Generation Z (born 1995–2009). These younger consumers have a receptive attitude to BNPL, and many prefer to engage with new digital consumer credit solutions rather than utilize alternate traditional financial products. Additionally, these younger consumers frequently have a limited credit history, making traditional credit products difficult to access. Many also experience more restricted financial well-being as they are in the early stages of their careers and are simultaneously seeking to establish an independent life with its intendent financial requirements. Equally, given their limited experience and the lack of formal education in the domain (Lusardi, 2015), many have low financial literacy. This can make these young consumers particularly financially vulnerable.

This vulnerability is potentially heightened as many young consumers additionally prefer the immediate and frictionless procedures and simple account management capacity that BNPL affords, making access to credit almost effortless. This creates a volatile admixture of credit opportunity and consumer naivety that fuels BNPL market growth. This mix also fosters the *illusion* of financial well-being, as it generates a position where the young consumer may feel they have "…control over day-to-day finances; have the capacity to absorb financial shock; have ability to meet [their] financial goals; and [specifically] have the financial freedom to make the choices that allow one to enjoy life (Collins & Urban, 2020; Netemeyer et al., 2018)" (Koskelainen et al., 2023, p. 508).

BNPL, therefore, offers potential financial freedoms, but is less tangible than other traditional, or even, digital payment forms. But perhaps most importantly, the attendant BNPL apps that wrap around the core consumer credit product, proliferate consumption choices triggered by algorithms (e.g., promotion of preferred retailers, discount notification). What is, therefore, created is an integrated ecosystem, which contains both the BNPL app and associated social media, and that frames both choice and the means to pay for it, offering young consumers a single portal to (over)spending.

Consequently, such BNPL offers are more a digital consumption platform than they are simply a new consumer credit solution. In that respect, these BNPL digital consumption ecosystems bound young consumers' financial capability – namely their ability and the opportunity to act (Scott et al., 2018; Serido et al., 2013). The pervasiveness, and power, of such digital ecosystems has often been noted, as users are immersed in the technology, hence they do not perceive it, and its use, as being a separate exercise from their everyday activities (Baskerville et al., 2020). Therefore, these digital ecosystems become embedded and persistent, and are a persuasive force, which seek to prime attitudes and nudge choice behavior (Dennis et al., 2020).

The nature and power of algorithmic marketing

This reframing of BNPL is principally predicated on the application of algorithmic marketing, which seeks to curate tailored retail offers alongside customized financial discounts and deals. Here the BNPL consumption platform acts as a digital infrastructure that draws together consumers and retailers and enables exchange between the actor groups through the digital consumer credit product that lies at its core. The emergence of such a 'platform assemblage' (Kozinets, 2022) has the capacity to alter customers' spending, both in relation to what is bought and when. This is predicated on the abundance of data generated and available through the embedding of such digital ecosystems in consumers' everyday activities and the appearance of varied digital-sensing tools used in the financial landscape (Gomber et al., 2017). Such tools enable BNPL providers to combine various data sources (browsing history, retailer transactions, repayment data, social network data) to both identify young consumers' consumption patterns and to build highly targeted recommendations (Gomber et al., 2017). As such, BNPL consumption platforms are not 'neutral' (Gillespie, 2010), as the explicit intent is to extract such data to affect the choices and the spending of the young consumers who are its chief users.

To enable the effective generation of data, these BNPL consumption platforms need to create an 'enclosed space' in which consumers can be observed, tracked and predictions made that serve to enhance consumer desire. This requires consumers' activities to be constrained by the platform (Zuboff, 2019) and yet be simultaneously empowered by them (Kozinets, 2022). For example, on a BNPL consumption platform, only retailers who 'subscribe' are displayed. This delimits the consumption choices that the young consumer can make but may also expose them to brands and products that they would otherwise not come across. Additionally, those retailers who pay the BNP platform more to enjoy preferential advertising displays are foregrounded and those retailers who do not engage in such promotional spending are demoted to secondary positions, hence consumers are required to expend more effort to effectively 'hunt out' these retailers' offers. Such practices thereby establish "outright manipulation and constrained self-determination" (Breidbach & Maglio, 2020, p. 180). This market-based form of constraint is both enabling but through the application of predictive analytics to consumer activities it equally seeks to nudge young consumers within these BNPL consumption platforms.

Such predictive analytics are built on algorithms that, in the contemporary context, are best understood as being "enacted by practices which do not heed a strong distinction between technical and non-technical concerns, but rather blend them together. In this view, algorithms are not singular technical objects that enter into many different cultural interactions, but are rather unstable objects, culturally enacted by the practices people use to engage with them" (Seaver, 2017, p. 5). This perspective enables consideration of the devices on which the software runs, the software programming, and the producing and consuming of content, as well as the valuing and using of data (Kozinets, 2022). Therefore, this conceptualization highlights that algorithms are embedded manifestations of contemporary consumer culture, that both have socially generative and responsive qualities, and are not 'merely' a benign technical instrument. This position led Kozinets et al. (2017, p. 667) to coin the term 'networks of desire' to describe the interconnected web of actors (chiefly consumers, companies, platforms, and influencers/content creators), that are part of a wider social system, and for whom, through the application of algorithmic technologies, consumption interests are created and intensified.

Other, more challenging, terminology refers to such algorithmic marketing approaches as 'surveillance capitalism' (Zuboff, 2019) and highlights the potential biases that the inferences shaped by such systems engender, even going so far as to suggest that the outcomes "…are used to manipulate, assess, predict, and nudge individuals – often without their awareness and nearly always without any oversight or accountability" (Gawer, 2021, p. 12). This raises significant concerns and suggests that there are likely to be ethical consequences that affect individual consumers and society more generally, particularly as the availability of anonymized, big data sets and analytic practices become ever more sophisticated (Wirtz et al., 2023). Similar customer privacy and vulnerability worries (Koskelainen et al., 2023) can be extended to BNPL, particularly given the potential centrality of this form of platform assemblage to young consumers' consumption practices, as well as to their financial capability. Here, algorithmic marketing, underpinned by behavioral economics, seeks to influence young consumers to make certain decisions in relation to the financial services that they use (Cai, 2020) to facilitate access to curated lifestyles, neatly packaged within the BNPL consumption platform.

Consumer credit marketing algorithms

Recent work has gone even further, suggesting that technologically supported credit marketing practices, and the application of algorithms specifically, shape class distinction (Pellandini-Simányi, 2023). Here, customers are seen as passive objects of algorithms, segmented, and 'fed specific marketing messages'; they are also viewed as subjects of algorithms, where the digitalization of choice is facilitated, with both preferential and detrimental consequences. BNPL consumption platforms have certainly been a stage for the proliferation of targeted marketing messages and demonstrated the potential to generate varied outcomes for young consumers, offering potential liberation from traditional credit forms to which they may not have access, alongside the promotion of unsustainable consumption and over-indebtedness.

Many young consumers, given their limited financial literacy, also hold a range of misnomers about the relationship between BNPL and wider credit systems. For instance, in the UK, a significant number assume that on-time repayment of BNPL debit immediately increases their credit scores (Relja et al., 2023), whilst not appreciating that each BNPL transaction and 'defaulted' repayments (90 days or more) are noted on credit reports, and in the case of the latter stay there for six years (Experian, 2023). Such specific inaccuracies, and more generally uninformed positions on digital financial services, are entwined with young consumers' extensive reliance on social media. BNPL providers make extensive use of social media, and there is copious consumer created BNPL content, alongside the pervasiveness of 'FinTok' as a means for young consumers to 'educate' themselves. In the United States of America, Generation Z and Millennials in particular (56 percent in total) report using social media to garner financial advice: both groups rely on Instagram, but Generation Z also use TikTok, whilst Millennials additionally employ Facebook (Credit Karma, 2021).

In a recent study of BNPL FinTok, Aggarwal et al. (2022, pp. 351-352) identified four common types of content: "Memes (highly spreadable and replicable videos, often depicting humorous or sardonic content); Lifestyle (videos in which creators discussed, criticized, or celebrated purchases made using BNPL); Promotional (videos in which creators advertised products that could be purchased using BNPL services or advertised the BNPL products themselves); and Advisory (videos in which creators provided information or cautioned viewers about using BNPL products)." Whilst these different types of content are evident, the nature of the algorithms that drive TikTok mean that young consumers who view one form of content, for example, lifestyle videos celebrating purchases made using BNPL, see more of the same material and simultaneously have messages that provide counterpoint excluded. This again amplifies the tone of the original material viewed, and simultaneously perpetuates constrained self-determination. Additionally, BNPL providers can comment on, or even promote, such content through the web of connectivity that is the BNPL ecosystem, potentially lending further opportunities to manipulate consumers' attitudes and choice behaviors. Given this, it is unsurprising that there are significant anxieties concerning how social media accelerates BNPL use, normalizes debt, and even seeks to make approaches to defaulting on repayments humorous.

In relation the use of social media in wider [digital] marketing ecosystems, Redmond (2023) suggests consideration of who is the consumer and who is the customer, and if their interests coincide, of what constitutes data and what information, alongside if social media provisions sovereignty, which "involves the self-interested, objective and analytical evaluation of market offerings by the consumer" (p. 2). Firstly, when social media is considered, the viewers of the content are purely consumers, as they pay nothing for access, and the customers are the advertisers and those paying for the data generated – namely the BNPL consumption platform providers in this context. The interests of the two groups do not necessarily align and content creators are keenly aware that the money they generate comes directly from the 'customer' rather than the consumer. Secondly, social media provides its *customers* with considerable data on its *consumers* – this data is the salable commodity at the heart of social media platforms. This notion underpins the third point that social media consumers may well be subjects of the system rather than served by it – and that it is the customers of social media who have sovereignty. Consumers, and their data, are however, the currency that is traded via social media and keeping them engaged and returning to consume more is critical.

Many social media consumers spend considerable time each day using such platforms and are influenced by their interactions on these sites. For instance, over one-third of Generation Z spend more than two hours daily on social media, Millennials are, however, the most active users with 32 percent posting either daily or multiple times a day (Coe et al., 2023), many stating this affects their choices. For young consumers social media has become habituated and the 'influencers' [irrespective of the veracity of what they present] are often more trusted than traditional sources of financial advice. When such social media engagement by young consumers is allied with the use of the BNPL consumption platforms, what results are refashioned approaches to purchasing – ones where young consumers can spend now and not worry, even later when repayment is due, with some content creators even posting about the size of their accumulated BNPL debt in humorous memes. In this sense, the issue becomes if what is fostered is choice or, rather, 'choicelessness'.

An evolving set of relationships

Choice is also reframed in terms of the traditional relationships that exist between consumer and retailer in the BNPL ecosystem. The BNPL consumption platforms, and the associated social media content, promote the digital consumer credit provider to a position of primacy. Retailers are a necessary constituent of the BNPL ecosystem but are no longer primary. It is access to this form of digital consumer credit that is paramount for young consumers, as it enables them to manage their finances in what are increasingly turbulent and uncertain economic conditions (Relja et al., forthcoming).

Consumers can use BNPL to 'feel' as if they are able to make use of what they see as *their* borrowed future money. They are, in essence, first focusing on the means of access to consumption that BNPL affords and then using this platform to delimit the menu of consumption choices available to them. Here, the retailers' chief connection becomes to the BNPL provider as it is the consumption platform, and the retailers' (paid for) relationships with it, that are critical. These associations enable the BNPL provider to offer targeted savings and discounts, as well as curate the development of a lifestyle proposition. This effectively mediates the consumption experiences of these young consumers, and potentially engenders dependence, both in terms of access to credit, but also by circumscribing the set of retailers and brands with whom consumers develop a relationship.

This presents retailers and brand owners with considerable challenges and may lead them to make decisions about which BNPL consumption platform providers they deal with, or if they elect to use the BNPL services of companies that currently operate more as a traditional credit product, offered only at point of purchase. If such patterns develop, they will further serve to delineate consumption choices for young consumers, as the extent to which consumers are then willing to engage with different BNPL providers becomes a salient feature and the future battleground for BNPL provision.

BPNL and the new (algo)rhythms of spending

When taken in the round, whilst BNPL may liberate young consumers from the tyranny of 'credit scores' (Kear, 2018), it might be said to simultaneously increase the responsibilization of individuals (Burton, 2008). Here, the issue of governance is transferred to the individual consumer through an 'appeal of freedom', and they are responsible for self-steering and self-care. BNPL consumption platforms are certainly offering young consumers a new means of access to goods and services, but there is also an implicit assumption that these consumers can make decisions that are advantageous to them – and thereby exercise self-governance. Therefore, it might be expected that BNPL furthers the entrepreneurial disposition of consumers to credit (Langley, 2008) but, given the issues raised above, concerns of inequality and susceptibility are also heightened – specifically given the allying of FinTech and digital marketing capabilities.

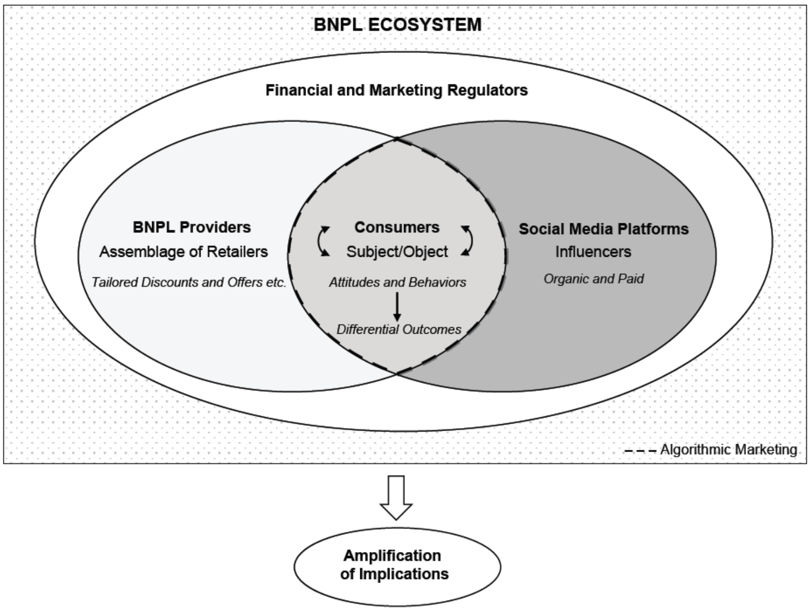
The application of algorithmic marketing that lies at the core of BNPL consumption platforms, and within the associated social media sites that these young consumers use to gain information, actively delimits, and potentially curtails consumers' capacity to act freely. The algorithms applied offer constrained self-determination by firstly categorizing these young BNPL users and then secondly by providing tailored retail offers. Hence, what a young consumer can access is, therefore, defined through the platform and reinforced via social media. This has considerable potential to lead to attitudinal and behavioral nudging, the outcomes of which can be unfavorable for the young consumer, for instance the buildup of debt, unnecessary accumulation of goods and spending on services, and reinforcement of unsustainable financial habits.

What is perhaps even more concerning is that the defaults that these young consumers may well develop in terms of BNPL will, in turn, be made manifest in future credit prospects. In essence, the data surrounding young consumers' BNPL activities will be the meat of further algorithms that will decide on their access, or more likely the curtailment of their access, to future financial opportunity. As such, the algorithms used by BNPL providers, and indeed the wider financial services industry, shape young consumers' rhythms of current spending and define their future financial well-being. Without effective regulation, consumer education, and more consideration of the issues that result from the application of algorithms in relation to new digital forms of consumer credit, the future for young consumers is fraught with differential outcomes and substantial equalities. This was recently highlighted as one BNPL consumption platform provider in the UK elected to make opting out of its credit services easier by managing this from within the platform settings. Up to this point, consumers could only 'leave' if they spoke to the provider's customer service team. The aim of such a tactic simply seems to be making it too 'inconvenient' to leave. Hence, once the young consumer is a BNPL user they were caught, constrained, and remained the object and subject of the BNPL provider's algorithmic marketing. Whether the move to ease young consumers' ability to leave was enacted to start returning control or a more cynical response to mounting external pressure is unclear. What is apparent though is that BNPL consumption platforms, and probably other new forms of digital credit services, will continue to reshape consumer spending and raise numerous questions and concerns.

Conclusion

Figure X-1 summarizes the interplay between the primary actors in the BNPL ecosystem. It depicts the way these relationships define the space for consumer action and their longer-term prospects.

Figure X-1. The BNPL ecosystem



Young consumers inhabit the intersection created by the algorithmic marketing practices deployed by BNPL platform providers and social media. The BNPL platform providers seek to offer an assemblage of retailers. The aim is to curate a lifestyle via access to specific goods and services. Through this, the short-term credit product that lies at the core of BNPL platform provision is enclosed within a structure that provides consumers with personalized discounts and offers. These benefits are then entwined with the messages fashioned by social media influencers, irrespective of whether those communications are paid for by the BNPL provider or are organic content. Therefore, consumers are both simultaneously the subject and object of algorithmic marketing that shapes their attitudes and behaviors. Consequently, differential outcomes are made manifest and potential inequalities are forged within the BNPL ecosystem.

That system is currently one with limited intervention from either financial or marketing regulators across much of the globe. However, the role of this actor is pivotal for the future. At present, regulators are playing catch-up as the speed and capability for novelty demonstrated by the BNPL providers incapacitates their ability to act preemptively. This results in an ecosystem that is driven by the FinTech provider. Such motivations are invariably bound to seeking profitability at the expense of the consumer. The potential amplification of inequalities that results is supported by young BNPL users' low levels of financial literacy and capability. The consequences of this confluence of factors could well create ripples that are sustained into the future financial well-being of young consumers for generations to come.

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