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FinTech as a key factor in financing SMEs growth in the digital age[3]

Abstract

This article examines the role of financial technology (FinTech) in addressing the challenges faced by small and medium-sized enterprises (SMEs) in accessing finance. It begins by examining the historical context of financial innovation and its impact on economic growth and stability. The financial crisis of 2007–2008 highlighted the need for alternative financing solutions, leading to the emergence of FinTech as a disruptive force in the banking sector. The article discusses the various barriers to SME finance, including high costs, information asymmetry and lack of collateral, and how FinTech solutions have addressed these challenges. Through the application of digital financial services and innovative business models, FinTech has facilitated faster, easier and cheaper lending and capital raising processes for SMEs. It has also reduced information asymmetry through the use of alternative data sources and advanced analytics. The article also highlights the role of large technology companies in providing digital financial products and services, alongside traditional financial institutions and FinTech startups. In addition, it emphasises the wider impact of FinTech on SMEs, including improving operational efficiency, facilitating international expansion and fostering

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innovation. Overall, FinTech is presented as a critical enabler of SME growth and economic development in both domestic and international markets.

Keywords: FinTech, innovation, SMEs, growth, digital economy.

FinTech jako kluczowy czynnik finansowania rozwoju MŚP w erze cyfrowej

Abstrakt

Niniejszy artykuł analizuje rolę technologii finansowej (FinTech) w rozwiązywaniu wyzwań stojących przed małymi i średnimi przedsiębiorstwami (MŚP) w zakresie dostępu do finansowania. Rozpoczyna się od zbadania historycznego kontekstu innowacji finansowych i ich wpływu na wzrost gospodarczy i stabilność. Kryzys finansowy z lat 2007–2008 uwypuklił potrzebę alternatywnych rozwiązań finansowych, co doprowadziło do pojawienia się FinTech jako przełomowej siły w sektorze bankowym. W artykule omówiono różne bariery w finansowaniu MŚP, w tym wysokie koszty, asymetrię informacji i brak zabezpieczeń, a także sposób, w jaki rozwiązania FinTech sprostały tym wyzwaniom. Dzięki zastosowaniu cyfrowych usług finansowych i innowacyjnych modeli biznesowych, FinTech ułatwił szybsze, łatwiejsze i tańsze procesy udzielania pożyczek i pozyskiwania kapitału dla MŚP. Zmniejszyła również asymetrię informacji dzięki wykorzystaniu alternatywnych źródeł danych i zaawansowanej analityki. Artykuł podkreśla również rolę dużych firm technologicznych w dostarczaniu cyfrowych produktów i usług finansowych, obok tradycyjnych instytucji finansowych i startupów FinTech. Ponadto podkreślono szerszy wpływ FinTech na MŚP, w tym poprawę wydajności operacyjnej, ułatwienie ekspansji międzynarodowej i wspieranie innowacji. Ogólnie rzecz biorąc, FinTech jest przedstawiany jako kluczowy czynnik umożliwiający wzrost MŚP i rozwój gospodarczy zarówno na rynkach krajowych, jak i międzynarodowych.

Słowa kluczowe: FinTech, innowacje, MSP, wzrost, gospodarka cyfrowa.

JEL: G23, G28, O16.

Introduction

Innovation is undoubtedly the driving force behind modern economies. It touches all aspects of their functioning, including the financial sector. Financial innovation in the digital age is known as FinTech and refers to an ever-growing segment of the market. Financial technology refers to the use of technology to deliver financial services and products to consumers. This can refer to banking, insurance, investment, in fact anything to do with finance. According to Allied Market Research, growth in online banking and mobile platforms will generate $110.57 billion in 2020 and is expected to reach $698.48 billion by 2030, growing at a compound annual growth rate (CAGR) of 20.3% from 2021 to 2030. However, the success of FinTech among individuals – consumers – is not the whole story. Businesses, especially SMEs, are also adopting FinTech, and the main role they seem to be fulfilling is to bridge the equity gap that is so characteristic of this business sector. This article aims to provide an insight into the impact of

digitalisation and FinTech solutions on the functioning of small and medium-sized enterprises.

Innovation in economic theory

Innovation in economic theory has been the subject of many academic studies. One of the most frequently cited authors is Schumpeter, in whose theory profits resulting from the creativity and innovation of entrepreneurs should be regarded as the basic factor in the development of capitalism, and the theory of economic growth built by Schumpeter introduced innovation into the group of factors influencing economic growth and microeconomic choices (Schumpeter, 1934). The essence of Schumpeterian innovation is non-innovation (as opposed to imitation, which involves the diffusion of innovation) (Marcinkowska, 2012).

The strand of innovation research that seeks to link innovation, competitiveness and growth is relevant to this thesis. Based on Schumpeter's theory of growth, Aghion *et al.* (2013) reflect, among other things, on the relationship of the inverted U-function between competition and growth identified by Schumpeter. This theory suggests that in an environment with low levels of competition, innovation implies less growth than when competition is high. This level of concentration was confirmed by Apergis *et al.* (2016) in a study of EU bank panel data from 1996 to 2011, which concluded that the EU banking sector has a pattern of monopolistic competition due to the mergers and acquisitions that have taken place since the 2008 crisis. This view was also highlighted by Bos *et al.* (2013), who studied the US banking sector to understand the relationship between competition and innovation. Through the model used, these authors positively verified the relationship represented by the inverted U. This had to do with the concentration of capital in US banks, which led to a decline in competition and actually reduced the level of innovation. This is particularly relevant as financial markets have become increasingly concentrated, reducing the level of competition. In this case, innovation brings lower levels of growth because innovators are likely to have fewer incentives to act, banks will be unwilling to invest in innovation (Marecki, Wojcik-Czerniawska, 2021, p. 285).

Based on Schumpeter's theory, Michalopoulos *et al.* (2009) developed a model that explains the joint evolution of financial and technological innovation. This duo is a consequence of the organisational development of firms and the emergence of stakeholders other than the entrepreneur. According to the researchers, growth is a consequence of the entrepreneur's decision, but it is supported by his continuous collaboration with financiers. This means that innovators introduce new processes and products because they are forced to do so by financiers. Successful financiers will be in the best position to assess the progress of an in-

novation but will only be interested if the financial innovation in question allows for a monopoly ration. The authors of this study concluded that as innovation becomes naturally obsolete, "technological innovation and economic growth will grind to a halt if financiers do not innovate" (Michalopoulos et al., 2009, p. 36).

Innovation in financial services of the digital economy – FinTech

Financial innovation in the traditional sense has been the subject of research by Lerner and Tufano (2011), who in their paper identified a historical view of innovation, listing interest rates and Eurobonds among financial innovations. On the other hand, the benefits and risks of innovation in the banking sector were examined by Beck *et al.* (2016). Using data from 32 countries between 1996 and 2010, the authors found that innovation was associated with both faster growth and volatility, as well as poorer performance. The literature also includes studies on the impact of the financial crisis on innovation. The author of the study (Thakor, 2011) states that "first, the more competitive the financial system (the lower the cost of entry), the stronger the incentives for financial innovation and the greater the amount of innovation. Second, the more innovative the financial system, the more vulnerable it is to financial crises" (Thakor, 2011, p. 144). A reference to Schumpeter's inverted U theory can be found here.

In turn, financial innovation (and in particular innovative post-derivative instruments) became the prime 'suspect' in the 2007–2008 financial crisis (Barre, Davis, 2008).

Innovation is seen as a driver of competitiveness for firms and economies. The development of information and communication technologies (ICTs) has helped to transform economic models and improve the quality of life around the world (Huynh et al., 2020). The 21st century is the age of ICT development. The Internet is growing and new solutions are emerging: cloud computing and mobile platforms. The digitalisation of business processes and operating models was considered one of the most effective ways to transform the international market even before the emergence of COVID-19 (Kotarba, 2018).

There is no doubt that it was the financial crisis of 2007–2010 that became the executioner of Schumpeter's 'creative destruction' in financial markets. Confidence in the banking sector declined. At the same time, confidence in the 'wisdom of the crowds', i.e. in platform solutions and the companies using these solutions, has grown. The financial innovations of banks and other financial institutions became less important (and were seen as less innovative) than those of companies such as Amazon, Google or Facebook. A report by the World Economic Forum (WEF, 2017) showed that banks lag significantly behind technology giants in the development of technologies such as cloud computing, artificial intelligence

and big data analytics. Digital technologies, including blockchain, have become the cornerstone of modern innovation in finance (Wojcik-Czerniawska, 2022).

The financial crisis caused problems with access to capital, due to restrictions on lending and investment by banks and traditional sources of funding. These restrictions resulted from a combination of bank-led decisions, new and stricter regulations (such as Basel II and III), and a decline in new investment from both companies and individuals. However, there was still a need for capital.

The continuing rapid development of digital and, in particular, mobile digital technologies has created a number of new opportunities for the financial sector. The new services and solutions for the financial sector have come to be known as FinTech. FinTech is: "a field or sector resulting from the symbiosis of digital platforms and artificial intelligence in financial services, generally at odds with traditional financial services" (Lacasse et al., 2016, p.1). In the literature, FinTech is referred to as a 'digital ecosystem', combining artificial intelligence (AI), the Internet of Things (IoT), digital platforms and the Wi-Fi generation. This new ecosystem is the birthplace of new payment and remittance solutions, deposits and loans, and new forms of currency (cyber and virtual). Lacasse *et al.* (2016) conclude that fintech solutions will have a significant impact on the transformation of financial services. The Financial Stability Board (FSB) defines FinTech as financial innovation enabled by technology that can have a significant impact on financial markets and institutions. Innovation can result in new business models, applications, processes or products used in the delivery of financial services (Marecki, Wójcik-Czerniawska, 2020).

Digital transformation has undoubtedly had significant implications for the banking sector. Sharma (2015) outlines the key challenges associated with the digital solutions being implemented. The author lists the following:

– the regulatory environment, which requires companies to change their IT solutions to comply with regulations;
– higher consumer expectations, as new technologies have increased their demand for better, faster and cheaper services;
– lower risk appetite as a direct result of the crisis;
– the development of the FinTech sector, with new business models and large players forcing banks to respond.

This assessment of the impact of digital transformation on the banking sector confirms the assumptions of the Shumpeterian idea of 'creative destruction'. It shows that new technologies at the service of human innovation are building a new era for financial services.

At its core, FinTech is being used to help businesses, entrepreneurs and consumers better manage their financial operations, processes and lives through the use of specialised software and algorithms.

Table 1. Taxonomy and classification of Fin Tech companies

Category	Fintech sector/ business model	Sub-sectors/business models included in each sector
1	*2*	*3*
Retail sales (consumers, households, SMEs)	Digital loans	P2P/business loans (off-balance sheet), P2P/consumer loans (off-balance sheet), P2P/real estate loans (off-balance sheet), on-balance sheet business loans, on-balance sheet consumer loans, on-balance sheet real estate loans, cash advances to customers or buy now/pay later, debt securities/bonds, invoice trading, cash advances to merchants and community microfinance
	Digital capital raising	Equity crowdfunding, real estate crowdfunding, revenue/profit sharing crowdfunding, donation-based crowdfunding, rewards-based crowdfunding and community shares.
	Digital payments	Digital remittances (cross-border P2P[4]), digital transfers (domestic P2P), money transfers (P2P, P2B[5], B2P[6], B2B[7]), e-money issuers, mobile money, merchant acquiring providers, access points (PoS[8], mPoS[9], online PoS), bulk payment solutions, top-ups, payment gateways and aggregators, payment API centres and clearing and settlement providers.
	Insuretech	Usage-based insurance, performance-based insurance, on-demand insurance, claims and risk management solutions, comparison portals, customer management, digital brokers or agents, IoT[10] (including telematics), P2P insurance and technical service providers (TSPs).
	Digital banking and savings	Neobank / fully digital native bank, marketplace bank, digital micro-savings solutions, digital money market / fund, agency banking (cash deposit and withdrawal services), banking as a service (BaaS) and savings as a service (SaaS).
	Wealthtech	Digital wealth management, financial comparison sites, retirement planning, personal finance management/planning, robo-advisors and social commerce
	Exchange services	Central order exchange, decentralised exchange models (dex), derivatives platforms, institutional brokerage services, OTC[11] services, P2P markets, retail brokerage services and trade automation.
	Digital storage	Co-managed trust services, e-money wallets, hardware cryptocurrency wallets, hosted cryptocurrency wallets, external trust services and non-hosted cryptocurrency wallets.

[4] P2P – peer-to-peer.

[5] P2B – person-to-business.

[6] B2P – business-to-partners – B2P refers to the business interactions and transactions that occur between companies and their partners or affiliates.

[7] B2B – business-to-business.

[8] PoS – Point of Sale.

[9] mPoS – mobile Point of Sale.

[10] IoT – Internet of Things.

[11] OTC – over-the-counter.

1	*2*	*3*
Market supply	Sharing technology with businesses	API12 management, digital accounting, electronic invoicing, blockchain in the enterprise and financial management and business analytics.
	Regtech	Profiling and due diligence, risk analysis, dynamic compliance, regulatory reporting and market monitoring.
	Alternative credit and/or data analysis	Alternative credit rating agency, credit scoring, biometric analysis, psychometric analysis and sociometric analysis
	Digital identity	Security and biometrics, KYC13 solutions and fraud prevention and management

Source: (CCAF, World Bank and World Economic Forum, 2022, p. 24).

SMEs and digital technologies

The main benefit of the development of digital technology is to streamline the production process and increase productivity (Karim et al., 2022). In addition, digital technology as a source of information and communication in the current era has increased the dependence on technology for all human activities (Wiyono, Kirana, 2021). The adoption of digital technology is strongly correlated with global financial growth. Digitalisation plays a key role in managing business stability and creditworthiness. Digital resources can be an effective tool for managing business processes. Especially after months of government support for businesses during the COVID-19 pandemic, it is clear that there must be a broad plan to implement consistent digital technologies in SMEs to level the development playing field for businesses of all sizes (Gudovskaya, Linin, 2021). Fintech plays a leading role in the fourth industrial revolution, which integrates new technological developments into business processes and changes the way modern companies operate.

There is no doubt that the main pain point for small and medium-sized pre-enterprises, which hinders their creation, growth or viability, is the problem of access to finance. SMEs most often choose internal funds or loans from friends and family as a form of financing because of the difficulties in accessing loan capital. A survey of SMEs in 135 countries found that access to finance was reported as the most serious obstacle to the day-to-day running of businesses (Ayyagari et al., 2017).

In emerging markets, about 131 million (41 per cent) SMEs suffer from a lack of access to finance. Creating opportunities for SMEs in these markets is one of

[12] API – Application Programming Interface.

[13] KYC solutions – Know your customer (KYC) is the process financial institutions (FIs) use to verify their customers' identities and inform compliance risk assessments. KYC is a foundation of anti-money laundering and countering the financing of terrorism (AML/CFT) compliance in jurisdictions worldwide.

the most important ways to accelerate economic development and reduce poverty. The estimated size of the so-called SME financing gap in developing countries is $5 trillion, or about 1.3 times the value of loans to this group of enterprises.

The supply-side barriers to SME finance, where FinTech solutions have shown the greatest impact in closing the finance gap, are as follows (WBG, 2022):

A. High cost of borrowing and servicing relative to revenue

Traditional methods of SME finance have relied on building strong relationships through face-to-face contact. Coupled with information asymmetries, this increased the unit cost of financing and reduced the ability of SMEs to access finance. In addition, the relatively high transaction costs associated with using capital markets for SME financing (public issuance of securities) meant that these forms of SME financing had to be considered unrealistic in most cases. Loans to these companies are also, by definition, smaller than loans to large companies. In addition, the formal requirements in terms of the underwriting process, operational, legal and credit risk monitoring of a loan are the same for SMEs as for large companies (if not higher). As a result, SME lending is riskier and less profitable for lenders given the smaller loan amounts, higher risk and the same level of formality for each loan.

FinTech solutions aim to facilitate these processes. Automated processes and products using DFS (Digital Financial Services) help to reduce transaction costs and make lending and capital raising much faster and easier by automating customer onboarding, underwriting, due diligence and collections. Products include: receivables financing such as factoring, reverse factoring and trade receivables financing; secured revolving credit lines; and platform financing – P2P lending and equity crowdfunding.

B. Information asymmetry

Information asymmetry, caused by a lack of available financial and credit data, is a major obstacle for SMEs in accessing finance. The lack of available information is traditionally replaced by higher collateral requirements.

Several FinTech solutions have been developed to address the information asymmetry barrier to SME finance. These solutions rely on the use of alternative data sources, big data analytics, artificial intelligence and machine learning to provide additional sources of information for SME credit risk assessment. Information from payment processors (i.e. credit card clearing companies and payment systems), e-commerce platforms and digital banks can also provide data to help measure cash flows and revenues and calculate the SME's ability to repay the loan. The use of these new data sources and advanced analytical techniques has made it possible to provide financing to SMEs that were previously unable to obtain financing from financial institutions.

C. Lack of collateral

Lack of collateral is also a common reason for SMEs' inability to access credit. A modern secured transactions framework has been developed, which allows lenders to develop loan products secured on movable assets owned by SMEs (rather than on real estate as in the past). Several FinTech solutions have emerged to support the introduction and use of movable assets (equipment, inventory, receivables, payment instruments and cash on deposit) as collateral, mainly through asset-based lending products: factoring, reverse factoring, secured revolving credit lines, trade receivables financing and tokenised assets. In addition, the digitisation of platforms to present and record transactions, connectivity to independent sources of information to help verify the existence and eligibility of collateral (i.e. payment processors, tax authorities, bank accounts, etc.), the Internet of Things to help monitor the maintenance, sale and replenishment/replacement of collateral, and smart contracts to automate the settlement of contracts are making asset-based finance products more accessible to both SMEs and financiers.

The impact of FinTech solutions on SME access to finance

Through the application of various technological innovations, digital financial services have become an important enabler for bridging the SME finance gap (SME, 2018). Technological innovations serve as the basis for the development of new business models and digital financial products, which include digital loans and other credit products, as well as raising equity capital through crowdfunding platforms. Digital financial services make the process of lending and raising capital faster, easier and cheaper. In addition, the use of alternative data sources, coupled with big data analytics, artificial intelligence (AI) and machine learning (ML), reduces information asymmetry by providing additional sources of information for assessing SME credit risk. These new data sources and advanced analytics make it possible to provide financing to businesses with no credit history or collateral, which were previously unable to obtain financing from financial institutions. The use of digital documentation, combined with the automation of many processes, helps to register the business and verify its identity, thereby increasing its chances of accessing finance (WBG, 2022).

Digital financial services are typically provided by new players, such as fintechs, large technology companies and neo-banks. However, traditional financial institutions are also starting to offer them. There are hybrid solutions in the market, where banks and other financial organisations partner with FinTech companies to use their products. Although FinTech companies are mainly young players that

have been in the market for less than a decade, large technology companies such as Alibaba, Tencent, Facebook, Amazon and Google are starting to offer digital financial products and services. Compared to FinTech start-ups, the main advantages of large technology companies are their huge customer base and the large amount of customer resources and data available. The availability of digital financial services can also encourage informal businesses to join the formal economy, leading to increased economic activity.

Fintech solutions and digital tools help to remove supply-side barriers and increase access to finance for SMEs.

Table 2 illustrates how fintech solutions address supply-side barriers.

Table 2. Key products facilitating digital finance and financial barriers for SMEs

Fintech solution	Impact	Key barriers/restrictions
1	*2*	*3*
Factoring	Factoring is a financial product that allows a financial institution to provide financing to an SME supplier by purchasing its receivables or invoices ('receivables'). In factoring transactions, the SME supplier is the customer of the financial institution	– No security – Asymmetry of information – High cost of service in relation to revenue
Reverse factoring	Reverse factoring is a financial product whereby a financial institution provides SMEs with immediate liquidity by discounting the liabilities of a large buyer. In reverse factoring transactions, the large buyer is the customer of the financial institution.	– No security – Asymmetry of information
Secured revolving credit lines	Secured revolving lines of credit (known as asset-based lending or ABL – asset-based lending) is a loan product used to provide working capital to mature or advanced SMEs, using their receivables and inventory as collateral.	– No security – High cost of service in relation to revenue
Tokenised assets	Asset tokenisation refers to the process of issuing a blockchain token that digitally represents a tangible or intangible asset, for trading, discounting or financing as collateral	– No security – High cost of service in relation to revenue
P2P/lending market	Peer-to-peer (P2P)/marketplace lending is a business model that uses online platforms to match potential lenders with borrowers. The term marketplace lending is sometimes used to distinguish business models where institutional investors rather than individuals are the lenders. However, the terms are also widely used as synonyms.	– Asymmetry of information – High cost of service in relation to revenue

1	2	3
Equity crowdfunding	The basic premise of crowdfunding is to enable small companies to reach a large number of potential investors and offer investment in their companies. Crowdfunding is made possible by taking advantage of technological advances and regulatory exemptions that reduce the cost of public share issues and increase the promotional potential of offerings.	– High cost of service in relation to revenue
Digitisation of business processes	Refers to the digital transformation of accounting, inventory, purchasing, invoicing, sales and delivery methods, practices and documentation, including the development of customer portals and e-commerce applications.	– Asymmetry of information – High cost of service in relation to revenue
Digitisation of banking processes	It refers to the automation of banking processes from onboarding to marketing, product applications, insurance, risk management, disbursements and servicing. Eliminating manual processes increases self-service rates, reduces processing costs and overall lowers service costs, while reducing errors and enabling the use of customer data across products.	– High cost of service in relation to revenue – Lack of available information
Electronic invoicing	Refers to the digital evolution of invoices that have the same legal force as their paper counterparts but are generated, approved, transmitted, received, rejected or accepted and/or archived or recorded electronically for tax, accounting, billing and commercial or financial purposes	– Asymmetry of information
Digital payments	Refers to transfers of value that are made using digital or electronic data transfer devices and channels. Digital payments include payments initiated by debit or credit card, mobile phone, computer, tablet or mobile digital device	– Asymmetry of information – High cost of service in relation to revenue – No security
Credit risk assessment using alternative data	It refers to the use of alternative data such as mobile phone call records, utility and bill payments, digital payment transactions, social media, industry/sector data and more in the development of credit risk models to assess SME borrowers' willingness and ability to repay.	– Asymmetry of information
E-commerce	Buying and selling goods or services using the internet via computers or other digital devices including mobile. E-commerce levels the playing field for SMEs, enabling them to showcase their products online on a par with larger companies. The platforms provide rich data on cash flow, inventory and business performance of active SMEs.	– Asymmetry of information – High cost of service in relation to revenue

1	*2*	*3*
Open banking	It refers to practices or regulations that aim to make traditional financial institutions share their customers' data (with customer consent) with third parties - including fintech companies - in a secure, standardised way to level the playing field between smaller firms and large financial institutions.	– High cost of service in relation to revenue

Source: (CCAF, World Bank and World Economic Forum, 2022, p. 24).

FinTech in SMEs worldwide

Long underserved by traditional financial services providers, SMEs have new options with the rise of FinTech offerings.

Consumer adoption of FinTech services has increased from 16% in 2015, the year EY's first Global Fintech Adoption Index was published (Ernst&Young, 2017), to 33% in 2017 and 64% in 2019. Over this period, EY has seen waves of innovation, including new ways to make payments, manage money and access finance. EY now measures 19 different offerings to customers, up from 10 in 2015.

As FinTechs expand their offerings, they are maturing as businesses, expanding their global reach – and spurring new competition. As FinTech technology continues to grow in popularity, banks, insurers and financial institutions are responding with FinTech offerings of their own.

In a 2019 report. E&Y presented the results of a study on the use of FinTech solutions by SMEs (Ernst&Young, 2019). FinTechs are now offering a range of innovative services to SMEs. They are using FinTechs to address their financial needs, including securing working capital, hedging currency risk and managing cash flow.

The report (Ernst&Young, 2019) presents the results of a study in five countries – two developed markets (UK and US) and three emerging markets (China, Mexico and South Africa). Among these countries, China leads the way with a 61% adoption rate of FinTech solutions in SMEs, followed by the US with 23%. The other three countries are the UK (18%), South Africa (16%) and Mexico (11%).

For the purposes of the survey, SME adopters of FinTech solutions were defined as companies that had used FinTech services in the last six months in all four categories:

– banking and payments
– financial management,
– financing
– insurance.

The global adoption rate is 25%, leaving plenty of room for growth.

One reason to expect a rapid increase in FinTech adoption by SMEs is their willingness to share data. Seventy per cent of MSPs are willing to share their banking data selectively and securely with other financial services companies if it would help them get a better deal. By comparison, only 46% of consumers are willing to share data in such circumstances.

This willingness of SMEs to share data creates significant opportunities for FinTech companies to develop products based on open APIs. Open APIs are at the heart of the open banking phenomenon in markets around the world.

In the UK, which introduced open banking in 2018, 94% of SME FinTech companies are willing to share data with other financial services companies, and 63% are willing to share data with non-financial companies if it means gaining access to a better offer. This suggests that the efficiencies created by open banking in the SME sector are significant, with products and services based on open APIs bringing real value to SMEs in the UK (Ernst&Young, 2019).

Many FinTechs in the UK are using open banking and open data to serve their SME customers in a personalised and timely way, helping them to understand, manage and grow their businesses. FinTechs offering financial management services can use open banking data to provide rich insights into the cash flow and financial health of SMEs.

Many SMEs are already accustomed to digital data-sharing, such as sending their financial information to a cloud accounting provider. With the proliferation of open APIs, providers can more effectively offer a range of services to SMEs, such as overdraft protection, bookkeeping, expense management, factoring and supply chain management.

Open APIs stimulate the development of new financial management tools. For example, fintechs can provide SMEs with the ability to dynamically and automatically hedge the currency risk of a transaction directly at the point of sale (Wojcik-Czerniawska, 2019).

Open APIs can make it much easier for SMEs to access credit. With access to open data, lenders – whether they are established banks or FinTech companies – can make informed decisions quickly, in some cases reducing the 'time to answer' and 'time to cash' for an SME loan to just a few minutes. In the UK, we see various product marketplaces, as well as standalone offerings, using open banking to 'turbo-charge' the implementation and underwriting processes. The aim is to provide faster and better access to credit for SMEs.

Unlike consumers, who often choose fintechs based on attractive rates and fees, SMEs are more interested in features and functionality (Ernst&Young, 2019). When asked to list the top three reasons why they would choose a FinTech over a bricks-and-mortar financial institution, 66% globally cited breadth of

functionality and features, 55% cited 24/7 service availability, and 54% cited ease of setting up and using the service. In contrast, 39% cited rates and fees as one of the most important factors. The top three global drivers for SMEs to adopt FinTech solutions are also the same in the UK market.

Summary

Technological disruption is becoming increasingly common. Digitalisation, one form of this disruption, is impacting businesses in a myriad of unpredictable ways, enabling them to be more flexible and adaptable. Through fintech – the delivery of financial services through various forms of technology – businesses are equipped with the tools and services they need to grow and expand internationally. Fintech helps in two main ways – reach and connectivity – by increasing 'mobility and agility'.

Technological innovation in financial services (FinTech) is changing the way consumers think about financial products. FinTech can support economic growth and reduce exclusion in access to financial services. FinTech plays an incredibly important role in the SME ecosystem. First and foremost, it provides them with access to finance: Fintech offers new ways for SMEs to raise capital through crowdfunding platforms, peer-to-peer lending or online factoring. This in turn enables them to grow faster, invest in innovation and increase production or employment. Improving access to finance supports economic growth by stimulating business activity. FinTech technologies can also improve the operational efficiency of SMEs by automating accounting processes, managing payments or analysing data. This saves them time and money, allowing them to focus on growing their business and introducing innovative products and services. FinTech opens up new commercial opportunities for SMEs, both in domestic and international markets. E-commerce platforms, payment solutions or online accounting make it easier for businesses to expand into new markets, contributing to increased turnover and economic growth. The implementation of modern FinTech solutions allows SMEs to adapt more quickly to market changes and create innovative products and services, and can also help to increase customer confidence in SMEs by providing greater transparency in financial transactions and better data protection.

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