### Exploring the Innovation Diffusion and Resistance in the Fintech

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### ABSTRACT

This study uses Clayton Christensen's Theory of Jobs to Be Done to examine the functional, social and emotional aspects of the Ant Group's service innovation during the three phases of its development: the budding, the thriving and the metamorphosis phases. The study found that the Ant Group's service innovations in these three phases did solve many consumers' pain points and made the Ant Group a great success. Because of the Ant Group's plan to go public was suspended by the Chinese financial regulator, we found that in addition to the functional, emotional and social aspects of the structure of innovation as discussed in the Theory of Jobs to Be Done, the regulatory aspect also affects the viability of the application of the innovation, and the more socially relevant the allocation of resources to a good or service, the more important the impact of regulation on innovation.

JEL Classification: G20, G28, M20, M21, M29

*Keywords: theory of jobs to be done, ant group, fintech innovation, resistance in the fintech* 

#### I. INTRODUCTION

Since the rise of the Internet in 2000, human society has undergone great changes. Business sales have been integrated with the Internet and have gradually developed into B2B, B2C and C2C, breaking the geographical limitations of sales in the past and allowing global trade to develop even further. However, in the past, individual-to-person transactions or small business-to-consumer transactions were limited by the inconvenience of payment and could not flourish. The "information asymmetry" between vendors and consumers has made non-physical storefront transactions less developed in the past. Although the mail-order industry was developed in the early days, it was limited to a small percentage. In addition, only the larger-scale inter-company transactions between manufacturers and vendors in international trade could be carried out with the support of letters of credit from banks. However, for smaller-scale, small-dollar cross-border transactions, bank support is almost impossible.

Therefore, since the rise of the Internet in 2000, online e-commerce platforms have emerged, from early companies such as YAHOO and eBay to the current Google and Facebook, all of which have become world class successes. In the early days, the main reason for the success of these companies was that consumers could see what the products looked like, which enriched the consumer experience. Moreover, the online platform companies guarantee the quality of the products and reduce the information asymmetry between vendors and consumers. More importantly, online platform companies solved the problem of trust in the cash flow between the vendor and the consumer. This was the period when Paypal emerged. Solving the trust issue of financial flows between online platforms is a key factor in the prosperity of online platforms (e-commerce). According to Rogers (2003), diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. It is because these innovative Fintech technologies have gained the trust of consumers that these financial payment technologies have diffusion and further integrated new financial innovations into a new financial ecosystem.

The largest IPO in the world in 2020 was the listing of Ant Group. Ant Group was listed on both the Hong Kong and Shanghai Stock Exchanges at the same time, and although it called was a last-minute time call at the end, Ant Group is turned out to be the world's largest Fintech company. Ant Group is the world's largest Fintech company, and its success story and the limitations of its future development are worth studying.

Ant Group's best-known product is Alipay. Alipay was first created to address the trust issues of users of Taobao.com. When Taobao.com was launched in May 2003, the payment process for online transactions was extremely cumbersome. This problem has been solved since Taobao.com introduced guaranteed transactions. Later, Taobao.com called this guaranteed transaction service "Alipay". The data on payment behavior was also accumulated into big data, which allowed Ant Group to develop various other services later on. Seeing the increase in user satisfaction from fast payments, Alipay also wanted to derive and exploit a greater degree of user value from money stream payments, and the easiest way to do this was to allow interest to be generated on the balance (which was beginning to be at odds with the banking business). Alipay acquired Tianhong Asset Management Co., Ltd. to create an innovative "money fund payment" product using a money fund plus payment spending model. In 2013, the Balance Treasure Fund was born and became an important watershed in the growth of Ant Group. Actually, the difference

between payment products on online platforms in Western countries and those in China can be seen in the emergence of the Balance Treasure Fund. Why is it impossible to set up a Fintech company like Ant Group in Europe and the US (integrating cash payments, deposits, instalments, microfinance, etc.)? Why do companies in Europe and the US only exist as different types of business, such as Paypal (payment platforms), P2P (online lending companies), or asset management companies (fund companies)?

According to Ram and Sheth (1989), an innovation may create a high degree of change in the consumer's day-to-day existence and disrupt their established routines, the higher the discontinuity of an innovation, the higher the resistance is likely to be. Financial technology innovation is usually an attempt to break the existing financial operating model, thereby creating a new business model to replace the existing access, but because the financial industry is a highly regulated industry by governments, so since these innovations have changed the established norms, so will these financial technology innovations, as Ram and Sheth (1989) said, be resistant to these government regulations. According to Moore (1999), when a product reaches this point in the market development, it must be made increasingly easier to adopt in order to continue being successful. If this does not occur, the transition to the late majority may well stall or never happen. In the Fintech, these resistances will prevent the innovative technology from spreading any longer, which is why financial innovation cannot spread, and this gap will make this technological innovation unsustainable. As the world's largest Fintech company Ant Group, it has the most complete financial ecosystem, so this study hopes to use a case study of Ant Group to understand the reasons for its success with Christensen et al. (2016) Theory of Jobs to Be Done and to explore its development limitations further.

#### II. THEORIES AND LITERATURE REVIEW

#### A. Introduction and literature on the Theory of Jobs to Be Done

The "Theory of Jobs to Be Done" is now often used to discuss innovation in social and entrepreneurial disciplines. Hankammer et al. (2019) explore models of circular economy by using the "Theory of Jobs to Be Done" to identify consumer needs. Tseng and Wang (2018) use innovative use the "Theory of Jobs to Be Done" to examine examples of teaching card learning aids, where they try to use the "Theory of Jobs to Be Done" proposed by Christensen et al. (2016) to examine the functional, emotional and social aspects of teaching writing. The "Theory of Jobs to Be Done" is not only used in the study of innovation in business, but also in other social science research.

The 'Theory of Jobs to Be Done' was coined by Christensen. While the competitive model of disruptive innovation has been successful, it does not tell one where to look for new business opportunities, but the "Theory of Jobs to Be Done" does. The reinterpretation of the innovation challenge from a usage perspective is an exciting breakthrough that provides a function that destructive innovation theory cannot address: it helps companies to understand what motivates customers to use a particular good or service in their lives. Therefore, the value of innovation theory is no longer in explaining past successes, but in predicting new instances of innovation. So, uses are inherently complex and multifaceted, involving not only functional but also social and emotional uses. A lot of innovation tends to focus on functional aspects, but consumers' social or emotional needs may far outweigh the functional aspects (Hall et al., 2016). For example,

a consumer may want to buy a car. I think that in addition to the functional aspects of the car (performance, handling, price), there may be other social or emotional factors. These factors may be that the consumer is particularly patriotic (the social aspect of the function) and therefore the consumer would prefer a domestic car. Therefore, the reasons for each use are multiple and complex.

Of the three dimensions of use theory proposed by Christensen, the functional dimension is more straightforward, but the social and emotional dimensions are more subjective and vaguer in definition. It is noted that the social aspect is a complex subject of analysis as its definition may vary from person to person and is essentially a perception (Picciano, 2002), Research also suggests that there is no clear and agreed definition of the presentation of social events (Rettie, 2003; Tu, 2002). Other terms that are more frequently used in this field include: 'social dimension', 'psychological or emotional dimension' (Henri ,1992; Guitert et al., 2005; Kreijns et al., 2003; Peraya and Dumont, 2003) emphasize the establishment of relationships within groups as a defining feature of the social dimension.

## B. Reference to the Literature on Financial Sandboxes and Financial Regulation

Why does the government regulate the financial industry more strictly than the technology industry? The main reason is that the financial industry manages public funds and performs the function of financial intermediary, which has a great impact on the rights of consumers or investors, as well as on the development of economic industries. As a result, the financial industry is highly regulated by international regulatory standards worldwide. Fintech innovation often runs up against these normative boundaries and is often unsure of how to proceed. Therefore, the Taiwan Financial Supervisory Commission (FSC) has established a financial sandbox system, following the practices of other countries. For example, as mentioned by Li (2017), the financial authorities wish to promote the development of the Fintech on the one hand, and to maintain financial order and protect the rights of consumers and investors on the other.

The Financial Supervision Sandbox is a common approach adopted by major countries around the world when dealing with the Fintech innovation. Li (2017) mentioned that in order to encourage the development of the Fintech, the UK FCA released the first version of the Financial Supervision Sandbox on 11 May 2015. The main purpose of the Fintech Sandbox is to enable the Fintech innovations to be subject to the necessary scrutiny before they are formally adopted for large-scale commercial use, so as to ensure that any new technological developments enter the financial market without destabilizing the financial system or adequately protecting consumer interests, and to avoid potential risks and hazards. It is therefore clear that the Financial Regulatory Sandbox aims to provide a platform for the Fintech innovators to experiment without being subject to financial regulations for the time being.

As for the approach of Taiwan's financial regulators in dealing with the Fintech innovations, Li (2017) mentioned that Taiwan has set out the legal requirements for the regulation of licensed financial business, which should be observed and followed by both financial and non-financial institutions. In addition, the domestic financial industry is also required to comply with international financial regulations, such as the Basel Agreement. These financial regulations are designed to protect the rights and interests of

consumers and depositors. After all, the financial industry acts as an intermediary and is not the actual owner of the funds. Therefore, in order to avoid the moral hazard of agency problems, financial authorities in various countries will have similar financial regulations and require financial institutions to strictly comply with them.

Peng and Tsang (2019) also mentioned five main supervisory risks arising from Fintech innovations:(1) Systemic risk: the use of technology or algorithms; (2) Financial sector failure risk; (3) Outsourcing risk; (4) Financial consumption risk for micro and small customers; and (5) Supervisory failure and supervisory reputation risk.

Therefore, the five possible risks arising from the Fintech innovations mentioned by Peng and Tsang (2019) may result in the loss of capital or deposits for consumers and investors. Therefore, a balance must be struck between financial regulation and the Fintech innovation for future development, and we must not be biased towards one side or the other. So, should the Fintech innovation be carried out within the framework of financial regulations? Or should we respect the principle of innovation? This has always been an area where techies often find it difficult to adapt when they enter the financial sector.

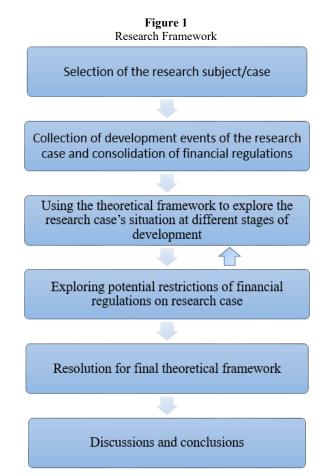
#### III. RESEARCH METHODOLOGY

In terms of information sources, in addition to Christensen's 'the "Theory of Jobs to Be Done", this paper also draws on the work of other scholars on the "Theory of Jobs to Be Done" by Christensen. In addition, in order to collect information on Ant Group, the research also referred to Ant Group's website, collected information from other websites (such as Sina), and read a considerable number of Ant Group's related news and weekly reports (such as Digital Times and Tech Orange) in order to gain a more complete understanding of Ant Group's development process and its characteristics. In terms of financial laws and regulations, in addition to research on the Fintech innovation and regulations (Li, 2017; Peng and Tsang, 2019), we also consulted the Banking Act, the Securities and Exchange Act, the Investment Trust and Investment Banking Act, and the Anti-Money Laundering Act in Taiwan, in the hope of summarizing the relevant regulations in a complete manner. These regulations may conflict with the development of the Fintech innovation. We hope to explore how outstanding the Fintech start-ups can strike a balance between innovation and legal compliance in the future.

This study chose Ant Group as the main subject of the "single case study". The reason for this is similar to that stated by Yung and Hong (2006), who suggested that BenQ Corporation was used as a 'single case study' in their article because Yin (1994) suggested that the reasons for choosing a single case might include that it was a critical case to test a well-established theory; that it was an extreme or unique case; that it was a revelatory case that could reveal particular phenomena; and that it served as an opening for further research (multiple cases in the future). Like Yung and Hung (2006), who used BenQ Corporation as a single case study. Ant Group is the largest financial innovation technology company in China. Although Ant Group will not be listed in Hong Kong and Shanghai in 2020 due to relevant factors, Ant Group's valuation before the 2020 IPO has already surpassed the 2019 IPO price of Saudi Aramco in Saudi Arabia, which shows that Ant Group is a significant player in the world of financial innovation companies.

In the study of social sciences, induction and deduction are two different methods of logical reasoning. The deductive method is to deduce the general principles to specific

matters, while the inductive method is to find general laws or principles through the summary of specific matters. Deductive-oriented research mainly reviews previous theories and gaps, inconsistencies, or deficiencies in order to propose new concepts or propositions to compensate for these deficiencies. Deductive-oriented theoretical construction mainly relies on the logical thinking of scholars, and does not require continuous matching and adaptation between theory and data. Inductive-oriented research believes that because social phenomena are very complex, and human beings do not understand them well enough, theory should be deeply grounded in social reality, and researchers should actively keep close to reality and systematically collect data and analysis data, including the collection and analysis of previous empirical research results (Glaser and Strauss, 1967; Dougherty, 2002; Chen et al, 2019). This study adopts the deductive reasoning approach, and uses Christensen's the "Theory of Jobs to Be Done" to examine the development of Ant Group in the different stages, finally compares the differentiation of financial regulation's restrictions between Ant Group and other financial institutions. The research framework is in the Figure 1.



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#### IV. RESEARCH RESULTS

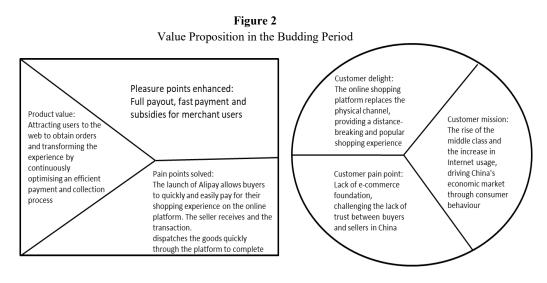
# A. Exploring Ant Group's Development Phases Using "Theory of Jobs to Be Done" is Framework

This study divides the development of Ant Group into three periods: the budding period, the thriving period, and the metamorphosis period. In addition, the study also examines Ant Group's innovation process in these phases by Christensen's "Theory of Jobs to Be Done" to explore Ant Group's innovation process at these stages and to test why a start-up Fintech company can be so successful.

#### 1. Budding Period (2003-2013)

We look at the development process during the budding period (2003-2013), and present the "Theory of Jobs to Be Done" and the value proposition of Ant Financial in Table 1 and Figure 2, and describe it in narrative form.

Table 1       Structural Analysis of the "Theory of Jobs to Be Done" during the Budding Period				
Year	Recorded Event	Functional	Emotional	Social
October, 2003	Taobao.com, a subsidiary of the Alibaba Group, launches 'Alipay'.	A first-of-its-kind guaranteed transaction model	The long wait for buyers, the inconvenience	A Chinese company has
March, 2013	The Alibaba Group announces the start of preparations for the launch of Zhejiang Ant Small and Micro Financial Services Group Co.	was created to solve the trust problem of online transactions and create a traffic portal.	of payment and the inability of sellers to collect and dispatch goods quickly are overcome.	a deeper understanding of the needs of Chinese consumers.



Ant Group was formerly the payment settlement arm of Taobao.com. Tech Orange (2020/07) Alipay pioneered the guaranteed transaction model, thus solving the trust problem of online payment transactions. On the merchant side, Alipay attracted merchants in the form of free fees and even subsidies, quickly capturing the market. Between 2007 and 2009, Alipay's annual transaction volume quintupled from RMB47.6 billion to RMB287.1 billion, accounting for 49.8% of the entire electronic payment market. At this stage, Ant Group is committed to solving the pain points of users and maximizing Alipay's single product. The business model is at the early stage of building the Fintech service portal to gather traffic and scale, with the main focus on earning service handling fees. According to Sina Finance (2020/10), as of June 2020, Alipay had 711 million monthly active users and a total payment transaction scale of RMB118 trillion, which has in effect accumulated a large amount of customer, credit and transaction data.

#### 2. The Thriving Period (2013-2018)

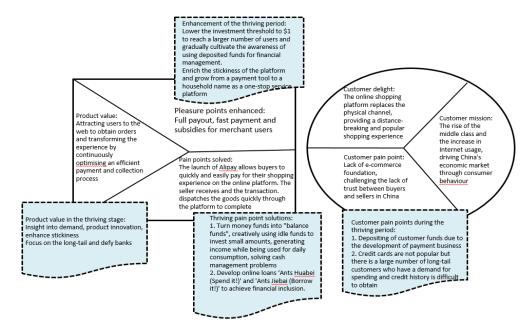
We look at the development process during the thriving period (2013-2018) and present the "Theory of Jobs to Be Done" and the value proposition of Ant Financial in Table 2 and Figure 3, and describe it in narrative form.

Structural Analysis of the "Theory of Jobs to Be Done" during the Thriving Period					
Year	Recorded Event	Functional	Emotional	Social	
June, 2020	Ant Financial changed its name to "Ant Group Co., Ltd." with the approval of the State Administration for Market Regulation (SAMR).				
August, 2020	Ant Financial submits prospectus, announces listing on both the Shanghai Science and Technology Venture Exchange and Hong Kong.	- DASIC Dascu	Group's IPO alone already had Chinese people queuing up in the early hours of the morning to get their hands on the shares. The buzz around the IPO also reinforced the Ant Group's brand value and	The Ant Group is deeply involved in BASIC underlying application technology and has mastered the underlying data of one billion users. With the elevation of "new infrastructure" to a national strategy, the Ant Group has been given a higher strategic significance. The new economy under COVID-19 provides a new momentum of growth for the Ant Group.	
October, 2020	At the second Bund Financial Summit in Shanghai, Jack Ma accused global regulators of being overly risk-averse and criticized the Chinese government's increasingly stringent financial regulations for hindering technology development. The comments are thought to have angered senior Chinese Communist Party officials.				
November, 2020	The Shanghai Stock Exchange issued a decision to suspend the listing of Ant Group Co. on the Shanghai Science and Technology Venture Exchange. The Hong Kong Stock Exchange also issued a statement that night, suspending the listing of the Ant Group's H-shares.				

Table 2



Value Proposition in the Thriving Period. Insight, Product Innovation, Good Life with Alipay



#### a. Wealth Management

Alipay launched the Balance Treasure Fund in partnership with Tianhong Asset Management Co. The growth of the payments business has led to the deposition of customers' funds, creating a demand for cash management. Ant Group has capitalized on this demand by turning its money fund into a 'Balance Treasure Fund', which makes use of idle funds to invest small amounts, generating income while also combining consumer and financial needs. The number of users has grown from 4.33 million at the end of 2013 to over 600 million in 2018. The number of users has grown from 4.33 million at the end of 2013 to over 600 million in 2018, and the scale of funds has exceeded RMB 1.2 trillion. Its capital is larger than that of banks. When Ant Financial is in the late budding period to the thriving period, Sina Finance (2020/10) points out that it is committed to Inclusive Financing. Leveraging on the huge Alibaba e-commerce ecosystem and early traffic accumulation to build the three engines of Fintech:

#### b. Credit

In 2014, "Ant Financial" was established. Around "financial services", Ant Group's Internet lending includes B to B and C to C models. In 2015, it set up an online business bank to engage in self-operated lending. This is backed by the use of big data and artificial intelligence to help SMEs build their credit systems, thus giving birth to Sesame Credit. Inclusive Financing has long been underdeveloped in China. However, due to the difficulty in obtaining WeChat records of customers and the high cost and low coverage of credit by traditional banks, Ant Group has been able to tap into this business pain point by focusing on Inclusive Financing. "Huabei" (Spend it!) users are often young

people with unmet consumer needs due to lack of credit cards or low credit limits, thus competing with the traditional finance industry. Throughout this period, Ant Financial has penetrated into the traditional financial sector, acquiring eight types of licenses, including banking, insurance, insurance brokerage, public offering, fund sales, private equity, factoring and microfinance. The main revenue was not only the handling fee for the direct marketing platform provided to Tianhong Asset Management Co. As at the end of June 2020, Ant Group had a consumer credit balance of RMB 1,732 billion and a micro and small business credit balance of RMB 421.7 billion, totaling RMB 213.56 billion, serving approximately 500 million users and over 20 million micro and small business operators.

In the thriving period, Ant Group not only eliminates the pain points of client consumption and does not only make P2P platforms (e.g. Paypal), but also focuses on user experience, creating a perfect client landscape and resource sharing and cross-operating business. Ant Group reinforces the functional, emotional and social needs of the "Theory of Jobs to Be Done". The value proposition of this phase is shown in Figure 3.

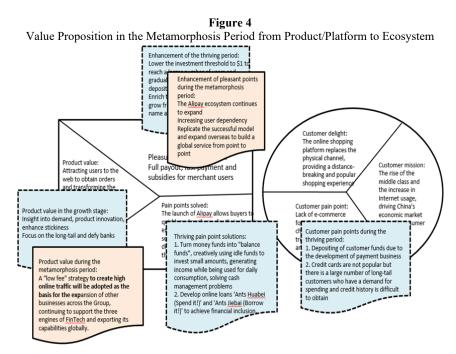
#### 3. The Metamorphosis Period (2018-2020)

We look at the development process during the metamorphosis period (2018-2020) and present the "Theory of Jobs to Be Done" and the value proposition of Ant Financial in Table 3, and describe it in narrative form.

Structural Analysis of the "Theory of Jobs to Be Done" during Metamorphosis Period					
Year	Recorded Event	Functional	Emotional	Social	
June, 2020	Ant Financial changed its name to "Ant Group Co., Ltd." with the approval of the State Administration for Market Regulation (SAMR).		The rumor of the Group's IPO alone	The Ant Group is deeply involved in BASIC underlying	
August, 2020	Ant Financial submits prospectus, announces listing on both the Shanghai Science and Technology Venture Exchange and Hong Kong. At the second Bund Financial Summit in	(payments, digital finance and technology services) to replicate the financial ecosystem oversees with its	alre Group is alre chine and Hong Kong. exporting its three are and Hong Kong.	already had Chinese people queuing up in the	application technology and has mastered the underlying data of
October, 2020	At the second Bund Financial Summit in Shanghai, Jack Ma accused global regulators of being overly risk-averse and criticized the Chinese government's increasingly stringent financial regulations for hindering technology development. The comments are thought to have angered senior Chinese Communist Party officials.		their hands on the shares. The buzz around the IPO also reinforced the Ant Group's brand value and	one billion users. With the elevation of "new infrastructure" to a national strategy, the Ant Group has been given a higher strategic significance.	
November 2020	The Shanghai Stock Exchange issued a decision to suspend the listing of Ant Group Co. on the Shanghai Science and Technology Venture Exchange. The Hong Kong Stock Exchange also issued a statement that night, suspending the listing of the Ant Group's H-shares.		gave international users more confidence in the services it provides.	The new economy under COVID-19 provides a new momentum of growth for the Ant Group.	

Table 3

Ant Group in the metamorphosis period is looking to de-financialize and focus on technology. According to Sina Finance (2020/10), financial regulation became tighter after 2017, and some of Ant Group's products began to be regulated due to the impact of P2P mines. Since then, Ant Group has announced its strategic transformation from Fintech to TechFin, proposing a strategic development direction with BASIC technology at its core. In July 2020, Ant Financial changed its name to 'Ant Group', announcing its strategic shift to the technology sector, with the aim of demonstrating its 'determination to de-financialize'. As reported in Digital Times (2020/07), Ant Group's biggest difference from the past is that it has shifted from providing services in the financial sector to emphasizing technology and digital lifestyle services. At this stage, Ant Group is also actively promoting its listing in both Shanghai and Hong Kong in an attempt to expand from a platform that solves consumer pains to a new international financial ecosystem. Christensen's "Theory of Jobs to Be Done" framework has been used to explore Ant Group's innovation process, which can be regarded as a global Fintech model. The value proposition of this phase is shown in Figure 4.



#### **B.** Financial Regulations and Restrictions

This paper uses Christensen's 'the "Theory of Jobs to Be Done" functional, emotional, and social dimensions to examine Ant Group's experiences in the budding period, the thriving period, and the metamorphosis period. Ant Group's innovation and development of the Fintech during the budding period, the thriving period, and the metamorphosis period had an impact on the business success of the company. From the study, it was found that these three dimensions could explain Ant Group's significant success during these phases. But it is curious why such a successful company could not go public like

the US start-up Tesla? Why was Ant Group's approval to list in Hong Kong and Shanghai suddenly and temporarily terminated by the financial authorities in China and Hong Kong just before the IPO?

As mentioned by Li (2017) in his article "the Fintech Development and Regulation", financial regulators in Europe, the US and Taiwan want these innovative applications to be tested in the sandbox first, and only after confirming that these innovative technologies can ensure the safety of the public's financial assets and comply with financial regulations, can they be applied to actual financial business. Peng and Zang (2019) also mentioned that there are five main regulatory risks arising from Fintech innovations. When Ant Group's business is examined in this way, the study found that Ant Group's business is exposed to the above risks, as shown in Table 4.

Table 4					
Conflicts between Ant Group's Businesses and Financial Regulations					
Businesses of Ant Group	Supervision Risk	Regulatory Compliance			
Alipay	Outsourcing Risk	N/A			
Balance Treasure Fund	Systemic Risk, Supervisory Failure Risk	The Money Laundering Prevention Act. The Fund shall not guarantee the preservation of capital or the making of profits.			
"Huabei" (Spend it!),	Risk of bankruptcy,				
"Jiebai" (Borrow it!),	financial consumption	Basel Accord: capital adequacy			
Zhejiang E-Commerce	risk of small and micro	requirements.			
Bank Co. (MYBank)	customers				

Table 4

Many of Ant Group's innovative applications of the Fintech technology do conflict with financial regulations. For example, Balance Treasure Fund uses the Tianhong Fund as a depository (similar to a deposit account) for the funds of both buyers and sellers on the Alibaba platform. According to the law, the fund cannot provide investors with the promise of capital and interest protection, as fund investment is inherently risky.

However, Balance Treasure Fund offers investors a deposit-like account with a high level of liquidity, high yield and capital protection. It is questionable whether such a promise can still ensure the safety of investors' capital in times of high market volatility. The number of Balance Treasure Fund subscribers has grown from 4.33 million at the end of 2013 to over 600 million in 2018. With a fund size of over RMB 1.2 trillion, the fund is even larger than banks, and users are not subject to the anti-money laundering law that requires banks to identify users to open accounts, so there is a real risk of systemic and monitoring failure. In addition, Ant Group's other financial instruments "Huabei" (Spend it!) and "Jiebai" (Borrow it!) were initially financed by bank loans, but Ant Group cleverly packaged the loans from "Huabei" (Spend it!) and "Jiebai" (Borrow it!) into ABS (financial asset securitization) and sold the ABS to the financial industry or other investors, thereby cashing out and re-investing the proceeds from the sale of the ABS into the Huabei (Spend it!) and Jiebai (Borrow it!) lending business and are not subject to the Basel requirements. Therefore, banks are required to have a certain percentage of capital to counteract risky lending, so that they do not over-leverage their lending for profit. In contrast, Ant Group's "Huabei" (Spend it!), "Jiebai" (Borrow it!) and Zhejiang E-Commerce Bank Co., Ltd. (or MYBank), which boast the Fintech sector, are not

subject to the Basel Accord II. As of the end of June 2020, Ant Group had a consumer credit balance of RMB 1,732 billion and a micro and small business credit balance of RMB 421.7 billion, making a total of RMB 213.56 billion, which is the size of a large bank. However, in the face of the 2017 P2P crisis in China, although the financial authorities in China are becoming more stringent in their management of Ant Group's loans, such a large amount of borrowing and a relatively small amount of capital would expose Ant Group to the risk of over-leveraging.

The financial industry manages public funds and performs the function of financial intermediary, which has a great impact on the rights of consumers or investors, as well as on the development of economic industries. As a result, the financial industry is highly regulated by international regulatory standards worldwide. Although Mr. Jack Ma has been hoping to de-financialize Ant Group during the metamorphosis period (2018-2020), hoping to transform Ant Group from a Fintech company to a TechFin company. However, Ant Group's businesses such as Balance Treasure Fund, lending business, fund business, and insurance business are unable to break away from being a financial holding company.

#### V. CONCLUSION

This study concludes with a summary of findings, theoretical contributions, practical management implications and recommendations for future research.

This study found that the Alipay service launched by Ant Group during the budding period was the right solution to the financial flow pains of Alibaba's online business buyers and sellers (functional side). As a result, secured transactions were created to address the trust issue (emotional side) of online payment transactions. As China is a vast country and financial services are not widely available, Alipay was created to meet the needs of both buyers and sellers of online e-commerce (social aspect). The "Theory of Jobs to Be Done" framework was used to examine the budding period, and it is indeed a testament to why Ant Group was so successful at this stage. During the thriving period, Ant Group launched the Balance Treasure Fund, which provided interest on the balance (the functional side), plus the fact that buyers and sellers no longer needed to go through a third intermediary (a bank) to provide financial flow services (the social side). Taobao.com's accumulated customer data was used to set up Sesame Credit, which provided a database for the later "Huabei" (Spend it!) and "Jiebai" (Borrow it!) personal lending businesses, creating a complete Inclusive financing service (emotional side). The "Theory of Jobs to Be Done" framework was used to examine the thriving period, which indeed demonstrates why Ant Group was so successful in this phase. In the metamorphosis period, Ant Group is actively moving towards internationalization, exporting its three business segments (payments, digital finance and technology services) with BASIC's basic technology capabilities, replicating the financial ecosystem (functional side) overseas. In 2020, Ant Group is actively promoting the listing of the company. The pre-IPO valuation has already surpassed that of Saudi Aramco's IPO in 2019 (sentiment side). With the "New Infrastructure" being elevated to a national strategy in China, Ant Group has been given a higher strategic significance (social aspect). Using the "Theory of Jobs to Be Done" framework to examine the metamorphosis period, it is indeed possible to demonstrate why Ant Group was so successful at this stage. However, as previously questioned in this study, a discussion of Ant Group's innovative services from the "Theory of Jobs to Be Done" framework demonstrates that the innovative the

Fintech services offered by Ant Group during the three phases of its development are indeed in line with Ant Group has been very successful in providing innovative the Fintech services that meet the needs of the consumer (jobs). However, the main reason why Ant Group's business model has no analogues in Western countries is due to the difference in legal compliance. The main reason why Ant Group's business model (Alipay (money flow service), Balance Treasure Fund (deposit service), "Huabei" (Spend it!), "Jiebai" (Borrow it!), Zhejiang E-Commerce Bank Co. MYBank (lending services) is not similar in Western countries is the difference in legal compliance. Because Ant Group's business model is similar to that of a financial holding company, and because financial holding companies are intermediaries, there are strict legal requirements for financial institutions in all countries. For example, funds cannot guarantee principal or investment returns, banks are required to comply with the Basel Capital Adequacy Ratio, and anti-money laundering laws require identification of the ultimate beneficiary of an account. However, Ant Group has always argued that it is a provider of the Fintech service and not a financier and does not need to comply with the restrictions of financial regulations. For personal lending, even though "Huabei" (Spend it!) and "Jiebai" (Borrow it!) have a lending balance of \$213.56 billion, they do not need to comply with the Basel Capital Adequacy Ratio (CAR) requirement to provide a guarantee for their relative capital amounts. Even though Ant Group has been de-financialized during the metamorphosis period, the financial regulator in China still has questions about the operational risks of Ant Group. Therefore, this study found that innovation sometimes conflicts with legal requirements.

The more the industry or commodity in question involves the allocation of social resources, the more stringent the legal requirements are, and the more serious the conflict between innovation and legal requirements. Therefore, in this type of industry or commodity, legal regulations should also be considered when innovating goods or services.

The theoretical contribution of this study is the finding that Christensen's "Theory of Jobs to Be Done" framework focuses on the analysis of whether the innovation of a good or service can satisfy the consumer's use. Thus, the theoretical framework focuses on the need for a good or service to satisfy emotional and social needs in addition to functional factors. However, this study found that in addition to the three components of the 'Theory of Jobs to Be Done', the more the innovative good or service is involved in the allocation of social resources, the more regulatory factors will also have a significant impact on the success of the good or service innovation. Christensen's book the "Theory of Jobs to Be Done" explores the success of milkshakes and babysitting as goods or services.

However, such goods or services are less involved in the allocation of social resources, so innovation does not have much of a legal impact on the success of the goods or services.

The financial industry or banking industry is managing public funds and performing financial intermediation functions, which have a significant impact on the rights of consumers or investors, as well as on the development of economic industries, and therefore the allocation of social resources is the most involved. Therefore, although Ant Group has been very innovative and successful in the budding period, the thriving period and the metamorphosis period, its business development has always been centered on the financial industry, but it has not complied with the corresponding laws and regulations in accordance with the financial regulations. As a result, the Chinese financial regulator rejected Ant Group's application for listing in Hong Kong and Shanghai at the last minute. In summary, in addition to the functional, emotional and social aspects of Christensen's 'Theory of Jobs to Be Done', the more social resources are involved in the allocation of goods or services, the more important the regulatory aspects are to the success of innovation.

In terms of management practice implications, this study suggests that when engaging in the Fintech innovation, companies can follow Christensen's "Theory of Jobs to Be Done" framework of functional, emotional and social dimensions to examine the future direction of business innovation. As Christensen mentioned in "the "Theory of Jobs to Be Done", "innovation should not touch luck"; however, it is more important to consider the financial regulations. According to Li (2017) innovative goods or services should first be allowed to experiment in the financial sandbox, so as not to spend a lot of time and resources on innovative Fintech research and development, only to fail in the end when it fails to pass government approval.

Finally, the limitations of this study are twofold. Firstly, although this study has collected a lot of information on financial regulations and Ant Group in order to ensure the accuracy of the data, and the data has been interpreted according to the actual regulations as far as possible, without involving political issues, this may be biased in the conclusion of Ant Group's development; secondly, the case chosen is a Chinese company, but the regulations are based on the universal values of Taiwan and Western countries' laws, so it cannot fully explain the legal impact that Chinese companies may face when engaging in Fintech innovation. In terms of recommendations for future research, the impact of the law on innovation could be further explored, and the possible impact of the legal aspects of innovation in business could be further tested by using the 'social resource allocation dimension' as a disruptive and mediating variable.

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