

FinTech Innovations and Financial Market Disruptions



ARPIT



ज्ञान-विज्ञान विमुक्तये

**UNIT 3
Module
3.1**



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Scope of Module 3.1

- Technologies of fourth industrial revolution
- Supply side and demand side drive for fintech innovation
- Aims of fintech innovations
- Survival of traditional financial institutions
- Growing influence of fintech
- Sources of fintech disruptions
- Emerging fintech business models
- Business risks of traditional financial institutions
- Survival strategies of traditional financial institutions
- Future of fintech, and
- Mobile payment services

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UNIT 3
Module 3.1

Introduction

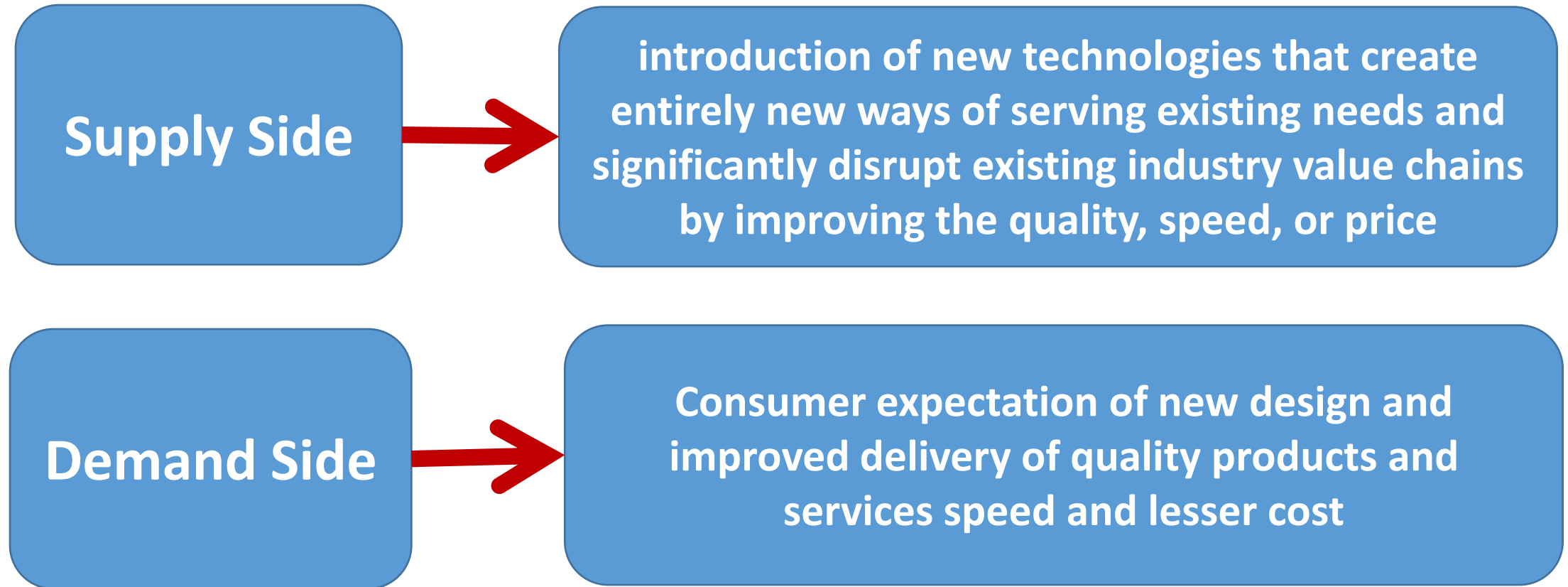
- **Technological revolution is fundamentally altering the way everyone lives, works and relates to each other.**
- **It will be possible to observe the complete disruption of many industries and their business models in the coming future.**
- **The fourth industrial revolution we experience is considered as a new era rather than a continuation of the third one.**
- **In its scale, scope, and complexity, the transformation will be unlike anything humankind or business has ever experienced before.**
- **The explosiveness of its development and the disruptiveness of its technologies are brilliant.**
- **The disruptive technologies and trends of the fourth industrial revolution is such as the Internet of Things (IoT), robotics, virtual reality (VR) and Blockchain and artificial intelligence (AI) are changing the way we live and work.**

Fourth Industrial Revolution

Fourth Industrial Revolution Technologies

- Internet of Things (IoT)
- Robotics
- Virtual Reality (VR)
- Blockchain
- Artificial Intelligence (AI)

Technology Revolution Drivers



Financial Service Industry and Technology

- **The financial industry has always been an early adopter of new technology.**
- **The first Automatic Teller Machine (ATM) was installed in 1967**
- **Now, financial services industry leverages Fintech innovations to serve, grow and sustain in this dynamic environment.**
- **No doubt, financial services, including banking services, are driven by technological and digital innovations.**
- **Now large number of financial entities and technology firms are experimenting with related technological and financial solutions as well as new products in the financial services field.**

Fintech Challenges, Opportunities and Risks

- **Posing challenges to existing business models and strategies of financial institutions.**
- **Also bringing opportunities for both the existing market participants and newcomers.**
- **At the same time, innovation can create new risks for individual financial institutions, consumers of financial services, as well as the financial system as a whole.**

A relevant thought?.....

“banking is necessary, banks are not”

The visionary statement made by Bill Gates in 1994

Fintech means.....



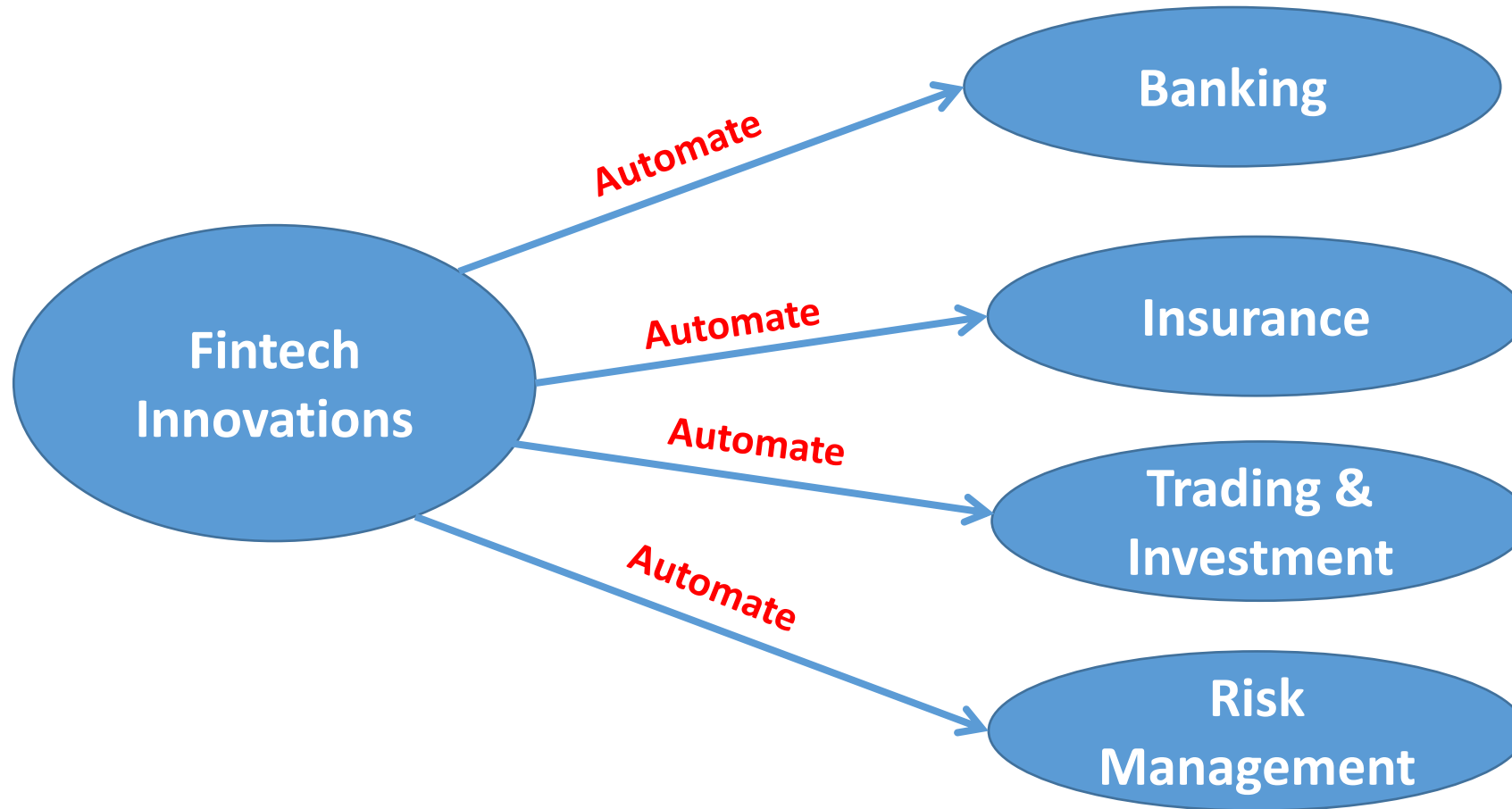
Financial Technology

What is FinTech?

- New applications,
- processes,
- products, or
- business models in the financial services industry via the Internet.
- **Financial technology** companies consist of both startups and established financial institutions and technology companies trying to **replace or enhance the usage of financial services** provided by existing financial companies.



Fintech is to



What are Fintechs doing?

- FinTech startups are bringing innovative financial products, services and process to enhance customer experiences
- The above will take on and beat traditional financial services and institutions. Here is the disruptive element.
- Mainstream financial institutions are focusing on extending financial services with their available technology
- The Fintech are innovating to extend the same or better or differentiated services with more customer experience, lesser cost and speed.

Customer experience through Fintech....

- **The customer experiences provided by fintechs are amazing.**
- **The fintech digital experiences offered by companies such as Google, Amazon, Facebook and Apple have fundamentally changed customer choices and preferences.**
- **They expect the same level of ‘customer experience’ from their traditional financial services providers.**
- **This is the kind of disruptiveness the fintechs are primarily bringing.**
- **This is the context where the pursuit of customer centricity has become a main priority.**

How do traditional FIs survive?

- **The mainstream Financial Institutions providing financial services are rapidly embracing the disruptive nature of FinTech.**
- **They are building partnerships with fintechs to sharpen operational efficiency and respond to customer demands for more innovative services.**
- **This new partnering approach offers alternative strategies for both new entrants and startups but it also carries with it a new set of risks.**
- **This partnership is needed as FinTech startups not only need capital but also they need customers.**

Growing influence of Fintechs...

- **The PwC Global Fintech Report 2017 details the growing influence of Fintech in the financial services industry and the emerging business models.**
- **This report assessed the continued rise of new business models and emerging technologies in the Financial Services sector.**
- **The assessment was based on a global survey of 1,308 financial services and FinTech executives.**
- **The survey results are indicators of the disruptive nature of fintech innovations.**

Sources FinTech Disruptions

● E-retailers are likely to be disruptive by using their large data sets to provide consumer-focused products and services

E-retailers
43%

● ICT and large tech companies are also seen as potentially large disruptors to the FS sector, as they are able to innovate at a far faster pace than incumbents

ICT and large tech companies
50%

● Traditional Financial Institutions need to be the most concerned as they are not seen as a disruptive force, but they are best able to leverage FinTech innovation

Traditional Financial Institutions
28%

Financial infrastructure companies
41%

Social media/ Internet platforms
55%

● Social media/Internet platforms are further entrenching their place as disruptors by leveraging their large client reach to provide new channels for customer service and business models

● Financial infrastructure companies should be concerned as more Financial Institutions turn to FinTech infrastructure providers, but they may be seen as enablers of innovation

Startups
75%

● Startups are seen as the main disruptors, but many have shifted to B2B models and providing platforms for Financial Institutions

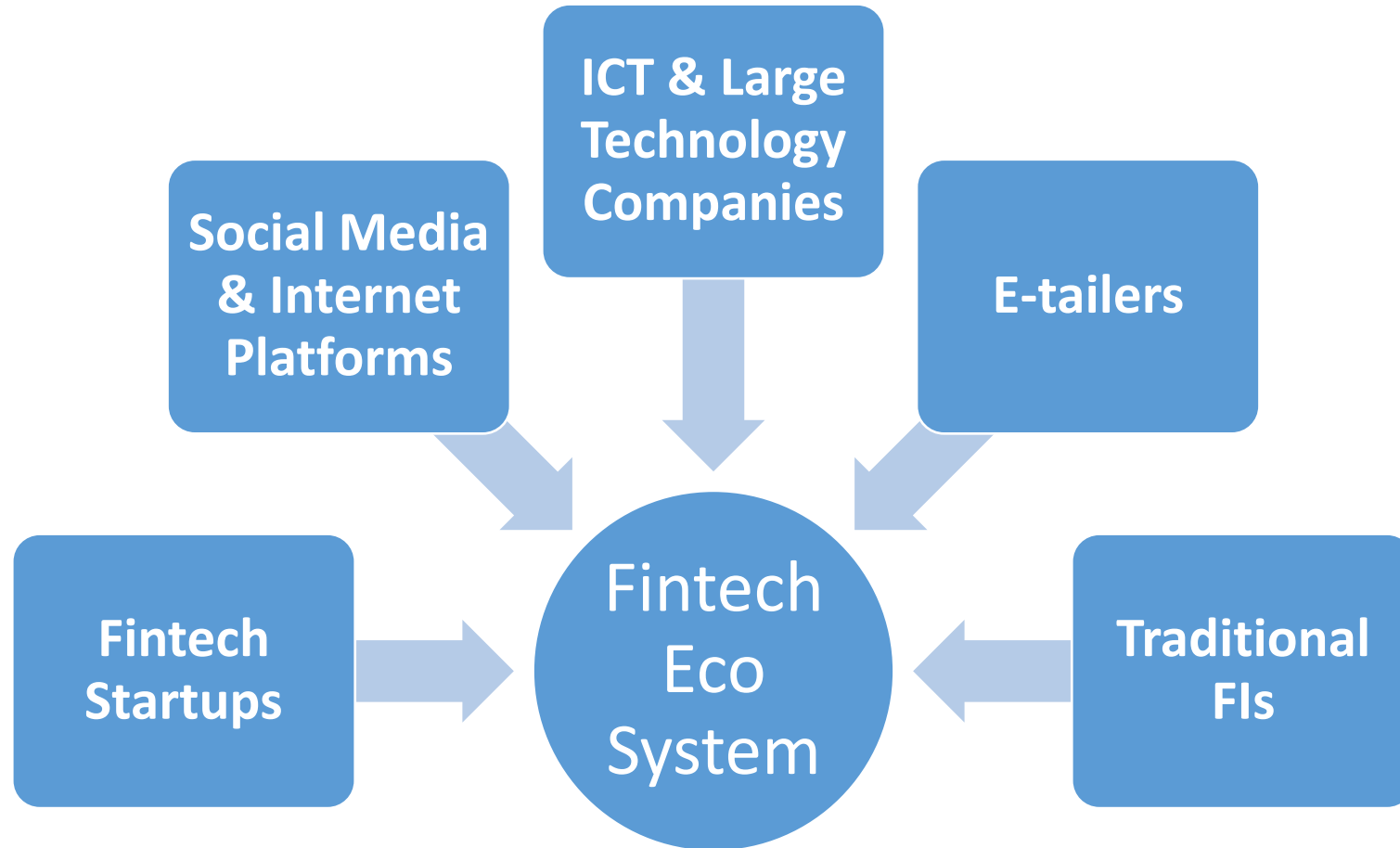
Emerging Fintech Business Models

- Startups are going to be the main disruptors, but many have shifted to B2B models and providing platforms for traditional Financial Institutions. This is an example of emerging business model in the financial services industry.
- Next to Startups, the Social media/Internet platforms are further entrenching their place as disruptors by leveraging their large client reach to provide new channels for customer service and business models. The very recent example is the instruction of a new crypto currency named LIBRA by the social networking platform Facebook.
- Then, ICT and large tech companies are also seen as potentially large disruptors to the financial services sector, as they are able to innovate at a far faster pace than the traditional institutions.

Emerging Fintech Business Models

- E-retailers are likely to be disruptive by using their large data sets to provide consumer-focused products and services.
- Financial infrastructure companies should be considered as 'Financial Institutions turned FinTech infrastructure providers', as they enabling innovation.
- The many-sided disruption sources are posing significant threats to the traditional financial services industry.
- However, the Traditional Financial Institutions need to be the most concerned as they are not seen as a disruptive force, but they are best able to leverage FinTech innovation.

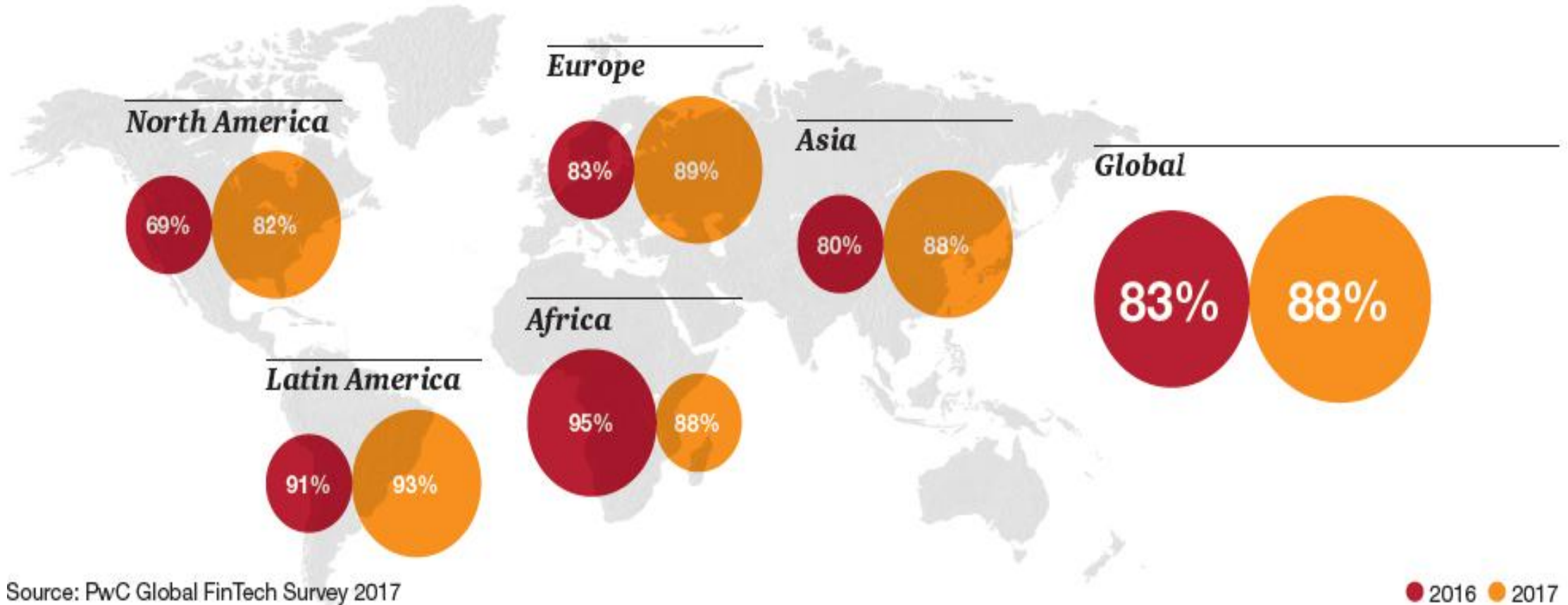
Fintech Eco System



What about the magnitude of disruption by Fintech?

- Starting with payments, fund transfer and personal finance the traditional financial institutions fear disruptive threats on multiple services.
- The vast majority (88%) of the participants in the PwC survey opined that part of their business is at risk to standalone FinTech companies as the Fintech has grown to an estimated 24% revenues of the sector.
- This fear is global - common and deep in almost all continents and it is also on the rise.

Business risk of Traditional FIs...



Source: PwC Global FinTech Survey 2017

● 2016 ● 2017

Strategies for Traditional FIs.....

- More and more consumers are adopting nontraditional Financial Services providers.
- Now we experience that traditional FIs are becoming self-disruptors.
- They are disrupting their own existing services and processes by partnering with Fintech startups and financial technology companies.
- They are responding to innovations with multiple strategies to empower their customers on a daily basis.
- Customer retention is now a challenge in the context of new “FinTech competition”.
- So these Financial Institutions have to focus first on developing intuitive product design, ease of use, and 24/7 accessibility. That is the suggestive survival strategy.

What about the future of Fintech?

- **Traditional financial service providers are becoming disrupters.**
- **They along with the existing fintech startups and the new entrants would transform the financial services sector. This is quite evident now.**
- **The Banking industry has already turned to blockchain technology in a big way as the world is changing and redefining the nature of currency.**
- **Modern customers need more reasons to switch to new market offers.**
- **This has brought in a competition among fintech companies.**
- **Hence, fintech providers have to hunt for new and robust solutions which will help them stand out and offer more viable business models.**

What about the future of Fintech?

- Some of the Fintech companies are addressing
 - blockchain technology,
 - AI, or
 - leverage cryptocurrency to build next-generation decentralized lending and borrowing platforms.
- While others actively utilize mobile banking and robo advisors to meet the demands of the always "on-the-go" millennials or accept payments via web applications to eliminate the need for traditional merchant accounts.

What do you think about World FinTech?

- **Private and institutional investors invested more than 50 billion dollars into the sector between 2010 and 2015.**
- **10,000 plus companies operate all over the world**

What do you think about FinTech in India?

- **Indian FinTech industry grew 282% between 2013 and 2014, and reached USD 450 million in 2015.**
- **At present around 400 FinTech companies are operating in India and their investments are expected to grow by 170% by 2020.**
- **The Indian FinTech software market is forecasted to touch USD 2.4 billion by 2020 from a current USD 1.2 billion, as per NASSCOM.**
- **The transaction value for the Indian FinTech sector is estimated to be approximately USD 33 billion in 2016 and is forecasted to reach USD 73 billion¹² in 2020.**

Popular Fintech Innovations

- **Mobile and Web based payments**
- **Digital/Crypto currencies**
- **Blockchain technology**
- **Peer-to Peer (P2P) lending**
- **crowd funding**
- **smart contracts**
- **E-aggregation**
- **cloud computing**
- **Big data**
- **AI and Robotics**
- **Robo Advice**
- **E-trading**

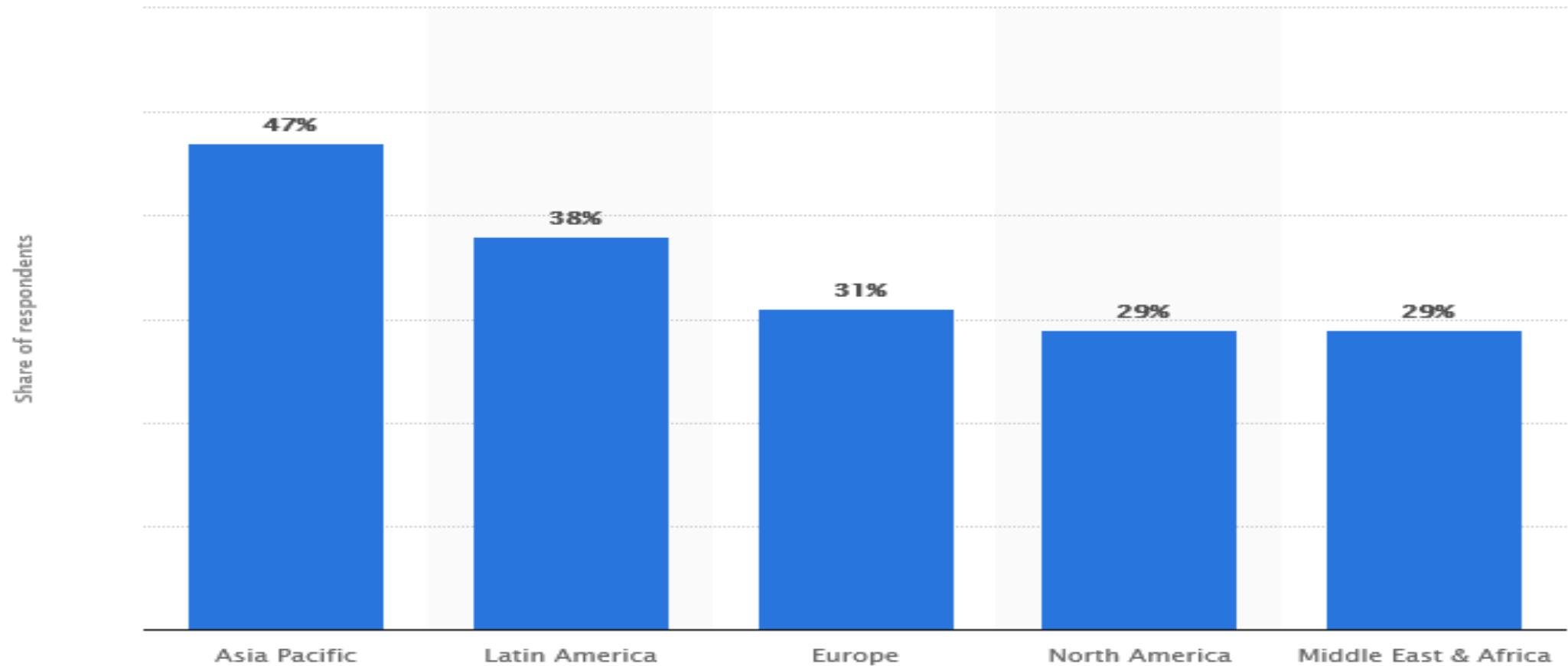
1. Mobile & Web based Payments

- **One of the most popular and widely applied Fintech innovation**
- **It has all the way transformed the traditional banking payment system**
- **Mobile payments and Web based payments have really contributed to the growth of E commerce.**
- **Examples include**
 - **BHIM App**
 - **Apple Pay, Samsung Pay, Android Pay, Paytm, Paypal**

Features of MPSs

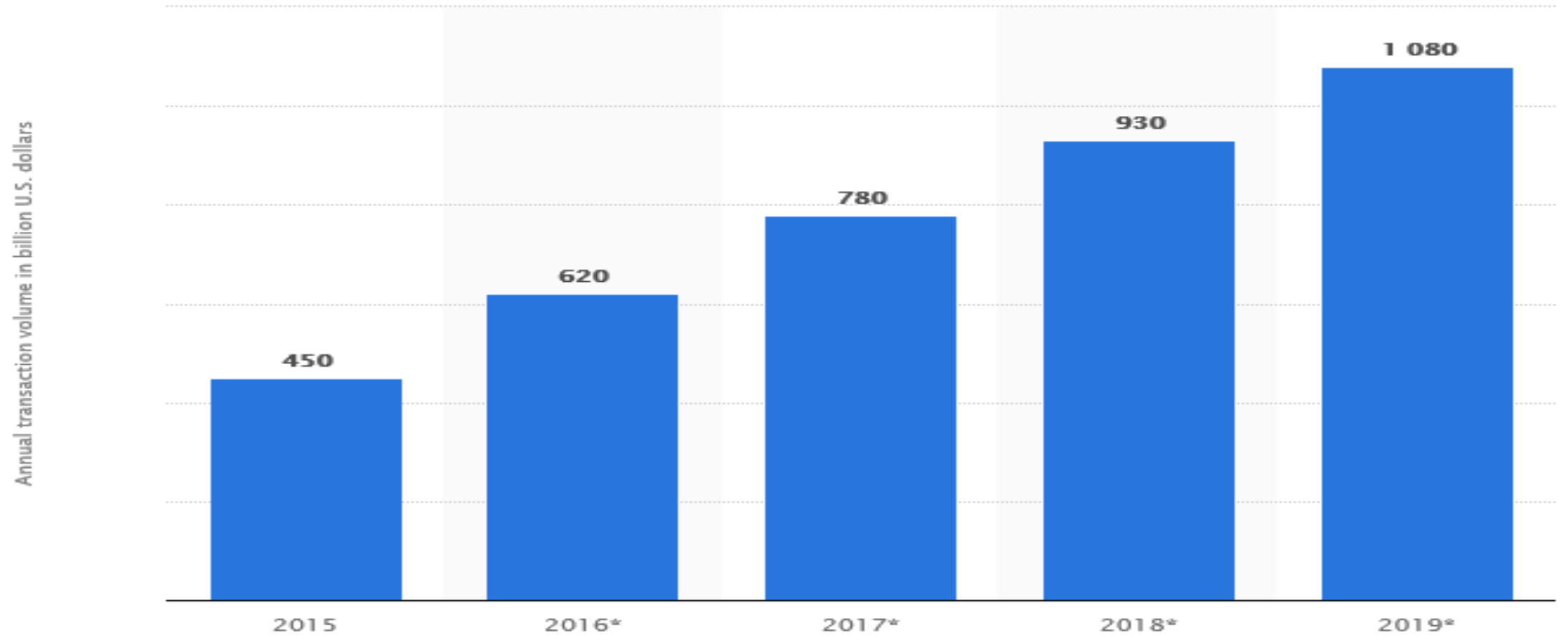
- **24/7 transaction monitoring,**
- **fraud protection**
- **secure encryption technology and**
- **cost effectiveness.**

Internet users worldwide who used a mobile payment services (2018)



<https://www.statista.com/statistics/820853/used-a-mobile-payment-service-in-the-last-month-region/>

Revenue from MPSs - Global



M-commerce

- **Thus, the spread of mobile devices like smartphones and tablets has lead to the strong growth of the business model - mobile commerce or M-commerce.**
- **Aside from physical goods, other strong drivers of mobile consumer spending are digital content such as mobile apps, mobile games or event tickets.**
- **Coming to the revenue part, the global mobile payment revenue in 2015 was 450 billion U.S. dollars and is expected to surpass 1 trillion U.S. dollars in 2019.**

