Cleared for takeoff

Five megatrends that will change financial services

Deloitte.

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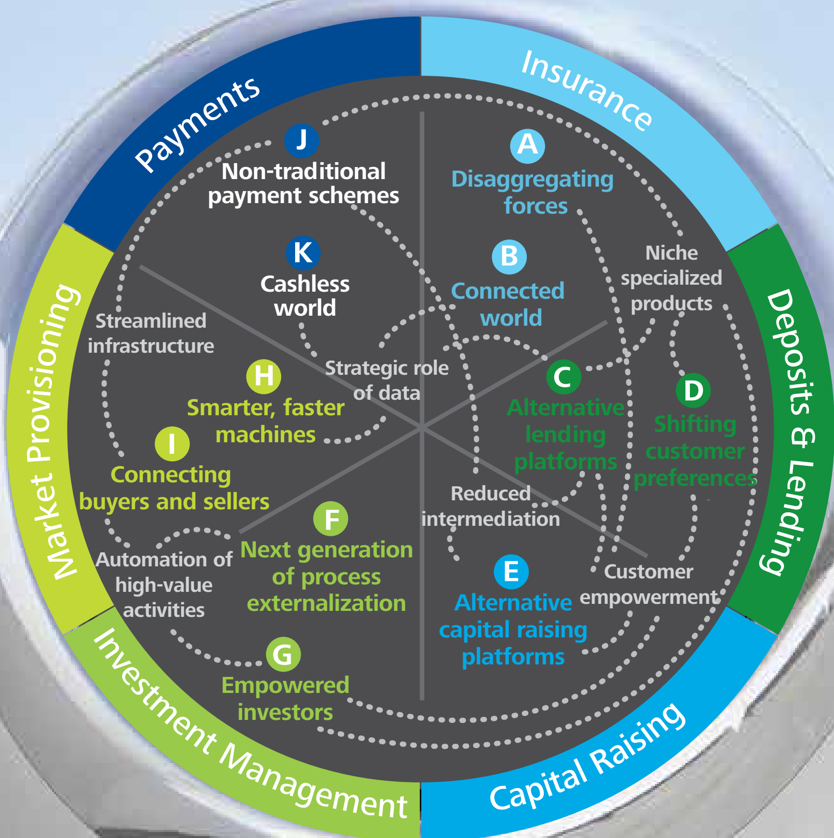

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*The information contained in this report is taken from the World Economic Forum Report, *"The Future of Financial Services: How disruptive innovations are reshaping the way financial services are structured, provisioned and consumed"*, in collaboration with Deloitte Touche Tohmatsu Limited.

Dear Colleagues,

To see the future of financial services, it might help to look at the past. Back in 1967, when Barclays installed an ATM in what was literally a hole in the wall, people recognized it for the innovation it was[1]. Still, ATMs weren't widely used until the early 1980s, when magnetic stripe cards became cheap enough for banks to distribute. Once that happened, customers piled in and the disruption was complete.

Deloitte Consulting LLP (Deloitte) recently joined with the World Economic Forum to conduct **a large study about the future of financial services**. Our purpose was to understand how disruptive innovations were reshaping the business of financial services as it exists today. The research, which forms the basis of this report, included significant consultation with established institutions, financial services startups, academic scholars and industry observers.

> I am dying to fund a disruptive bank.
>
> Marc Andreessen, General Partner, Andreessen Horowitz

What we discovered was that innovation is occurring in clusters. These clusters at first seemed pretty isolated, but then we noticed some commonalities. For one thing, the most visible innovations are platform-based, data intensive and capital light. They also cross competitive lines. For instance, incumbent institutions are supporting new entrants with infrastructure and access to services. In turn, innovative service providers are providing small and mid-sized institutions with sophisticated new capabilities.

Any one of the innovation clusters has major implications, not just for incumbents and their customers, but for the overall financial services ecosystem as well. Benefits of scale will erode. The universal banking model will become unbundled. New sources of capital will appear. The disruption will be felt first in banking, but hardest in insurance: The old ways of measuring customer risk won't work anymore.

In this article, we look at how clusters of innovation are affecting business in primary accounts, payments, capital markets, investment management and insurance. Then, taking what we know now and assuming certain conditions, we examine different ways those innovations could play out.

You won't learn where to place your bets, necessarily. But you might learn where to start your due diligence. Because if there's a transcendent insight to emerge from this study, it's that in financial services, disruption isn't a single event. Innovation is deliberate and predictable. And when you view disruptive innovation this way – as a collection of seemingly disparate events that someday come together to create a *before* and an *after* – it opens lines of sight into a number of alternative futures.

Sincerely,

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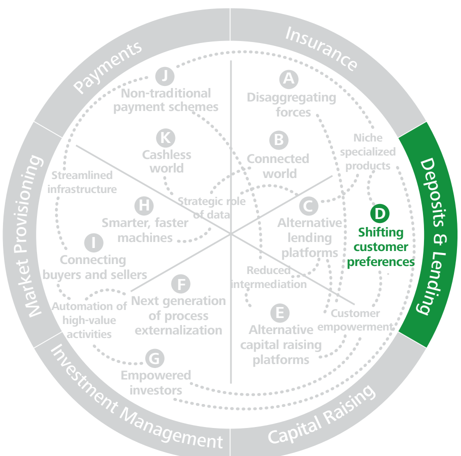
[1] "Enfield's Cash Gift to the World," BBC.co.uk, June 27, 2007.



Primary Accounts

Changing customer preferences

Customer preferences are changing thanks to advances in the digital economy. As a result, primary account providers will change as well.

Direct banks – ones with no brick-and-mortar branches, only ATMs – are one example of what the future will look like. The banks themselves aren't new. Most were set up years ago as subsidiaries of larger, traditional financial institutions to serve their more price-sensitive customers. These banks promised reduced fees and attractive interest rates in exchange for the willingness to conduct transactions strictly by phone or online. But today, thanks to improved technology, they can compete on more than just price.

Mobile banking is another example. Like many other businesses, financial institutions scrambled to respond to the rapid adoption of mobile devices by adding mobile sites to enable basic transactions. But these early solutions were quickly superseded by fully-functional mobile applications. The advantage then shifted to non-traditional players who offered mobile users conveniences such as peer-to-peer money transfer, photo bill payment and voice recognition.

But the playing field may soon level itself. "Banking as a platform" aims to standardize application programming interfaces (APIs) across financial institutions, allowing developers to easily build and integrate customer-facing enhancements into providers' core offerings. This will boost not just new entrants, but also traditional players who until now have struggled between the resource demands of legacy

The future banking experience

✓ **Fully virtual.** Virtual channels will evolve beyond basic transactions to provide broader functionality such as onboarding and servicing.

✓ **Customer driven.** As customers become more tech savvy, they'll wield greater influence on the value propositions and customer experiences that financial institutions bring.

✓ **Seamless.** Banks will need to cater to heightened expectations of customers who are accustomed to the seamless customer experiences offered by technology providers.

✓ **Customized.** Service offerings will evolve to target and meet the needs of each segment or community, moving away from a one-size-fits-all mass market approach.

✓ **Externalized.** Financial institutions will rely more on external providers to deliver online and mobile solutions in a timely manner.

systems and the high cost of building custom solutions.

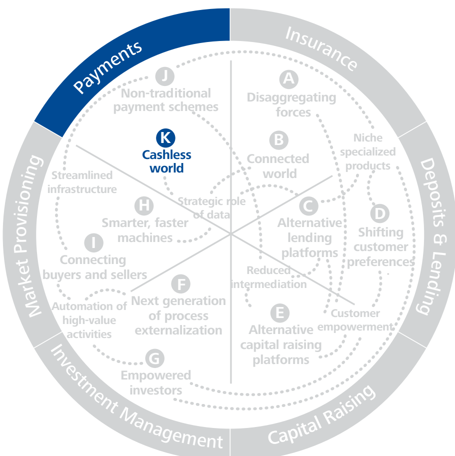
The upshot of all this? It's likely that alternative providers will rise to assume ownership of the customer relationship. They'll join networks of other, niche providers to compete head-on with traditional providers. And, with virtual channels leading to greater interaction, both traditional and alternative financial institutions will become more embedded in customers' daily lives.

These trends can shape the future of retail financial services in several ways. If services become unbundled to the point where financial institutions no longer own the majority of individuals' financial data, it will limit providers' ability to independently create more compelling products and services. In addition, changing preferences can give rise to an ecosystem of non-traditional providers. Financial institutions may still act as a gateway in that scenario, but their ability to control the customer experience end-to-end will be diminished. Lastly, as financial institutions evolve their offerings to stay relevant to customers, they may need to tackle unfamiliar or ambiguous areas that raise risk and compliance issues.

Any of these scenarios will reduce incumbent institutions' ability to cross-subsidize their own products and services. They'll need to find a way to work with non-traditional players to take advantage of the new product, service and distribution opportunities waiting just around the bend.

Potential effects	Necessary conditions
Non-financial companies take over the customer relationship as well as distribution of financial services **Traditional financial institutions** become suppliers of increasingly refined financial products	**A strong reputation** among non-traditional players for trustworthiness and for providing an offering good enough to compete with financial institutions **Integration** throughout the value chain
"Light" or virtual financial institutions emerge to specialize in account management, offering a full suite of financial products by partnering with niche alternative providers **Partnerships** allow networks of alternative providers to compete with full-service retail banks	**Services and products** from alternative niche providers that fulfill the core requirements of most clients and provide enough value to merit a switch from incumbents **Regulatory comfort with significant growth** in the use of alternative niche products
Financial institutions use virtual channels to strengthen customer relationships **Virtual channels** enable financial institutions to offer not only financial but also non-financial services (e.g. concierge services) at little additional cost	**Continued competitive pressure** from disruptors on incumbent institutions to innovate **An understanding** of customers' unidentified needs plus the ability to develop competitive offerings to cater to them

Payments
A cashless world



Mobility and connectivity are coming together to make the long-anticipated cashless society a reality. Mobile applications free users from their wallets and the checkout line. Integrated and streamlined technologies make it easier to settle accounts. Geotagging, biometrics and tokens protect all parties to a transaction from fraud.

Consumers are embracing these technologies. Meanwhile, issuers face the challenge of differentiating themselves even as they cede control over the customer experience to digital payment platforms.

One outcome of this struggle may be consolidation of the payment market. Here, the advantage will likely go to large stand-alone issuers or network issuers as they use their scale to edge out bank issuers. Either way, the prize will be visibility into most of the customer's payment activities, with all its valuable data on lifestyle and preferences.

The future of payments

- ✓ **Cashless.** More customers will choose payment cards over cash, even for small transactions.
- ✓ **Invisible.** Payments processes will be concealed from end customers, changing their needs and behaviors.
- ✓ **Connected.** Transactions will become a more important customer touchpoint for merchants and financial institutions.
- ✓ **Data-driven.** With the data flow from payment transactions, financial institutions, services providers and merchants will gain greater understanding of customers and businesses.
- ✓ **Economical.** Electronic transactions will become cheaper as new solutions proliferate.

Fragmentation of the payment market is another possibility. As consumers spread purchases over a greater number of cards, the credit card will lose its power to retain customers for financial institutions. It also will become harder for a financial institution to assess the credit-worthiness of any one customer.

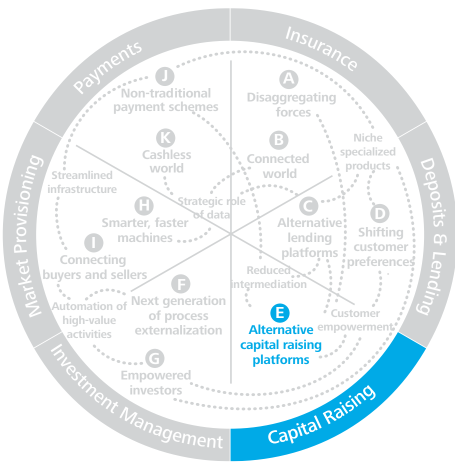
There's also the chance that credit cards will be displaced altogether. If that happens, retail financial institutions will need to find a way to replace the profit they once realized from credit card borrowing. They'll also need to create new ways to promote customer loyalty as the tide shifts in favor of lower fees from bank account transactions.

Whatever happens, financial institutions are likely to lose at least some influence over their customers' transaction experience. Data from specific customer segments will become a more important way to gain adoption or wallet share in a diversified market. And financial institutions will become more dependent on marketing partnerships to drive card use among specific merchants.

Potential effects	Necessary conditions
Customers lose visibility into their payment choices as express checkout pushes more and more transactions to a single default card **Default cards' share of wallet** increases while the influence of card brand and design decline	**Widespread adoption** of express checkout solutions among customers and everyday-spend merchants **Customer willingness** to relinquish control over payment options
Digital wallets eliminate the need for physical cards and enable customers to optimize their card usage **Niche and merchant cards** proliferate, splintering share of wallet across many providers	**Merchant acceptance** of smart payment solutions **Payment platforms** with support systems (e.g. mobile wallets linked to merchant apps) **Efficient, impartial** recommendation engines gaining customer trust
Customers with revolving balances use point of sale vendor financing schemes offering more favorable terms **Credit card** usage erodes as transactional card users migrate to payment solutions that seamlessly link to their bank accounts	**Incentives** for customers to switch payment methods **Cooperation** among bank account providers and payment solution providers, supported by clearly defined liability rules **Willingness** among bank account providers to take on credit risk

Capital Markets

Distributed capital raising platforms



Curious about the future of capital markets? Take a look at distributed capital raising platforms, otherwise known as websites that help businesses and investors find each other.

Distributed capital raising platforms don't provide investment advice. Neither do they sell equity or debt investments – not directly, anyway. They're (virtual) marketplaces where a business can secure a space and try to attract potential investors. Investors, in turn, gain a convenient way to shop opportunities and compare them with one another.

Distributed capital raising platforms vary in the opportunities they offer. Some specialize in startups, for instance. Others allow lead investors to earn fees for their work. Many platforms facilitate legal structuring for issuers or allow them to build in unique clauses, such as rewards, as a "sweetener" for investors.

But questions remain about how appropriate these new asset classes really are for individual investors. It's one thing to require that funding applicants meet a minimum target or accept the leadership of an experienced investor. It's quite another to offer consumer protections that rise to the level of due diligence. To succeed in the long term, distributed platforms will need a reliable way to align applicant and investor incentives.

The future capital market

- ✓ **Accessible.** More businesses and projects will get in front of investors.
- ✓ **Controllable.** Individual investors will gain more control over investment decisions.
- ✓ **Efficient.** As businesses are tested through the capital raising process, investments will flow to the most promising opportunities.
- ✓ **Flexible.** Businesses will be able to structure funding instruments to meet their needs better and appeal to more investors.
- ✓ **Economical.** As intermediaries decline, so will the cost of investment to individual investors.

If it takes hold, the distributed platform model has several implications for financial institutions. First, its advantages may prove irresistible to seed-stage companies despite concerns over becoming visible to the competition. To compete, traditional intermediaries might have to double down on offering unique or exclusive investment opportunities.

It's also possible that traditional institutions will themselves use distributed platforms, as a convenient way to make smaller investments.

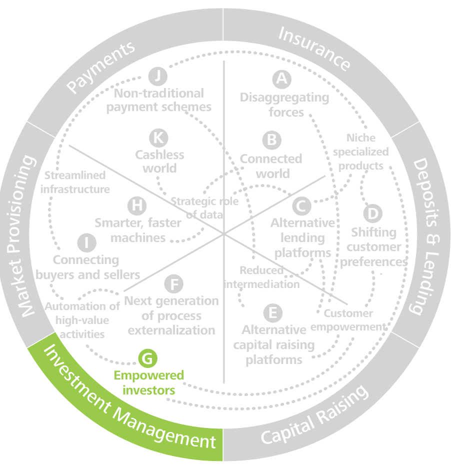
A third scenario is that distributed platforms will evolve into a popular funding option for larger companies. In that case, it will become more important for traditional intermediaries to provide value that isn't directly tied to financing.

In any case, it's a safe bet that distributed platforms will compete with traditional intermediaries for investments (particularly from angel investors). More funding options will also shorten the average time between funding stages, helping new companies grow faster. Finally, look for the investment mix in traditional wealth management products to shift as individual customers take advantage of the wider array of choices becoming available to them.

Potential effects	Necessary conditions
Peer-based funding platforms solidify their position as the capital-raising intermediaries for higher-risk, seed-stage companies **The capital-raising network** becomes richer by increasing investment opportunities for later-stage venture capital financing as well as funding opportunities for seed-stage companies	**A critical mass of investors** willing to participate in peer-based funding models **Accurate, high-quality information** to help investors conduct due diligence **Sufficient financial literacy** for investors to understand risk
Investors with motives beyond financial return (e.g. sustainability or social impact) fund low-return opportunities that otherwise would not have qualified to raise capital through traditional intermediaries **Seed-stage companies** are funded by traditional intermediaries that can provide appropriate guidance for growth	**Limited funding opportunities** for local startups through traditional institutions **Communities** that accept a below-market return to make a project succeed **Failure** of seed-stage companies to secure additional rounds of financing, pressuring alternative funding platforms to switch focus
Larger companies use peer-based platforms to raise capital directly from customers **Customers** gain non-financial incentives (e.g. future discounts) from larger companies, further reducing capital costs for such companies while providing implicit marketing and increased customer loyalty	**Lower fully-loaded costs** for funding through peer-based platforms compared with the traditional financial ecosystem for larger financial undertakings **The capability** of alternative funding platforms to provide mass market investors with information equivalent to that which institutional investors receive

Investment Management

Empowered customers



Wealth management is becoming more democratic. Services that were once costly and labor-intensive are evolving into commodities. Technology is extending financial literacy beyond the old circles of the well-connected and well-to-do.

Robo-advisors sound like science fiction, but they're here today. They're actually online tools that automatically analyze a customer's financial position and return tailored recommendations. They can also manage investment portfolios, typically by investing in established players' products.

Some robo-advisors invest in passive investment portfolios only (like exchange-traded funds) and don't allow customers to modify investment strategies. Others permit active investing with some customer input (such as stock selection). Portfolio rebalancing and other services are delivered automatically for a modest fee.

On other technology fronts, social trading platforms have sprung up for users to swap opinions, strategies and market insights. At the same time, individuals can build investment portfolios and share them with other investors. Retail algorithmic trading, another kind of platform, enables investors – even those with limited technical knowledge – to easily build, test and execute trading algorithms.

The future of wealth management

- ✓ **Accessible.** Automation will extend sophisticated wealth management services to mass affluent and mass market customers.
- ✓ **Transparent.** Customers will gain greater visibility into their investments and make adjustments more readily.
- ✓ **Convenient.** Customer interaction and service delivery will increasingly take place on demand via online and mobile channels.
- ✓ **Personalized.** Mass affluent and mass market customers will benefit from more individualized services and advice.
- ✓ **Cost-effective.** The cost of wealth advice and management services will shrink as lean new entrants spur competition.

For financial institutions, these trends may signal the erosion of the mass affluent market. In this scenario, retail banks could find themselves losing depositors to new entrants offering lower-entry wealth products. At the other end of the spectrum, in the high-touch, high net worth market, the role of personal managers will become even more critical.

On the other hand, retail banks might pivot to offer automated services themselves, meeting most of the needs of wealth management customers. Traditional players could face challenges in adapting their offerings and serving customer segments that are new to them. Today's wealth managers may find themselves revamping their value proposition to stay in business.

Still another possibility is that influential consumers become a source of competition. This will make it increasingly difficult to benchmark the performance of traditional wealth products, given the dispersed, constantly-changing makeup of consumer experts. In this case, traditional institutions will rely on brand and trust even more to set themselves apart from consumers who generate similar returns on investment.

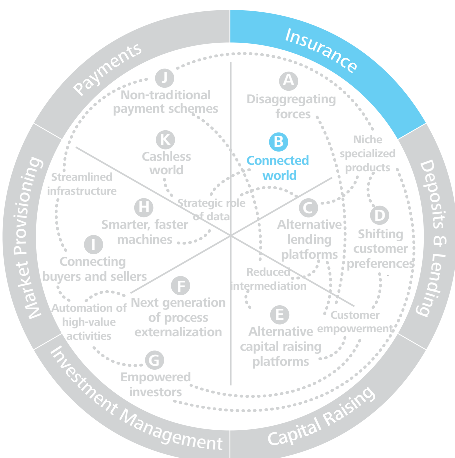
However these trends play out, advisory services will likely break off from products. As customers switch to new, more cost-effective automated advisors, fewer wealth products will be sold through their own advisory channels.

Traditional wealth managers will also see waning advantages of scale. More processes will become automated, more people will use virtual channels, and new entrants will continue to make use of low-cost infrastructures. The results? Less profit for traditional wealth managers, and intensified competition among traditional players in more specialized segments or services.

Potential effects	Necessary conditions
Online tools and automated services that originally catered to underserved customers steal share from traditional wealth managers in the mass affluent market **Wealth managers** return to white-glove service for high net worth individuals	**Customer trust and awareness** of new market entrants **Offerings** strong enough to entice customers to replace traditional wealth managers with new players
Automated platforms commoditize once-costly services (e.g. tax loss harvesting) and reduce the value that investment managers deliver even to high net worth customers **Physical wealth managers** provide more bespoke services, such as financial concierge service and inter-generational wealth transfer	**Incumbents** that can acquire and implement new capabilities, or be comfortable with partnering with automated service providers **Incumbents** that can successfully identify and deliver high-value services available only through personal relationships
Individual investors act as investment experts without the technical knowledge or infrastructure traditionally required **Retail and social trading platforms** become an effective way for individuals to share or sell their investment expertise, directly competing with traditional investment managers	**A track record** of performance sufficient for investment experts to gain customers' trust **A value proposition** from investment experts that competes on return, risk and cost **Regulatory control** to ensure the degree of advisory services is well understood

Insurance

Growing connectivity



Sensors. Communication protocols. Advanced analytics. The Internet of Things.

The same technologies that bring us the connected lifestyle are driving change in the insurance industry.

Automobiles are changing. These days, cars have operating systems, run user-installed apps, and connect to the Internet. Sensors make it possible to remotely collect information on every part of the vehicle. Cars can even communicate with one another to head off accidents.

Healthcare is changing. People can manage their daily activities through wearable devices. Specific medical conditions can be measured, tracked and analyzed for intervention. Healthcare professionals can uncover patterns and make recommendations based on the data.

Connectivity is transforming the home as well. Devices monitor the interior environment and modify it as metrics and machine learning indicate. They also can pick up risk factors requiring preventive action – think smoke, triggering alarms and sprinklers.

Already we have the technology to link all these systems. They're becoming interoperable, streaming across standardized platforms to build a portrait of a life. The devices that connect cars, people and homes form the web that brings us the telematics insurance model.

The future of insurance

- ✓ **Personalized.** Pricing will be based on individual risk rather than cluster risk.
- ✓ **Accurate.** Cross-subsidization will decline, leading more customers to pay premiums appropriate for their personal risk.
- ✓ **Transparent.** Fraud will decline as insurers gain greater visibility into the circumstances surrounding a claim.
- ✓ **Data-rich.** Insurers will become a custodian of behavioral data (e.g. vehicle movement) on top of historical and static data (e.g. type of vehicle owned).
- ✓ **Engaged.** Better data will help insurers generate content that's more relevant to their customers.

A potential outcome of all this connectivity is the personalization of insurance. When policies and premiums are highly individualized, the current business model of cross-subsidizing across customers will no longer be feasible.

Another response might be active management of the insured's risks. To do this, insurers will have to work around brokers and other traditional channels to interact directly with customers. They'll also need the customers to accept this level of involvement and modify their behaviors.

A third possibility is that insurers will use personal data to deliver more relevant value to customers. This means insurers will have to come up with a better way to manage their relationships with merchants.

For incumbent providers, it's hard to overstate just how great a shift any of these outcomes will be. Up to now, insurers have used data primarily as a means to report and mitigate risk. But the ability to access these new data streams is commoditizing the old competencies. It's giving rise to attractive new competitors that can offer consumers a more empowering experience.

To respond, insurers will need to gather and analyze data not just at issuance and renewal but throughout the life of a policy. They'll need a stronger grasp of the customer's financial status and needs. They'll have to step up as client-facing risk advisors. These changes won't be easy, but they'll need to happen fast – if sought-after customers go, it will be very difficult to win them back.

Potential effects	Necessary conditions
Insurers use connected devices to track and continuously refine risk profiles with empirical data, enabling more accurate underwriting of individual risks **Customers** use connected devices to buy event-based coverages, personalizing their policies for better protection	**Widespread adoption** of personal connected devices **Analytics** that can constantly update underwriting of risks using real-time data **Collaboration** among insurers, device manufacturers and telcos **Customers** willing to share additional personal data with insurers
Connected devices help insurers interact more frequently with their customers and proactively manage their customers' risks (e.g. health consultation based on data gathered through wearables) **Insurers** evolve into risk managers to cut losses and deliver more value to customers	**Advanced analytics** capable of predicting future risks **A clear grasp** of the liabilities associated with advice **Customers** who trust insurers to manage their risks and provide advice
Connected devices allow insurers to gather ongoing behavioral data to gain a fuller view of the customer identity and lifestyle **Insurers** work with retailers and other outside parties to collect customer information for more targeted outreach (e.g. offers)	**Insurers** that can persuade customers that their personal data is safe and will result in greater value **Compliance** with existing and future regulations on usage of personal data

Conclusion

Technology is dramatically reshaping financial services. As consumer behaviors evolve, traditional players are facing new competitors in direct and mobile banking. In the payment market, cash and (quite possibly) credit cards are giving way to digital alternatives that will cost financial institutions at least some influence over the transaction experience. Distributed capital raising platforms are opening up the capital markets, forcing traditional intermediaries to develop new value propositions in order to compete.

Robo-advisors and social trading platforms are democratizing investment management, eroding the mass affluent market while signaling a return to white glove advisory services. As for insurance, the technologies bringing us the connected lifestyle are also leading to intense personalization, making the customer's "walk away cost" higher than ever before.

These changes are disruptive, but they aren't sudden. Neither are they random. They're targeting the likeliest areas, the ones where customers are restless and where light, scalable technologies apply. Together, they form a long-term trend from which incumbent institutions will emerge as aggressive, adaptable innovators, snapping up the best ideas of the startup ecosystem and bringing them to fruition.

This article just touches on some of the ways in which new entrants and innovations are continually changing the business of financial services now, and in the future. Through Deloitte's work with the World Economic Forum, we've developed in-depth examinations of a number of potential areas of disruption, with particular attention to rallying an effective response. We welcome the opportunity to discuss any of these ideas further with you.

For more information please visit www.deloitte.com/future-of-fsi for additional materials on this topic, including the World Economic Forum report which was developed in collaboration with Deloitte.

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