

The Future of FinTech

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FNT611
Foundations of FinTech

Lecture 11



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Discussion

What are the key features and benefits of the Nasdaq SMARTS Market Surveillance Technologies?

Answer: Nasdaq SMARTS Market Surveillance Technologies represent a comprehensive suite of tools designed to monitor and analyze trading activities across various markets to detect and prevent market manipulation and other forms of market abuse. The key features and benefits of Nasdaq SMARTS include:

1. Real-Time Surveillance, 2. Advanced Analytics, 3. Cross-Market Surveillance, 4. Customizable Alert System, 5. Regulatory Compliance, 6. Global Application, 7. Data Integration.

Discussion

What does navigating regulatory services in finance involve and what are the key considerations for financial institutions?

Answer: Navigating regulatory services in finance involves understanding and adhering to a complex set of laws and regulations that govern the operations of financial institutions. The key considerations include:

- Understanding Regulatory Bodies
- Compliance with Laws and Regulations
- Implementing Compliance Programs
- Keeping Up with Changes.

Discussion

What is Risk Management Software and what are its key features and benefits in the financial sector?

Answer: Risk Management Software is a type of application or suite of tools designed to help organizations identify, assess, manage, and mitigate various types of risks they face, particularly in the financial sector. Key features and benefits of such software include:

- Risk Identification and Assessment.
- Risk Monitoring and Reporting.
- Compliance Management.

Objectives:

- To analyze how emerging technologies will reshape the financial services industry.
- To conduct an academic analysis of the five game-changing factors influencing the future of FinTech.
- To explore the Future Landscape of Financial Services:
- To investigate the potential future scenarios and trends in the financial services sector.
- To examine the upcoming technologies and their applications within the FinTech industry.
- To explore the shift in focus from being product vendors to becoming solution providers in the financial sector.
- To maximize Data Advantage for Banks:

Objectives:

- **To analyze the Tripartite Innovation Ecosystem in FinTech:**
- **To examine the three-way innovation ecosystem shaping the future of FinTech.**
- **To enhance Customer Experience through Banks' Collaboration with FinTech Start-ups:**
- **To explore how banks can partner with FinTech start-ups to create integrated customer experiences.**
- **To analyze the various collaborations between traditional banks and FinTech start-ups.**
- **To explore the specific effects and transformations FinTech is bringing to the retail banking sector**

How Emerging Technologies Will Change Financial Services?

- **Digital Disruption Continues:** The financial sector is experiencing digital disruption, but its fundamental services remain the same.
- **Technological Transformation:** New technologies are revolutionizing the delivery of financial services, enhancing convenience, speed, and efficiency.
- **FinTech's Growing Influence:** FinTech is reshaping the financial industry, indicating a significant shift in how services will be provided in the future.
- **Decrease in Cash Use:** There is a trend towards declining cash transactions and an increase in non-cash payments, expected to grow significantly by 2020.

How Emerging Technologies Will Change Financial Services?

- **Non-Cash Payments Growing:** Global economic growth, improved payment systems, and e-commerce are driving rapid increases in non-cash transactions.
- **Digital and Mobile Payments Rising:** Digital currencies and mobile payments are seeing significant growth.
- **Alternative Financing Expanding:** Rising global financing needs boost alternative methods, with investable assets reaching new highs.
- **E-Commerce and Cryptocurrencies Shaping Payments:** E-commerce and cryptocurrency adoption, like Bitcoin and Ripple, are transforming payment methods, accelerating digitalization.

How Emerging Technologies Will Change Financial Services?

- **Rising Demand for Asset Management:** Growth in investable assets is fueling demand for asset management services.
- **Expansion of Robo Advisors:** By 2014, robo advisors managed \$19 billion globally, with growth driven by personalized, cost-efficient solutions.
- **Benefits of Virtual Advisors:** Virtual advisors offer smart rebalancing, 24/7 access, and lower fees than traditional advisors.
- **Enhanced Investment Decisions:** Market players are leveraging new information for investment, compliance, and reporting

Five Game-Changers Shaping the Future of FinTech: An Academic Analysis

• Customer Experience:

- Customer Expectations: Rising demand for simplicity, speed, and convenience in financial services driven by digital advancements.
- FinTech's Focus: Emphasis on client-centric models, enhancing front-end tools, and offering multi-channel interactions.
- Improving Experience: FinTech enriches customer experience through services like PFM, Blockchain, and API-based banking.
- IT Flexibility: Increased adaptability in IT architectures and networks is revolutionizing the financial services sector.
- Adaptation Challenge: Traditional financial institutions must evolve their business models and IT systems to remain competitive.

Five Game-Changers Shaping the Future of FinTech: An Academic Analysis

- **Finance-Technology Collaboration:** The fusion of finance and technology is breaking traditional business boundaries.
- **Blending Expertise:** Finance experts contribute risk management and compliance skills, while IT professionals offer tech and digital insights.
- **Competitive Shift:** Companies aim to mirror Silicon Valley's seamless services and embrace strategic partnerships.
- **Future Integration Strategies:** Approaches include in-house enhancement, outsourcing, partnerships, or acquiring strategic stakes.

Five Game-Changers Shaping the Future of FinTech: An Academic Analysis

- **Data Monetization:**

- **Data Goldmine:** Financial services providers possess a wealth of untapped data crucial for FinTech development.
- **Utilizing Advanced Analytics:** The advent of low-cost, powerful analytical tools allows for mining big data to identify trends and gain unique insights.
- **Driving Innovation and Competitive Edge:** These insights lead to smarter business decisions, innovative products, and hidden market discovery, providing a competitive advantage.
- **Data Analytics as a Necessity:** The pivotal question is whether data analytics will shift from being a competitive advantage to a necessity, and how financial institutions can secure client data privacy and build trust.

Five Game-Changers Shaping the Future of FinTech: An Academic Analysis

- **Crypto-technologies (“Blockchain”):**
 - **Blockchain's Transformative Impact:** Blockchain is set to revolutionize payment systems, trading, and settlements in finance.
 - **Expanding Beyond Payments:** Blockchain could transform securities clearing and cross-border transactions, per the Bank of England.
 - **Adoption Challenges:** Crypto-tech faces AML and KYC hurdles, impacting broader acceptance in finance.
 - **Smart Contracts Simplify Banking:** Automated smart contracts could streamline processes and lower costs.

Five Game-Changers Shaping the Future of FinTech: An Academic Analysis

• Adapt (to) Regulation:

- Adapting to Regulations: The future of FinTech hinges on its ability to navigate the complex regulatory landscape of the financial sector. Role of Regulators: Regulators need to clarify rules and create a harmonized environment to protect customers and facilitate market growth.
- Regulation as a Double-Edged Sword: Regulation could either catalyze FinTech development or act as its primary obstacle.
- FinTech's Industry Impact: FinTech firms, through innovation, have already made significant inroads in the financial services industry and now stand to radically transform its infrastructure and processes, enhancing speed and agility.

The Future of Financial Services

The Future of Financing:

- **Streamlined Home Financing:** Home purchases will become faster as mortgages are shared with multiple lenders in real estate markets.
- **Digital Financial Assistants (DFAs):** DFAs will match borrowers with lending offers based on their financial profiles.
- **Growth of Crowdlending:** Crowdlending will expand as platforms pool individual investments, safeguarded by credit default swaps.
- **Competitive Crowdlending:** Low tech costs in matching and credit analysis will keep crowdlending competitive despite insurance expenses

The Future of Financial Services

The Future of Identity:

- **Transforming Financial Transactions:** Blockchain will reshape global financial systems and data management.
- **Global Asset Databases:** Centralized databases will simplify and reduce costs for financial transactions.
- **Enhanced Security with Distributed Ledgers:** Distributed systems lower hacking risks by leveraging global computing power.
- **Balancing Privacy and Compliance:** Blockchain may use intermediaries or pseudonyms while ensuring KYC and AML compliance.

The Future of Financial Services

The Future of Money:

- **Electronic Currency Evolution:** National banks are leveraging blockchain to issue electronic currencies.
- **Transparent Global Asset Databases:** Governments will push for real-time tracking of financial flows via transparent databases.
- **Standardized Electronic Currencies:** Central bank-controlled e-currencies like "ePounds" will become monetary management norms.
- **Balancing Transparency and Freedom:** New governance will address the trade-off between financial transparency and privacy in a highly monitored world.

The Future of Financial Services

The Future of Saving and Consumption

- DFAs will increasingly guide individuals in deciding whether to use available cash for saving or consumption based on user preferences and financial goals, leveraging online product information.
- A diverse ecosystem of independent and dependent DFAs will emerge, driven by different charging models, including usage fees and referral/advertising revenues.
- Users with long-term financial goals will rely on DFAs to make informed decisions, potentially delaying immediate spending in favor of saving, leading to a more sophisticated approach to the saving vs. consumption dilemma.

The Future Technologies & Applications in Fintech:

Artificial Intelligence (AI):

- **Personalized Experiences:** AI will customize financial services to enhance user interactions.
- **Risk and Fraud Management:** AI will detect and prevent fraud while improving risk assessment.
- **Task Automation:** AI will streamline financial operations, cutting costs and errors.
- **AI in Investments:** Robo-advisors and AI trading systems will revolutionize investment strategies.

The Future Technologies & Applications in Fintech:

Blockchain Technology

- **Enhanced Security:** By using a decentralized ledger, blockchain greatly reduces the risk of fraud and data breaches.
- **Increased Transparency:** Transactions recorded on blockchain are transparent and easily verifiable, building greater trust in financial processes.
- **Cost and Time Efficiency:** Blockchain cuts out intermediaries, leading to lower costs and faster transactions, especially in international dealings.
- **Innovation in Services:** It enables new financial services like smart contracts and decentralized finance, expanding the scope of fintech offerings.

The Future Technologies & Applications in Fintech:

Cloud Computing

- **Efficient Data Management:** Cloud computing supports large-scale data processing for trading, risk, and compliance.
- **Cost-Effective Resources:** Subscription-based cloud models reduce costs and optimize global infrastructure usage.
- **Scalability and Security:** Cloud solutions offer flexible storage, secure access, and automated backups for business continuity.

The Future Technologies & Applications in Fintech:

Internet of Things (IoT):

- Real-Time Payments: IoT enabling instant transactions.
- Personalized Insurance: IoT devices providing data for tailored policies.
- Automated Trading: IoT sensors triggering stock market trades.
- Risk Management: IoT data enhancing fraud detection and prevention.
- Blockchain Integration: IoT devices leveraging blockchain for secure transactions.
- Smart Contracts: IoT triggering automated agreements in fintech.
- Data-Driven Lending: IoT providing insights for credit decisions.
- RegTech Solutions: IoT aiding in regulatory compliance.
- Biometric Security: IoT devices enhancing identity verification.
- Sustainable Finance: IoT data driving green investments.

The Future Technologies & Applications in Fintech:

No-Code and Low-Code Platforms:

- **Traditional Coding Challenges:** Developing financial services traditionally required extensive coding and API integration, leading to high costs, long delays, and inflexibility in updates.
- **Low-Code vs No-Code:** Both approaches simplify development by removing complex coding requirements. Low-code needs some coding knowledge, while no-code doesn't require any, making it more accessible for businesses.
- **Choosing the Right Platform:** The choice between low-code and no-code depends on the project's complexity and the business's coding capability. Low-code suits simpler projects, while no-code is better for more complex, custom applications

From Financial Product Vendors to Solution Providers:

- **Banks as Solution Providers:** Banks are shifting from selling products to offering comprehensive financial solutions using transactional data.
- **Tailored Financial Plans:** Personalized plans replace broad product catalogues, addressing specific customer needs.
- **Innovation Potential:** Banks leverage decades of data to create precisely timed, customized solutions.
- **Data-Driven Insights:** Actionable insights from customer data enable effective, personalized financial offerings.

How Can Banks Best Leverage Their Data Advantage?

- Embracing Open Banking:** Banks can adopt secure APIs to enable third-party innovations, inspired by tech giants like Apple and Google.
- Middleware for Simplification:** Middleware applications streamline core banking systems, facilitating developer access and fostering innovation.
- Collaborating with FinTech:** Partnering with FinTech platforms allows banks to leverage creativity, foster ecosystems, and create new revenue streams.

The Future of FinTech: A Tripartite Innovation Ecosystem

- **Data Science Driving Innovation:** Extracting insights from data helps create solutions based on customer needs.
- **Personalized Solutions with Machine Learning:** Machine learning tailors financial products to customer goals and behaviors.
- **Collaborative Ecosystem:** Banks, tech companies, and customers work together, with banks supplying essential data and services.

Why FinTech Banks Will Rule the World

- **Resistance to Change:** Traditional banks lag in adapting to the digital revolution, relying on regulatory protections.
- **Declining Trust:** Post-2008, customers increasingly prefer alternative finance, viewing banks as self-interested.
- **Selective FinTech Investments:** Banks focus on startups that complement their products, avoiding direct competition.

Why FinTech Banks Will Rule the World

- **Shifting FinTech Models:** FinTechs are evolving from peer-to-peer to marketplace models, leveraging institutional liquidity.
- **Marketplace Banking Growth:** FinTechs now offer core banking via third-party products and APIs, bypassing traditional banks.
- **Challenges for FinTech Banks:** Key hurdles include tech development, licensing, and customer acquisition.
- **Disruptive Potential:** Agile and innovative, FinTech banks can challenge traditional banks with modern systems and strong reputations.

Banks Partnering with FinTech Start-ups to Create an Integrated Customer Experience

- **Evolving Entrepreneur Stereotype:** Entrepreneurs now come from diverse backgrounds, including women in Africa and banking professionals.
- **New Innovation Models:** Banks are partnering with start-ups, moving beyond traditional vendor-client relationships.
- **Need for Adaptation:** Growing FinTech investments signal a rising impact, pushing banks to evolve.
- **FinTech's Disruptive Potential:** Venture capitalists see FinTech as poised to transform finance, akin to changes in media, travel, and retail.

Banks Partnering with FinTech Start-ups

- **Data Beyond Firewalls:** Banks need to leverage valuable data available on the open internet.
- **Understanding APIs:** APIs enable access to external data, resources, and algorithms, often from FinTech start-ups.
- **Collaborative Partnerships:** Working with FinTech start-ups can be mutually beneficial, despite potential competition.
- **Marketplace Strategies:** Platforms like Lending Club use network effects to attract data-sharing partners, benefiting banks and firms.

Banks Partnering with FinTech Start-ups

- **Creating Value with Algorithms:** Banks can enhance customer satisfaction by developing smart algorithms and intuitive user experiences.
- **Collaboration with Marketplaces:** Partnering with networked marketplaces enables banks to leverage data and network effects.
- **Focus on Services:** Banks should prioritize service-based models, following examples like NYSE and NASDAQ, which add value through services atop marketplace APIs.

Banks Partnering with FinTech Start-ups

- **Brand and Agility Combo:** Combining a strong brand with startup agility gives banks a competitive edge.
- **Listening to Customers:** Addressing marketplace users' pain points improves the customer experience.
- **The Great Rebundling:** Banks can succeed by integrating fragmented services into seamless experiences, anticipating customer needs with new technologies.

Banks Partnering with FinTech Start-ups

- Price Competition in Asset Allocation: Robo-advisors are driving down the cost of asset allocation services, making it a commodity. Competing at this level with a high-cost structure is not advisable.
- Innovation in Data Science and Personalization: Wealth management firms have an opportunity to innovate in data science, personalization, and reporting services, moving away from commodity offerings.

Banks Partnering with FinTech Start-ups

- Race to Provide Complementary Services: Some robo-advisors aim to avoid consolidation by moving up the value stack and rebundling complementary wealth management services. This is a competitive race.
- Emergence of Micro Asset Managers: Micro asset managers, often focused on a specific asset class, are emerging as early adopters of marketplaces like Lending Club and Angel List. They offer low-cost and agile investment strategies, challenging traditional asset managers.

FinTech Impact on Retail Banking

- **Regulatory Overload:** Banks are heavily focused on compliance, with 70% of budgets spent on regulation, according to Accenture.
- **Changing Consumer Habits:** The digital economy's growth has shifted consumer expectations and behaviors.
- **Rising Costs:** Banks face increasing IT expenses and the challenge of maintaining large branch networks.

FinTech Impact on Retail Banking

- **Revenue Pressure:** Regulatory demands and digital shifts have reduced retail banking revenues, despite cost-cutting efforts.
- **Legacy IT Hurdles:** Outdated IT systems, consuming 14% of costs, limit digital transformation.
- **Reluctance to Change:** Fear of disruption and complexity keeps banks focused on incremental innovation rather than radical transformation.

FinTech Impact on Retail Banking

- **Outdated Full-Service Models:** Traditional banking models fail to meet modern market demands, requiring bold innovation.
- **Misaligned Financial Focus:** Banks prioritize branch networks over transformative R&D, hindering progress.
- **High Customer Expectations:** Digital advances, driven by tech giants, have raised customer standards, increasing IT costs.
- **Costly Complexity:** Outdated IT systems and complex offerings consume 14% of banking expenses, mostly for maintenance.

Summary

- Understanding the Impact of Emerging Technologies on Financial Services
- Academic Analysis of Key Factors Shaping FinTech's Future
- Exploring the Future Landscape of Financial Services
- Exploring Future Technologies and Applications in FinTech
- Transitioning from Product Vendors to Solution Providers
- Maximizing Data Advantage for Banks
- Analyzing the Tripartite Innovation Ecosystem in FinTech
- Enhancing Customer Experience through Banks' Collaboration with FinTech Start-ups
- Strategic Collaborations between Banks and FinTech Start-ups
- Impact of FinTech on Retail Banking

- How are digital and mobile payments, along with cryptocurrencies, changing the global payment landscape?
- What are the key developments in FinTech business models, particularly the evolution towards marketplace banking, and what challenges and potential disruptive impacts do these changes pose for traditional banking systems?
- How will Digital Financial Assistants (DFAs) shape the future of saving and consumption?



Thank You

