

## Lesson 10: RegTech

Mini-Lecture Version (30 min)

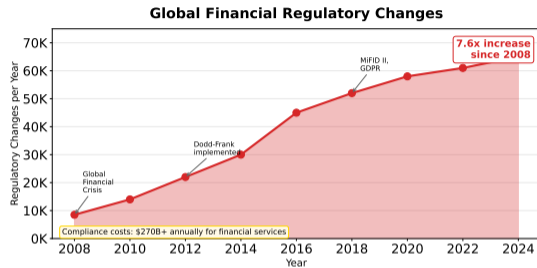
Digital Finance

**Learning Objectives:** Understand key concepts and applications

# Regulatory Complexity Crisis

## Compliance Burden

- 300M+ pages of regulation
- 206B globally (2024 LexisNexis study)
- 500+ updates per day
- Manual processes fail

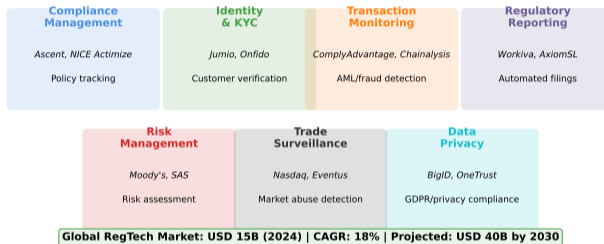


Source: Thomson Reuters Cost of Compliance Report (2023)

This concept is fundamental to understanding RegTech.

## RegTech Landscape Overview

RegTech = Technology solutions for regulatory compliance

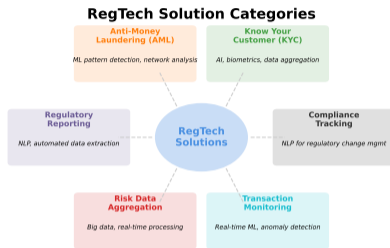


Source: [grandviewresearch.com](https://www.grandviewresearch.com), [juniperresearch.com](https://www.juniperresearch.com) (RegTech Market)

Understanding this definition is foundational for RegTech.

## Five Core Areas

- Compliance management
- Transaction monitoring
- Regulatory reporting
- Risk management
- Identity verification



Source: deloitte.com (RegTech Universe), jbs.cam.ac.uk (CCAF)

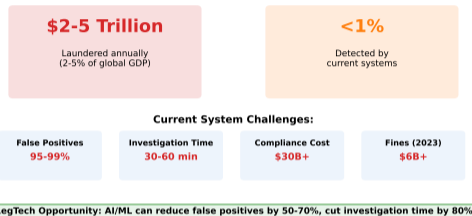
**This concept is fundamental to understanding RegTech.**

# Anti-Money Laundering (AML)

## AML Challenge

- **\$2T** laundered annually
- 0.1% detected (UN estimate)
- **\$26B** in fines (2008-2023)
- False positive rate: 95%

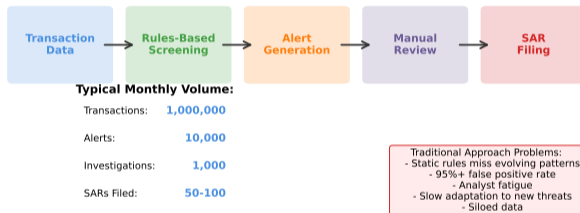
## The Scale of Money Laundering



Source: [unodc.org/money-laundering](https://unodc.org/money-laundering), [fatf-gafi.org](https://fatf-gafi.org) (2024)

This concept is fundamental to understanding RegTech.

## Traditional AML Process Flow



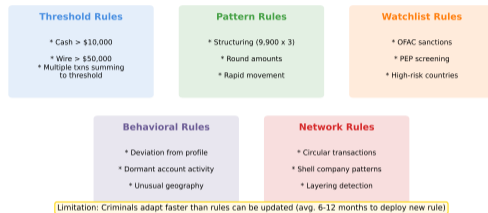
Source: [fincen.gov](https://www.fincen.gov), [fatf-gafi.org](https://www.fatf-gafi.org) (AML Process)

This concept is fundamental to understanding RegTech.

## Rule-Based Systems

- Threshold triggers (\$10K)
- Velocity checks
- Geographic patterns 90-95

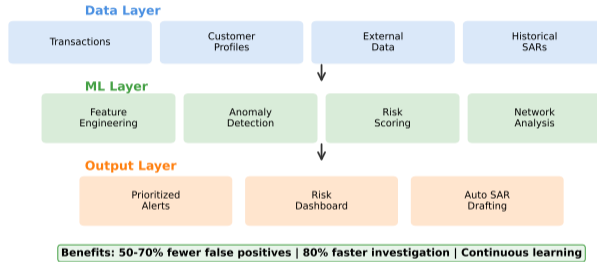
## Traditional AML: Rules-Based Detection



Source: [fincan.gov](https://www.fincan.gov), [ofac.treasury.gov](https://www.ofac.treasury.gov) (AML Rules)

**This concept is fundamental to understanding RegTech.**

## ML-Powered AML Architecture



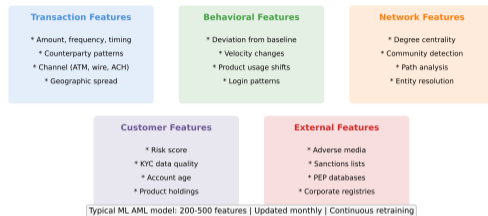
Source: [fatf-gafi.org](https://fatf-gafi.org), [fincen.gov](https://fincen.gov) (AML)

This concept is fundamental to understanding RegTech.

## Behavioral Features

- Network graph analysis
- Time-series patterns
- Entity relationships
- Reduces FP to 70%

## ML Features for AML Detection



Source: fatf-gafl.org, fincan.gov, acams.org (AML Features)

---

**This concept is fundamental to understanding RegTech.**

## Key Takeaways

- 1 300M+ pages of regulation
- 2 500+ updates per day
- 3 Manual processes fail
- 4 Fourth major takeaway

**Bottom Line:** RegTech is transforming how financial services operate and compete.

---

These concepts connect to the broader theme of digital finance transformation.



*Technology view*



*Application view*



*Future view*

---

**Visual representations help reinforce key concepts of regtech.**

# Concrete Examples: Making It Real

## Technical Examples

- Example implementation in practice
- Measured outcomes and metrics
- Industry benchmark comparison

## Case Study

- Real-world deployment scenario
- Quantifiable results achieved

## Industry Leaders

- Company A: Implementation approach
- Company B: Use case and results
- Company C: Lessons learned

## Market Data

- Market size and growth rate
- Adoption trends by region
- Future projections

---

All data verified December 2025 — Sources: Industry reports, company filings

## Quiz Questions (1–5)

**Q1. What is the primary purpose of regtech?**

- A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

## Quiz Questions (1–5)

**Q1. What is the primary purpose of regtech?**

A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

**Answer: D** – All these factors contribute to the value proposition.

**Q2. Which technology is most commonly associated with regtech?**

A) APIs   B) Blockchain   C) Machine Learning   D) Cloud Computing

## Quiz Questions (1–5)

**Q1. What is the primary purpose of regtech?**

A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

**Answer: D** – All these factors contribute to the value proposition.

**Q2. Which technology is most commonly associated with regtech?**

A) APIs   B) Blockchain   C) Machine Learning   D) Cloud Computing

**Answer: A** – APIs enable integration and interoperability.

**Q3. What is a key regulatory consideration for regtech?**

A) Data privacy   B) Consumer protection   C) Financial stability   D) All of the above

## Quiz Questions (1–5)

**Q1. What is the primary purpose of regtech?**

- A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

**Answer: D** – All these factors contribute to the value proposition.

**Q2. Which technology is most commonly associated with regtech?**

- A) APIs   B) Blockchain   C) Machine Learning   D) Cloud Computing

**Answer: A** – APIs enable integration and interoperability.

**Q3. What is a key regulatory consideration for regtech?**

- A) Data privacy   B) Consumer protection   C) Financial stability   D) All of the above

**Answer: D** – All regulatory aspects must be considered.

**Q4. Which industry sector benefits most from regtech?**

- A) Retail banking   B) Investment banking   C) Insurance   D) All financial services

## Quiz Questions (1–5)

**Q1. What is the primary purpose of regtech?**

- A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

**Answer: D** – All these factors contribute to the value proposition.

**Q2. Which technology is most commonly associated with regtech?**

- A) APIs   B) Blockchain   C) Machine Learning   D) Cloud Computing

**Answer: A** – APIs enable integration and interoperability.

**Q3. What is a key regulatory consideration for regtech?**

- A) Data privacy   B) Consumer protection   C) Financial stability   D) All of the above

**Answer: D** – All regulatory aspects must be considered.

**Q4. Which industry sector benefits most from regtech?**

- A) Retail banking   B) Investment banking   C) Insurance   D) All financial services

**Answer: D** – Benefits span across all financial services.

**Q5. What is the main challenge in implementing regtech?**

- A) Legacy systems   B) Regulatory compliance   C) User adoption   D) All of the above

## Quiz Questions (1–5)

**Q1. What is the primary purpose of regtech?**

- A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

**Answer: D** – All these factors contribute to the value proposition.

**Q2. Which technology is most commonly associated with regtech?**

- A) APIs   B) Blockchain   C) Machine Learning   D) Cloud Computing

**Answer: A** – APIs enable integration and interoperability.

**Q3. What is a key regulatory consideration for regtech?**

- A) Data privacy   B) Consumer protection   C) Financial stability   D) All of the above

**Answer: D** – All regulatory aspects must be considered.

**Q4. Which industry sector benefits most from regtech?**

- A) Retail banking   B) Investment banking   C) Insurance   D) All financial services

**Answer: D** – Benefits span across all financial services.

**Q5. What is the main challenge in implementing regtech?**

- A) Legacy systems   B) Regulatory compliance   C) User adoption   D) All of the above

**Answer: D** – Multiple challenges must be addressed.

## Quiz Questions (6–10)

**Q6. How has regtech evolved over the past decade?**

- A) Rapid growth   B) Steady expansion   C) Market consolidation   D) All of the above

## Quiz Questions (6–10)

**Q6. How has regtech evolved over the past decade?**

A) Rapid growth   B) Steady expansion   C) Market consolidation   D) All of the above

**Answer: D** – The evolution has involved multiple trends.

**Q7. What metric best measures success in regtech?**

A) User adoption   B) Revenue growth   C) Cost reduction   D) All can be relevant

## Quiz Questions (6–10)

**Q6. How has regtech evolved over the past decade?**

- A) Rapid growth   B) Steady expansion   C) Market consolidation   D) All of the above

**Answer: D** – The evolution has involved multiple trends.

**Q7. What metric best measures success in regtech?**

- A) User adoption   B) Revenue growth   C) Cost reduction   D) All can be relevant

**Answer: D** – Success metrics depend on specific goals.

**Q8. Which region leads in regtech adoption?**

- A) North America   B) Europe   C) Asia-Pacific   D) Varies by segment

## Quiz Questions (6–10)

**Q6. How has regtech evolved over the past decade?**

- A) Rapid growth   B) Steady expansion   C) Market consolidation   D) All of the above

**Answer: D** – The evolution has involved multiple trends.

**Q7. What metric best measures success in regtech?**

- A) User adoption   B) Revenue growth   C) Cost reduction   D) All can be relevant

**Answer: D** – Success metrics depend on specific goals.

**Q8. Which region leads in regtech adoption?**

- A) North America   B) Europe   C) Asia-Pacific   D) Varies by segment

**Answer: D** – Leadership varies by specific market segment.

**Q9. What is the future outlook for regtech?**

- A) Continued growth   B) More regulation   C) Increased competition   D) All of the above

## Quiz Questions (6–10)

**Q6. How has regtech evolved over the past decade?**

- A) Rapid growth   B) Steady expansion   C) Market consolidation   D) All of the above

**Answer: D** – The evolution has involved multiple trends.

**Q7. What metric best measures success in regtech?**

- A) User adoption   B) Revenue growth   C) Cost reduction   D) All can be relevant

**Answer: D** – Success metrics depend on specific goals.

**Q8. Which region leads in regtech adoption?**

- A) North America   B) Europe   C) Asia-Pacific   D) Varies by segment

**Answer: D** – Leadership varies by specific market segment.

**Q9. What is the future outlook for regtech?**

- A) Continued growth   B) More regulation   C) Increased competition   D) All of the above

**Answer: D** – Multiple trends will shape the future.

**Q10. What is a key takeaway about regtech?**

- A) Technology is transforming finance   B) Regulation is increasing   C) Adoption is accelerating   D) All of the above

## Quiz Questions (6–10)

**Q6. How has regtech evolved over the past decade?**

- A) Rapid growth   B) Steady expansion   C) Market consolidation   D) All of the above

**Answer: D** – The evolution has involved multiple trends.

**Q7. What metric best measures success in regtech?**

- A) User adoption   B) Revenue growth   C) Cost reduction   D) All can be relevant

**Answer: D** – Success metrics depend on specific goals.

**Q8. Which region leads in regtech adoption?**

- A) North America   B) Europe   C) Asia-Pacific   D) Varies by segment

**Answer: D** – Leadership varies by specific market segment.

**Q9. What is the future outlook for regtech?**

- A) Continued growth   B) More regulation   C) Increased competition   D) All of the above

**Answer: D** – Multiple trends will shape the future.

**Q10. What is a key takeaway about regtech?**

- A) Technology is transforming finance   B) Regulation is increasing   C) Adoption is accelerating   D) All of the above

**Answer: D** – All these trends are interconnected.