# SUPTECH

## SUPERVISORY TECHNOLOGY

### TRAINING COURSE
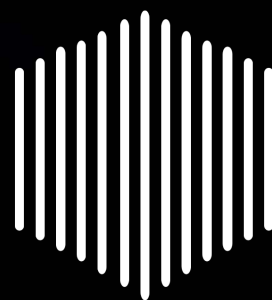
STORM-7 CONSULTING

# ABOUT SUPERVISORY TECHNOLOGY

# ABOUT THE TRAINING COURSE

As noted by the Bank for International Settlements, Supervisory Technology (**SupTech**) is a sub-set of Financial Technology (**FinTech**) that uses innovative technology to support supervision. It helps supervisory agencies to digitise reporting and regulatory processes, resulting in more efficient and proactive monitoring of risk and compliance at financial institutions. As observed by the TORONTOCENTRE, SupTech can be used to digitize, automate, streamline or transform operational and administrative procedures, increasing their level of standardization and efficiency (TORONTOCENTRE, 2019).

Benefits include improved performance (e.g. reduced response times to requests and applications), reduced costs, and increased use of digital data utilising advanced data analytics software. SupTech represents the next generation of supervisory authority surveillance frameworks and tools that can massively increase supervisory authority efficiency and effectiveness.

The Supervisory Technologies training course has been specifically designed to provide attendees with highly comprehensive training covering all the latest developments in Supervisory Technologies (**SupTech**). It is one of the most advanced SupTech training course on the market today. It adopts a highly unique approach in that it covers SupTech from multiple perspectives. In the first session attendees will be instructed on all key definitions, ideas, and areas that govern SupTech and the use of Artificial Intelligence (**AI**) and machine learning. It will also cover the different types of machine learning, as well as introducing attendees to the latest developments covering the use of SupTech.

The second session will cover regulatory evolution, theoretical approaches to the adoption of Regulatory Technology (**RegTech**) by supervisory authorities, as well as a broad range of challenges and risks pertaining to the implementation and use of SupTech globally. The third session will cover SupTech use cases relating to areas such as market surveillance, misconduct analysis, and microprudential supervision.

Other areas covered include data analytics, data visualisation, and visual analytics. Finally, the fourth session will cover eight practical operational case studies covering different uses of SupTech by different regulatory authorities around the world. The case studies will allow attendees to understand the operational challenges and risks of implementing SupTech solutions as well as the significant benefits that such solutions offer global regulatory authorities.

## AN INTRODUCTION TO SUPERVISORY TECHNOLOGIES

- An Introduction to Supervisory Technologies (**SupTech**); SupTech Demand Drivers; SupTech Supply Drivers; SupTech Risks (Operational Risks; Legal Risks; Strategic Risks; Data Quality Issues; Resource Issues; Internal Support Issues).

- Artificial Intelligence (**AI**); Bayesian Networks; Big Data Analytics; Big Data; Cognitive Analytics; Data Push Approach; Data Pull Approach; Dynamic Predictive Supervision; Graph Learning; Heat Maps; Loan Default Forecasting; Machine Learning; Natural Language Processing (**NLP**); Neural Networks; Random Forest Techniques; Sentiment Analysis; Structured Data; Topic Modelling; Unstructured Data.

- Machine Learning Algorithms; Supervised Learning; Unsupervised Learning; Reinforcement Learning; Deep Learning.

## SUPTECH REGULATIONS AND OPERATIONS

- The Porter Hypothesis; Regulatory Evolution (Rules-Based; Principles-Based; Insight-Based); Regulatory Technology (**RegTech**) Adoption Approach; Digital Regulatory Reporting (**DRR**); Machine-readable Regulations.

- Common Challenges faced by Supervisory Authorities (Data Collection, Management, and Governance; Data Analysis);

- Challenges to implementing SupTech (Administrative Constraints; Data Silos; Difficulty Integrating SupTech solutions with Legacy Systems; Lack of Budgets; Lack of Clear Goals; Lack of Coordination; Locating and Retaining In-House Expertise).

- Risks to implementing SupTech (Cyber Risks; Data Security Risks; False Alerts; Less Focus on Qualitative Aspects; Opaque Tools; Operational Biases; Operational Risks; Privacy Risks; Third-Party Risks).

## SUPTECH USE CASES, DATA ANALYTICS, DATA VISUALISATION, AND VISUAL ANALYTICS

- SupTech, AI, and Market Surveillance (Market Manipulation; Insider Trading); Case Study: NASDAQ Sybenetix Market Abuse Surveillance Software System.

- Misconduct Analysis (Anti-Money Laundering (AML); Combatting the financing of terrorism (CFT); Fraud Detection; Mis-selling); **Case Study**: Ayasdi AML Intelligent Segmentation.

- Microprudential Supervision (Credit Risk Evaluation; Liquidity Risk Detection); Macroprudential Supervision (Macro-financial Risks; Signals of Emerging Risks; Policy Evaluations).

- Data Analytics (Real Time Predictive Monitoring); Data Visualisation (Modelling and Visualisation Techniques; Scenario Analysis); Visual Analytics (Visualising Interrelationships and Interconnectedness; Visual Network Dashboards); and Network Analytics; **Case Study**: The Monetary Authority of Singapore Data Analytics Group.

## SUPTECH CASE STUDIES

- SupTech **Case Study**: (2011) Central Bank of Brazil, Risk-Based AML/CFT Supervision; SupTech **Case Study**: (2014) Financial Conduct Authority, Project Innovate and SupTech Initiatives.

- SupTech **Case Study**: (2015) Austrian Central Bank (**OeNB**), AuRep; SupTech **Case Study**: (2016) Bank of Lithuania, Complaints Handling and Dispute Resolution.

- SupTech **Case Study**: (2017) Mexican National Banking and Securities Commission (**CNBV**) AML SupTech Solution. SupTech **Case Study**: (2017) Rwandan Central Bank, Data Pull Approach.

- SupTech **Case Study**: (2017) The Monetary Authority of Singapore (**MAS**), SupTech Initiatives. SupTech **Case Study**: (2018) Mexico's CONSAR, Deep Learning Tool.

# KEY BENEFITS

# ABOUT STORM-7 CONSULTING

- Attendees will attend the world's leading course on SupTech, AI, and machine learning.

- Attendees will understand in greater depth the range of challenges and risks pertaining to the implementation and use of SupTech by supervisory authorities around the world, as well as the significant benefits and potential use cases for SupTech.

- Attendees will be guided through a range of practical operational SupTech case studies that will help to contextualise the use of SupTech and the current state-of-play in relation to the development of the RegTech technologies used in SupTech.

- Highly comprehensive training course materials consisting of a training course manual, training course materials manual, and four PowerPoint presentations.

Storm-7 Consulting is an international consulting company that provides premier intelligence, insight and support to global financial institutions. We provide cutting-edge conferences, events, public training courses, and in-house training courses to leading firms globally.

We provide expert regulatory compliance training covering areas such as GDPR, MiFID II, AEOI (FATCA & CRS), MAD 2 MAR (Market Abuse), CRD IV, PRIIPs, Solvency II, PSD2, CCP Clearing, AML/CFT, Stress Testing, and the Senior Managers and Certification Regime.

We provide unique and highly innovative marketing services to firms operating in the banking, (**RegTech**), and Financial Technology (**FinTech**) sectors.

We have received enquiries and bookings from leading firms around the world, such as the Abu Dhabi Investment Authority, Rothschild Investment Management (UK) Limited, Dubai Financial Market, CAF the Development Bank of Latin America, the Central Bank of Ireland, the Central Bank of Russia, APG Asset Management, Royal London Asset Management, Brandes Investment Partners, Eversheds, Erste Group, Millenium Information Technologies, Deutsche Bank, Bethmann Bank AG, ICBC Standard Bank, Gulf International Bank, Raiffeisen Bank International AG, and BGC Partners.

We have collaborated with firms around the world, such as the United Kingdom Financial Conduct Authority, Thomson Reuters, Sopra Steria, SunGard, Capco, OTC Partners New York, IHS Markit, Eze Castle Integration, ICMA Centre, Sybenetix, Heriot Watt University, JP Morgan Asset Management, Custom House Global Fund Services, Cass Business School, Rixtrema, Solum Financial, D2 Legal Technology, Eurekahedge, Financial IT, HedgeConnection, Alpha Journal, ATMonitor, HF Alert, and CrowdReviews.

Bank for International Settlements (2018). Innovative technology in financial supervision (suptech) – the experience of early users. (July), FSI Insights on policy implementation No.9.

TORONTOCENTRE (2018). SupTech: Leveraging Technology for Better Supervision. (July), Toronto Leadership Centre.

# ABOUT THE
# EXPERT TRAINER

Rodrigo Zepeda is Co-Founder and Managing Director of Storm-7 Consulting. He is an expert consultant who specialises in derivatives and banking and financial services law, regulation, and compliance. He is an expert in a very broad range of regulatory compliance frameworks such as FATCA, the OECD CRS, MiFID II, MAD 2 MAR, PSD2, CRD IV, Solvency II, OTC Derivatives, CCP Clearing, PRIIPs, BRRD, AML4, and the GDPR. He holds a LLB degree, a LLM Masters degree in International and Comparative Business Law, and has passed the New York Bar Examination.
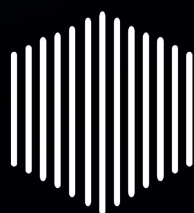
He was an Associate (ACSI) of the Chartered Institute for Securities & Investment from 2004 to 2014 and is now a Chartered Member (MCSI). He has created and delivered numerous conferences and training courses around the world such as 'FATCA for Latin American Firms' (Santo Domingo, Dominican Republic, Panama City, Panama), 'MiFID II: Regulatory, Risk, and Compliance (London), and 'Market Abuse: Operational Compliance' (London), 'AEOI (FATCA & CRS)' (Manama, Bahrain). He has also delivered numerous In-House Training Courses around the world to major international financial institutions such as The Abu Dhabi Investment Authority (MiFID II:

Operational Compliance, Abu Dhabi, the United Arab Emirates), the United Nations Principles of Responsible Investment (MiFID II: Final Review, London), CAF, the Development Bank of Latin America (Swaps and Over-the-counter Derivatives, Lima, Peru), Rothschild Investment Management (UK) Limited (AEOI (FATCA & CRS), London) and Bethmann Bank AG (MAD 2 MAR, Frankfurt).

He is a Reviewer for the Journal of Financial Regulation and Compliance and has also published widely in leading industry journals such as the Capco Institute's Journal of Financial Transformation, the Journal of International Banking Law and Regulation, as well as e-books on derivatives law. Noted publications include "Optimizing Risk Allocation for CCPs under the European Market Infrastructure Regulation"; "The ISDA Master Agreement 2012: A Missed Opportunity"; "The ISDA Master Agreement: The Derivatives Risk Management Tool of the 21st Century?"; "To EU, or not to EU: that is the AIFMD question"; and "The Industrialization Blueprint: Re-Engineering the Future of Banking and Financial Services?".

# FOR BOOKINGS AND ENQUIRIES:

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