

# Fraud Detection and Prevention using Data-Driven Approach

*Skills and expertise to help you increase your knowledge in the field of digital technologies*

## About this workshop

As a matter of fact, today attackers and fraudsters continually expanding their knowledge and sharpen their capabilities. As a result, with these skills, online businesses are losing millions of dollars every year to fraud, paying heavy penalties and fines with these losses growing each year. Above all, it is clear that rule-based approaches to fraud detection and prevention have not been relevant or helpful anymore and organizations are challenged to look beyond their present approach. The new approach leaves security and fraud teams looking to AI and machine learning models as the next generation in fraud detection and protection.

In this course, we will discuss the merits of a data-driven approach to fraud detection and prevention, along with how having the right data and the best data are critically important.



**Organization needs a counter fraud approach to protect the Digital Banking Ecosystem and mitigate the risks arising from fraudulent activity by developing a counter fraud framework.**

In a nut shell, organizations must understand the total value of **investing** into their **resources** rather paying heavy penalties against the new data protection laws.

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## A little backdrop:

Fraud impacts everyone—from individual consumers to large corporations.

Traditional rules-based systems may have been effective in the past in identifying fraud, but they become ineffective and stale as fraudsters learn how to bypass those rules. It becomes even more challenging due to the large volumes of data that need to be processed and examined to detect fraud, in addition to the constantly changing tactics for committing fraud – those activities are usually hidden in large volumes of data.

Recently developed machine learning techniques are increasingly effective in detecting fraud with the advances in data systems (e.g. big data, streaming data) and computational systems (e.g. high-performance computing, GPU). As a result, it is possible to identify fraudulent patterns of behavior in data that is constantly being captured from day-to-day activities. In addition, it is feasible to address the challenges associated with fraudsters changing their tactics.

## Workshop details:

### Unit 1 - Financial Crime and Fraud in the age of Cybersecurity

- A world without cybersecurity.
- Global Threat Intelligence Index reports in a view.
- Top Security Concerns for the Executive Management.
- Assess and mitigate vulnerabilities in mobile systems.
- Differences between Information Security and Cybersecurity.
- Changing Attacker Profiles – Increasing Resources and Sophistication.
- Attack Vector, Attack Surface and Malicious Actors.
- Understanding Security Elements – Knowing security threats and their channels.
- Differences between Information Security and Cybersecurity.
- Multiple layers of protection offered by Cybersecurity.

- Understand Personally Identifiable Information and Data anonymization.
- Understand Financial crime or fraud.
- How can a compliance strategy improve customer trust?
- Compliance and Financial Crime/Fraud? And Types of frauds.
- The Difference between automated and human-driven fraud.
- Fraud and financial crime – A small Industry backdrop.
- Challenges to combat Financial Crime in Financial Domain.
- Cyber profile of Fraud and Financial Crime – An illustrated Example.
- Crime pathways are converging, blurring traditional distinctions among cyber breaches, fraud, and financial crimes.
- Adoption of Cybersecurity best practices.
- 10 key steps to Cybersecurity.
- Top 11 ways poor Cybersecurity can harm you.
- Unit 1 Assessment.

### Unit 2 - The Industrialization of Fraud and Organized Attack Lifecycle

- The Industrialization of Fraud – What is it? And their components.
- What is online fraud, and what should businesses know about it?
- Understand Enterprise Fraud Management.
- Layered Solutions are becoming an Essential for maximum security.
- Understand how to combat WAF attacks, Bot detection, Click-farm Detection, Defense against API attacks.
- Click Hijacking, Device ID Reset Fraud, and How Click Injection Works.
- Understand the role of Machine learning and behavioral analytics.
- Understanding the Organized Attack Lifecycle.
- Describe Siloed Attack Defense – Advanced Telemetry.
- Secure the entire journey – From perimeter to user.
- Attack Progression Model used by Cybercriminals.
- The Siloed Attack Defense Vs. Unified Defense View.
- Three main categories of Signals.
- Fraud and Friction Use Cases and Case Study.
- Customer Case Study – Adaptive Authentication.
- Convergence of Fraud and Information Security Functions
- Functional Convergence in Financial Industry & Convergence Mechanism.
- Unit 2 Assessment.

*This course is designed on the basis that you have got nothing to lose and everything to gain.*



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## Target Audience for this workshop

CXO Suite, Business leaders, Director IT and IT Managers, Legal, and internal Audit and Regulators teams, Risk and Compliance, information security and cybersecurity teams, Enterprise Architectures with a familiarity of basic IT/IS security concepts.

This course is designed on the basis that you have got nothing to lose and everything to gain

## About the instructor

Training will be delivered by an experienced trainer with 25+ years of career experience imparting education and training services both locally and internationally and have served international enterprise technology vendors including IBM, Fujitsu, and ICL.

Our instructor holds various industry professional certifications in the space of enterprise servers and storage technologies, Information Security, Enterprise Architecture, ITIL, Cloud, Virtualization, Green IT, and a co-author of 10 IBM Redbooks.

The training course flow will be a mix of lectures & classroom discussions and videos so that participants can have a detailed understanding of various components and technologies used to combat against cyber attacks.

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## Unit 3 - Exploring Fraud Detection and Prevention

### Approaches

- Challenges associated to Fraud Detection and Prevention Approaches.
- Exploring Fraud Detection and their Techniques and fraud detection using data-driven techniques.
- Monitoring Metrics for Behavior-based Fraud Detection Solution.
- Fraud Controls Reference Approach and Framework.
- The Predictive Fraud values and thresholds model – An example.
- Data-driven approach and Traditional Rule based method approach.
- Take advantage of a Layered Fraud Prevention Approach.
- A solution that enable organizations to safe guard against application exploits.
- Identifying the right Security Solution for your Enterprise Applications.
- Protect your Credentials – Guard against the most common tactic used by hackers.
- Mitigate Application Vulnerabilities and Security Due Diligence.
- Defend against software and code-level vulnerabilities.
- Mitigate Bots & Abuse by removing unwanted automation that can lead to account takeover & fraud.
- Manage and Secure APIS and to solve your modern API challenges.
- Securing your API, API Management and API Gateway.
- Integrate Security into Continuous Integration/Continuous Development Pipelines.
- Why Account Takeover (ATO) Prevention Matters.
- Fight Back Fraud – A brief summary.
- Bringing together financial crime, fraud, and cyber operations.
- Exploring the CARTA Approach to Fraud & Risk Management.
- Unfolding the CARTA Approach and CARTA Adaptive Access Protection Architecture.
- Fraud Detection benefits using CARTA.
- Taking the CARTA Approach to your Fraud Prevention Strategy.
- Stepwise approach to combat Fraud – Functional components..
- Unit 3 Assessment.

## Unit 4 - Compliance and Regulatory Aspects of Security

- Understanding Data Analytics and its importance from Application Security PoV.
- Rule-based Vs ML-based Fraud Detection Systems – Recap Summary.
- Threats and security challenges faced today by Banking and FSS industry.
- Managing compliance risk and their types.
- Privacy Compliance – A Dominant Business Concern.
- Data Anonymization, Data De-Anonymization and their types.
- Roadmap to improved Data Privacy.
- Managing compliance risk and their types.
- The need for having a Compliance Department.

- Areas of responsibility falls under the Compliance Department.
- The Role of Compliance Officers and Regulators and Regulatory Bodies Key Takeaways.
- Special considerations and requirements for compliance department.
- Generalized Compliance Department Organization Organogram.
- Understanding the importance of Compliance Regulations.
- Regulatory Compliance in Cybersecurity.
- Assessing which Compliance Regulations relate to an Organization.
- How do you implement regulatory compliance in IT?
- Types of Cybersecurity frameworks and regulations.
- Understanding the importance of Compliance Regulations.
- Common Archetypes for Compliance Models for Banks.
- Elements and Components of a Compliance Framework.
- NIST – A Cybersecurity Risk Management Framework – General Information.
- Differences Between Compliance and Security.
- Threat Protection – The bigger picture.
- Unit 4 Assessment.

## The importance of this workshop

Fraud can occur in a multitude of ways. Our comprehensive fraud detection and prevention training course will enhance your fraud awareness so you know exactly what to look for in every area of your organization. Learn how to apply the various evidence-gathering techniques used to detect fraud. Learn the basics of forensic accounting and how it can be used to investigate fraud and embezzlement and in the analysis of financial information. Discover how to determine your organization's fraud risk liability. Successful completion of our fraud detection and prevention training course may also help you identify opportunities where you can further optimize your present set of solution based on fraud detection and prevention technologies.

## Detail Information

Course Code	: TN219
Course Duration	: 2 Day Online Workshop
Course Location	: TLC, Customer On-site and Online.
Terms & Conditions	: 100% payment in advance.
Course Deliverable	: Comprehensive Student Guide and Course Certificate

For additional information, please write to us at: [info@tlcpak.com](mailto:info@tlcpak.com)

*Opportunities are made, not found*

