

The e-commerce industry in India

E-commerce is one of the fastest growing sectors in India today, adding 6 million new entrants every month, supported by a growing internet user base¹. With such a growth pace, the e-commerce industry is projected to touch around USD 10-20 billion by 2017-20202.

The e-commerce industry, in its present form, is a complex ecosystem. It involves large volumes of transactions, reliance on newer technologies such as mobile wallets for payments and mobile apps for customer access, and dependence on third-party vendors for product procurement and logistics. Over time, the fraud risks, including phishing, identity theft related to payment systems and thirdparty fraud risks in procurement and logistics, such as counterfeiting, bribery and corruption etc., have started collectively impacting e-commerce businesses. In addition, with fierce competition to gain market share through aggressive pricing strategies, such as deep discounting, meeting profitability expectations of investors and the race to seek funds for expansion, the e-commerce companies may be forced to overlook their back-end processes and controls, thereby increasing the risk of frauds.

An illustrative fraud-risk landscape of an e-commerce market place company is indicated below:



Order placement processing

Inflated MRP for

Unauthorized price

Unauthorised/fake

Presence of black

under a new

adequate vendor

due diligence

fake discounts

change

orders









- Credit/Debit Card fraud using stolen information
- Payment gateway vulnerabilities (Hacking, Lack of authenticated credentials etc.)
- listed entities in the system (who Cash on delivery (non-receipt of tend to re-apply payment, fraud by cash collection name to register in the system) in agent) the absence of

System / Network operations



- Phishing fraud (Identity theft)
- Intrusion/Cyber attacks (e.g. malware)
- Pharming
- System manipulation e.g. redemption of coupon even on cancellation of order. avail discount on expired coupons, order executed without payment

Returns and refunds



- Return of used products
- Tampering with product in order to return it
- Customer initiates chargeback without returning the product

Sellers / **Vendors** positioning

- Fake/forged documents for registration
- Ghost vendors fraud
- Impersonation by sellers for buy back of aoods
- Inadequate vendor background checks resulting in third party fraud risks

Delivery logistics



- Leakage/ misappropriation/ theft of goods from warehouse
- Change of shipping address after order placement to deliver the goods
- Product intentionally misplaced/replaced/ not delivered
- Delivery of defective/ counterfeit products

'As of June 2015, India is reported to have an internet user base of about 354 million being third largest user base in world. Source - http://articles.economictimes.indiatimes. $com/2015-09-03/news/66178659_1_user-base-iamai-internet-and-mobile-association$

2 Source: http://www.business-standard.com/article/news-cm/ecommerce-industry-likely-to-spend-addl-500-to-1000-mln-usd-on-infrastructure-logistics-warehousing-till-2017-2020study-114082100578_1.html

Key questions the senior management needs to ask

Are we aware of the fraud vulnerabilities/ areas of revenue leakage in our business? Are our existing revenue assurance frameworks robust enough to mitigate these risks?

Do we know if counterfeit products are being sold through our marketplace?

Do we know if the third parties (vendor/ sellers) in our business ecosystem have an adverse reputation among their peers or the public?

Is our organisation complying with the statutory requirements such as the Companies Act 2013, Prevention of Corruption Act, 1988 etc.? If not, can the non-compliance impact our future funding prospects?

Have we gauged the effectiveness of our existing fraud risk management framework?



Our solutions

While most e-commerce organisations have realised the need for a strong internal team to manage fraud-risk-related vulnerabilities, working alongside third-party forensic experts can reveal inadequacies in the prevailing fraud risk management framework, as well as make organisations aware of newer fraud schemes.

Deloitte has been recognised as the world leader in forensic and dispute services by Kennedy Research 2014, and our India practice has a dedicated e-commerce-focused team offering select services to companies. Some of these services are listed below.

Revenue leakage and fraud risk management (RLFRM)

We can assist your organisation in:

- Assessing different revenue generation avenues and the associated processes
- Assessing processes pertaining to customer-wallet management
- Conducting maturity assessment of the current state of revenue assurance and fraud management practice both at marketplace and digital wallets
- Conducting gap assessment by identifying potential areas of revenue leakages or frauds that are unaddressed in the existing revenue assurance processes
- Formulating and implementing customised RLFRM framework (including dashboard) to mitigate revenue leakages and potential fraud areas
- Operationalising RLFRM function through managed services support

Brand protection advisory

We can assist in assessing your organisation's current brand perception among stake holders such as customers and partners through:

- Analysis of internal information such as QRC (Query, Resolution and Complaint) data base, billing, provisioning, wallet transactions and customer satisfaction score to arrive at brand impact indicators
- Mystery shopping throughout the customer life cycle (onboarding experience to off-platform shopping experience) to determine the customer experience as well as flag the potential fraud risk areas (e.g. counterfeit products), including discreet enquiries to track down the counterfeit goods manufacturers to cut off the product source
- Workshops with key stakeholders to understand key concerns and root cause of issues
- Market/business intelligence across service operations, including vendors, to check for the presence of any counterfeit activity
- Sentiment analysis from social networking properties around customer dissatisfaction, fraud/ misconduct and any other negative brand publicity

Compliance review of thirdparty sellers

To ensure that sellers adhere to the norms and guidelines prescribed by your organisation, we can conduct onsite checks as well as online website sweeps to ascertain compliance levels. We can:

- Conduct physical checks on the sellers' businesses
- Conduct a visual check at the seller premises as well as the third-party delivery hubs based on compliance requirements to test the product quality, packaging material and product labelling, and packaging dimensions
- Verify the parity between product data (pertaining to quality, certifications etc.) entered into the system and the items actually sold
- Evaluate whether the seller is compliant based on the documents approved by the client

Our solutions Continued...

Cyber forensic incident response

We can help your organisation:

- To be aware of threat profiles and vulnerabilities and to respond effectively, should an attack happen
- Identify potential internal and external threats like customer information scrapping, business logic abuse, malicious attack footprint, etc. through our cyber forensic approach, which blends network forensics, security perimeter forensic analysis, activity forensic and data integrity forensic
- Analyse malware presence through a root-cause-oriented approach using our malware exploration framework, which focuses on reverse engineering the malware to provide insight into micro-grained code and hacked application modules, and on further testing of decoded malwares in an automated environment across all operating systems and digital devices

Competition law

Our competition law experts can help:

- Conduct competition-compliance programmes with data analytics, e-discovery and review of agreements to assess potential anti-competitive behaviour
- Define the relevant market for these businesses through consumer survey and economic and econometric analyses
- Conduct market studies to identify potential scenarios of dominance by looking at aspects such as:
 - Relevant market and defining the product (online and offline retail) and geographic markets using economic theory for the entity under examination
 - Cost structure and the pricing of the product
 - Quantifying whether the player was a dominant player in the "relevant market" by using concentration ratios and indexes
 - Use of sophisticated economic analysis tools like the recoupment test

Fraud risk management

We can help organisations set up a fraud risk management structure including:

- Development of fraud risk mitigation policy
- Comprehensive evaluation of antifraud programmes and controls as well as ethics and compliance programme
- Employee fraud awareness training(s)
- Establishment of a whistleblowing hotline
- Development of a Fraud Response Management Plan

Fraud investigation

We can help organisations investigate red flags from whistle-blower hotlines and internal audit reviews through computer forensic and accounting expertise, document and transactions analysis, combined with witness and third-party evidences.



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