

## Risk Management Report

Risk may be defined as the possibility to suffer damage or loss, characterized by three factors:

1. The Probability or likelihood that loss or damage will occur.
2. The Expected time of occurrence.
3. Magnitude of the negative impact that can result from its occurrence.

Focus on risk management enable us to achieve key business and strategic objectives by identifying, analyzing, evaluating, monitoring, governing and mitigating all known forms of risks or potential treats to these objectives. In order to achieve this objective, policies and relevant internal controls are developed as an on-going process to ensure we have an efficient risk management system in place with proper management of the Company’s resources and appropriate mitigation of risks.

We seek to achieve an appropriate balance between risk and reward in our business, and continue to build and enhance the risk management capabilities that assist in delivering our growth plans in a controlled environment.

### Risk Management Structure at Nucleus

At Nucleus, Risk Management is a disciplined way to deal with business uncertainty and the associated risk and opportunity.

This objective of this Risk Management at Nucleus is to:

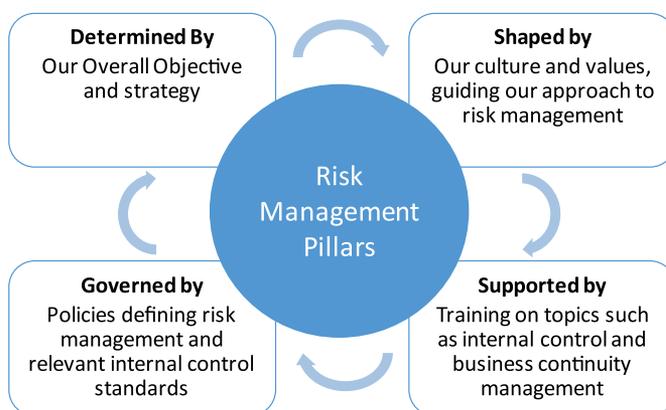
- Enable the Company to manage unexpected outcomes and reduce impact of risk events when they occur.
- Empower the Management to take informed decisions, under guidance of Board of Directors of the Company, that maximize value, reduce costs and balance risk with returns.
- Ultimately promote confidence amongst the Company’s stakeholders in the effectiveness of business management process of the Company and the ability to plan and meet strategic objectives.

Risk management in the Company is conducted across the organisation at various levels. The key components of Risk management structure are as follows:



At a strategic level, our risk management practices are:

- Risk Identification – Risk Management Committee (RMC) is responsible for identification and review of risks and mitigation plans. The Committee meets on a quarterly basis for identification and prioritization of risks. RMC conducts risk survey with the senior and middle level management of the Company to identify risks and rate them appropriately. Top risks are identified and remaining are categorized as other risks. The RMC then places updates to the Board on a quarterly basis, on key risks facing the Company, along with their mitigation plans.
- Risk measurement, mitigation and monitoring - At the end of every quarter, the Risk Management Committee invites status update of the mitigation plans of the top identified risks and if any changes have occurred in the nature of risks during the quarter. Basis the same, an analysis of exposure and potential impact are carried out. Mitigation plans are finalized, owners are identified and progress of mitigation actions are monitored and reviewed. Each top risk is mapped as per a Risk Criticality Matrix.
- Risk Reporting – Basis the above, a Risk update is prepared every quarter and provided to the Audit Committee and the Board. Entity level risks such as project risks, account level risks are reported to and discussed at appropriate levels of the organization.
- Integration with strategy and business planning - Identified risks are used as key inputs for the development of strategy and business plan.



### Risks and Concerns

The Company’s business operations are subject to various risks particular to the industry and certain generic risks including those described below, that could have an adverse impact on business.

**Product Obsolescence may affect our business potential.** The IT sector is characterized by technological changes at a rapid rate, evolution of existing products and introduction of new product. Latest technology trends are to be closely monitored to provide products in compliance with industry standards. As a Product Company, growth of the Company is based on the ability to offer products on latest technology trends and evolving industry standards. If we are unable to provide enhancements and new features for our existing applications or new applications that achieve market acceptance or that keep pace with rapid technological developments, our business and results of operations could be adversely affected. Our future success will depend

## Risk Management Report

on our ability to absorb new technology trends and develop solutions that will keep pace with changes in the markets in which we provide services. Despite our constant efforts, we cannot be sure that we will be successful in developing new products with evolving technologies in a timely or cost-effective manner and along with this the success of developed products also cannot be guaranteed. It can require long development and testing periods. Significant delays in new releases or significant problems in creating new products or services could adversely affect our revenue. Our new Product Strategy is based on rapid continuous evolution of the Products. Timely delivery of planned Scope of the Roadmap is its key. Developing new technologies is complex. Any delay or scope reduction can impact Sales and meeting customer commitments. To mitigate this risk, continuous investments are being made in conducting research and development to enhance product technology and features and develop new products. Technology and functionality road map for products is prepared and reviewed by the senior management and implemented. Accordingly, we have planned new releases in a year for each of the Products and are focusing on maximizing engineering capacity to it. Overload of Asks on the Roadmap from customers, prospects in the pipeline and tactical demands may lead to wrong prioritization and inefficiencies. This can further lead to the Roadmap becoming overloaded and stressed and we may see delays in the releases as an outcome of this.

Further high-level interaction with top class academic institutes is also being set up, to keep abreast with latest changes. We have made and expect to continue to make significant investments in research and development and related product opportunities. During the year, your Company has continued to enhance its solutions to take advantage of market trends, such as increasing digitalization of financial services. We have leveraged India Stack further to offer end to end digitalization of Loan lifecycle.

Your Company launched a sourcing channel application – mFin that offers specialized solution for microfinance loan application processing. This channel capability is fully extended to the core application processing platform FinnOne Neo CAS.

As a part of ongoing development program, your Company also launched FinnAxia 6.0. The trade finance solution in FinnAxia 6.0 comes with new features such as standby letters of credit- which mitigates risks in the exports business; shipping guarantees-which provides benefits to the buyer with faster possession of goods and improved cash flow; and multi-currency import and export loans-which assist with funding trade transactions at important points throughout the trading cycle of a company; thus enabling seamless cross border trade. During the year, PaySe™ payment solutions have been expanded in both functionality and reach. PaySe today is truly an offline and online payment solution. PaySe offline payment solutions have been deployed in rural India and is going to be a key infrastructure in making digital villages. PaySe is moving in the direction of partnering with financial institutions to make micro credit on tap a reality.

**Our business depends on our ability to attract and retain talent.** Product centric model of the Company especially demands retention of key talent; people with domain knowledge and technical skills. We also rely on our leadership team in the areas of product development, marketing, sales, services, and general and administrative functions and on mission-critical individual contributors in product development. High Attrition which can happen due to many factors including growth,

compensation expectations, work and empowerment processes, leadership, infrastructure etc. To execute our growth plan, we must attract and retain highly qualified personnel, and our managers must be successful in hiring employees who share our values and have the competencies to succeed at Nucleus. To mitigate this risk, we are making the line manager more people centric and in collaboration with HR Team. Your Company has also outsourced recruitment of engineering team to multiple companies. This is being done in addition to the internal recruitment in all the areas. We have taken many initiatives in the last year to retain the best talent. We continuously review and improvise them for still better retention. We give exposure to talented people to work with our customers in different geographies and understand customer expectations in times to come. These expectations are then build in the product to make it future ready. We also lay focus on learning and development, help them in understanding their career, identifying achievers and rewarding them. Succession planning for key positions in Senior Management (i.e. one level below the CEO position) and Heads of Departments is also a critical aspect of risk management.

**If we cannot maintain our corporate culture, we could lose the innovation, teamwork and passion that we believe contribute to our success, and our business may be harmed.** We believe that a critical component of our success has been our corporate culture, as reflected in our core values: Integrity, Respect, Result Orientation, Innovation and Collaboration. As we continue to grow, we will need to maintain our corporate culture among a larger number of employees dispersed in various geographic regions. Any failure to preserve our culture could negatively affect our future success, including our ability to retain and recruit personnel and to effectively focus on and pursue our corporate objectives. During the year, there have been many workshops and trainings conducted across the organization, to instill a system and keep reminding the workforce about the values, which has helped the organization to grow in the past.

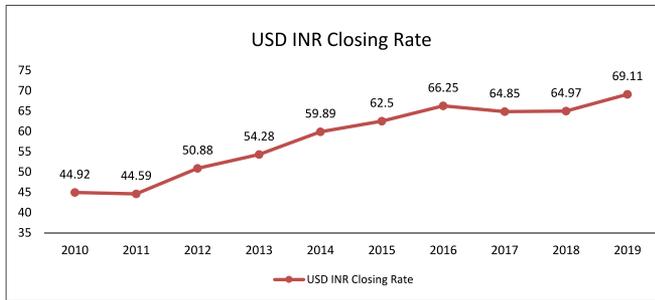
**Our organization structure, processes and business models may not be scalable.** The structures and processes of the Company business operations may not have adequate potential to grow the revenue base significantly faster than the cost base; and hence may not be adequate for growth. Business models; how we sell, how we license, how we support, product development and life cycle management, go to market strategy, may also not be suitable for significant year on year growth. The Management is working towards mitigating this risk by instilling measures to develop and refresh leadership skills and competencies in employees, Retain best suited talent, Automate processes including installing enterprise software systems and Innovating business models.

**Company is constantly exposed to the risk of volatility in foreign exchange rates.** The Company operates internationally in 50 plus countries and a major portion of our business is transacted in currencies other than the Indian Rupee. Nearly seventy percent of our revenue is denominated in foreign currency, predominantly the US Dollar. Seventy percent of our expenses are in the Indian Rupee. Foreign exchange currency markets are volatile, and such fluctuations in foreign currency exchange rates could materially and adversely affect the Company's profit margins and results of operations and therefore the Company is exposed to continuing risk of foreign exchange fluctuation.

The exchange rate of the Rupee has been extremely volatile in the

## Risk Management Report

last ten years as evidenced by the succeeding graph.



Source: FEDAI

The volatility in the foreign currency markets may make it difficult to hedge our foreign currency exposures effectively. Inadequacies in the hedging mechanisms to deal with exchange rate fluctuation could expose the Company to even larger losses than envisaged due to exchange rate fluctuations. To mitigate this risk, the Company follows a well-defined policy of hedging close to receivables through Forward Contracts which are designated as Highly Probable forecast transactions. The Company has a conservative approach and does not speculate in foreign currency markets. Forwards are held to maturity and regular reporting and monitoring systems are in place including quarterly updates to the Audit Committee. Clear guidelines for concluding derivative transactions have been laid down and arrangements have been institutionalized to facilitate periodic review and audit of the operation, impact and consequences of such transactions, including verifying compliance with extant laws and regulations.

The hedging strategies that we have implemented, or may in the future implement, to mitigate foreign currency exchange rate risks, may not reduce or completely offset our exposure to foreign exchange rate fluctuations. This may additionally also expose our business to unexpected market, operational and counterparty credit risks. We may incur losses from our use of derivative financial instruments that could have a material adverse effect on our business, results of operations and financial condition. At the year end, the Company had US\$ 6.95 million of hedges compared to US\$ 7.05 million at the beginning of the year.

Further, the policies of the Reserve Bank of India may change from time to time, also have a bearing on our operations and hence the revenues. Full or increased capital account convertibility, if introduced, could result in increased volatility in the fluctuations of exchange rates between the rupee and foreign currencies.

The following table gives details in respect of the outstanding foreign exchange forward and option contracts:

	As of March 31,	
	2019	2018
Aggregate amount of outstanding forward and options contracts	\$ 6.95 million	\$ 7.05 million
Gain/(loss) on outstanding forward and options contracts reflected in the Hedging Reserve in the Balance Sheet	₹ 1.83 crore	₹ 0.03 crore

**Legal Compliances world-wide expose us to additional risks.** The Company is an incorporated legal entity and is impacted by changes in various laws, rules and regulations like Companies Act, Accounting Standards, Labour laws, SEBI Regulations, etc. Further the Company is incorporated in India, and has subsidiaries overseas in Japan, Netherlands, Singapore, USA, Australia and South Africa; which caters to customers operating in various countries and a significant part of the revenue is derived from international sales. Nucleus operations world-wide may be affected by changes in political scenario, trade protection laws, policies and measures, and other regulatory requirements affecting trade and investment. This risk could typically result in penalties, financial loss, loss of reputation and are assessed on dimensions such as process effectiveness, compliance with policies and procedures and underlying controls. In order to mitigate these risks, various departments within the Company; taking care of compliances of applicable laws/rules etc., are manned by qualified personnel. A proactive team of legal experts is also positioned at the head-office of the Company. Expert external advice/opinion, is also taken, as per requirement, for ensuring compliance.

**Delays in project executions may adversely affect our implementations and revenues.** The Company faces risks associated with the execution of any project. There are risks of project delays, discomfort due to system quality and weak customer engagements and thus ability to deliver large projects with quality and within agreed timeliness is to be carefully monitored.

Our customers' deployment timeframes vary based on many factors including the number and type of applications being deployed, the complexity and scale of the customers' businesses and operations, the configuration requirements, the number of integrations with other systems, and other factors, many of which are beyond our control. The delivery model requires great skills in seamlessly integrating delivery, ensuring smooth communications between the customer, onsite teams as well as offsite teams. Any apprehensions of the customer have to be handled very carefully. There is also a risk of order cancellation, loss of market goodwill, financial liability and losses due to overruns on projects.

From a project governance perspective, this risk can be accurately monitored by having a good project plan with well-defined work breakdown structure that will provide visibility into key activities associated with essential project deliverables. To mitigate this risk, we work on the basis of a well thought plan:

- continuous monitoring of Projects
  - o Product Development capacity augmentation to deliver contractual commitments
  - o Customer Expectation Management/ Connect with customer officials at relevant levels
  - o Schedule and Cost containment
  - o Continuous Improvement in System Quality/ Testing Automation
  - o Continual Risk Monitoring
  - o Regulatory requirements fulfilment
  - o Product quality improvements
- Product Development capacity augmentation to deliver contractual commitments. A new program "Recruitment Program outsource" has been initiated where agencies will be identified

## Risk Management Report

for helping the organization in the overall recruitment process. These agencies will be working with the talent acquisition team of Nucleus.

- Focus on IPCM (Integrated Product Lifecycle Management)

**We face strong competition across all markets for our products and services.** The markets that we cater to, is highly competitive both from the perspective of new and existing competitors. We also expect that the markets in which we compete will continue to attract new well-funded competitors and new technologies, including technology companies, start-ups and international providers of similar products and services to ours. Our competitors range in size from Fortune 500 companies with significant research and development resources to small, specialized single-product businesses. In addition, we also compete with numerous small indigenous companies in various geographic markets. The Change in customer business model, is also a risk area as many of the areas in which we compete evolve rapidly with changing and disruptive technologies. Although we believe our product robustness is our competitive advantage, our competitors may be more effective in devoting technical, marketing, and financial resources to compete with us. In addition there is emerging competition from new players, specially for Bottom-of-the-Pyramid customer segment. The competitors offer a full suite of services and tend to focus on providing end to end solutions. Due to slowing growth and depleting margins, traditional service providers are now focusing more on developing their product business which is further increasing the competitive intensity in the market.

These competitive pressures may result in decreased sales volumes, price reductions, and/or increased operating costs, such as for marketing and sales incentives, resulting in lower revenue, gross margins, and operating income. We compete based on our ability to offer to our customers' competitive integrated solutions that provide the most current and desired product and services features. Our ability to remain competitive depends on our success in making innovative products and services. A broad referral base created through years, also helps us derive an edge over competition. The Company lays constant focus on product differentiation as well as product diversification to mitigate this risk. To provide further flexibility to the customers the company is providing SaaS offering and flexible pricing options.

The Company is also continually investing in marketing mandated with the below objectives:

- Ensure that the Company is known to provide high quality, innovative lending and transaction banking solutions to the target markets.
- Establish company as Industry Thought Leader
- Fully equip the sales team with the material and tools required to sell the product or service they represent.

**Non-utilization of Surplus Funds may affect growth.** Over the years, internal cash accruals more than adequately covered the working capital requirements, capital expenditure and dividend payments. The Company has been consistently following a conservative investment policy maintaining a reasonably high level of cash and cash equivalents which enable the Company to not only eliminate short and medium term liquidity risks but also scale up operations at a short notice. Non-optimal utilization of the surplus funds may pose a risk. For ensuring continuity of business operations and to have liquidity in business, a mix of investments with some low earning assets has

also to be maintained by the Company. Inadequate management of the investment mix of the Company could lead to either Shareholder Value destruction or a high exposure to the risk of liquidity crunch. The Company is regularly paying dividends. At the same time, the management is always scouting for investment options which are relevant and meaningful for in-organic growth.

**We may not be able to adequately protect our Intellectual Property (IP) rights.** Your Company has an IP led business model and globally licenses IP in the form of products for the Banking and Financial Services Industry. We rely on patent, copyright, trade secret and trademark laws, trade secret protection, and confidentiality or license agreements with our employees, customers, partners, and others to protect our intellectual property rights. Protecting our global intellectual property rights and combating unlicensed copying and use of software and other intellectual property is challenging. Any inaction to prevent violation or misuse of intellectual property could cause significant damage to our reputation and adversely affect our revenue and results of operations.

We continue to make significant expenditure related to the use of technology and intellectual property rights as part of our strategy to manage this risk. The Company has system and processes in place to ensure protection to the intellectual property rights. As a policy, the Company develops own IP at its own cost using own resources and is actively engaged in seeking maximum legal protection for the Intellectual Property through a combination of trademarks, confidentiality procedures and contractual provisions.

**Increased exposure with specific customers may impact our profitability.** This may result in an increase in the credit risk and make us highly vulnerable for customers negotiating positions at the time of contract renewal or work distribution among multiple vendors. The group's profitability and revenues would be affected in case of loss of business with these major customers, significant downsizing of projects or moving work-in-house by them. Our top five and top ten customers generated approximately 38 % and 49 %, respectively, of our revenues for FY 19. The loss of any of our large customers could have a material adverse effect on our business and profitability. At the same time, large customers help us scale up revenues quickly and repeat-business contributes to higher margins through lower marketing costs. We being in the product space, enjoy enduring long-term relationships with large customers. These advantages and risks have to be balanced and we believe the solution is to increase the number of large customers, as business with existing customers is the backbone of our platform for providing complete product and services solutions.

We aim to build long term strategic relationships with Customers in order to maximise the value provided to both parties. Through strong relationships, we are able to further develop products according to industry needs and requirements. We believe that the solution is to increase the number of large customers, as business with existing customers is the backbone of the platform for providing complete product and services solutions

**Our inability to maintain and devise effective internal control methods may affect us adversely.** Until recently, many organizations were overly focused on a financial reporting controls-based monitoring framework. But the global financial crisis highlighted that many of the most impactful risks stem from external circumstances. Moving forward, risk management and control systems should take a wider perspective since organizations exist as part of an open system of dynamic variables. While we may introduce the best of processes

## Risk Management Report

to check and prevent error, inherent limitations like that of human error etc. cannot be ruled out and hence internal control might not prevent or detect all misstatements or fraud. The Company has an Internal Control System commensurate with the size, scale and complexity of operations. This has been designed to provide reasonable assurance with regard to recording and providing reliable financial and operational information, complying with applicable statutes, safeguarding assets from unauthorised use, executing transactions with proper authorisation and ensuring compliance of corporate policies. The management assessed the effectiveness of the Company's internal control over financial reporting (as defined in Clause 17 of SEBI Regulations 2015) as of March 31, 2019.

BSR Associates and LLP, the statutory auditors of the Company has audited the financial statements included in this annual report and has issued an attestation report on our internal control over financial reporting (as defined in section 143 of Companies Act 2013).

**Our prime focus on providing products and services only in the BFS domain to Banks and Financial Institutions exposes us to the risk of Industry concentration.** For the foreseeable future, we expect to continue to derive our revenues from products and services we provide to the financial services industry. Given this concentration, we are exposed to the global economic conditions in the financial services industry. A slowdown in economy translates to reduction or a delay in technology spending decisions by banking & financial services firms, which could have adverse effect on our business and financial conditions. The BFSI industry segment is witnessing an increased spend on strategic initiatives like automation, digitisation and simplification. Digitisation is now the default strategy for banks. The digital revolution is redrawing the boundaries of financial services and lowering entry barriers encouraging challengers to emerge. While acknowledging this risk, we continue to focus on this sector and are confident that our "Value" based solutions will find greater market success. Our focus now is on improving efficiency by maintaining the existing operations at a lower cost. Also to be proactive and keep a sense of agility, knowledge sessions and continuous trainings for required skill sets, empowering the work force with latest tools, and technical designs.

The present situation emphasizes the need for a strong risk management strategy to sense and avert systemic failures.

**Security vulnerabilities and business continuity risk pose a threat to successfully running our operations.** Our inability to put in place a Business Continuity Plan (BCP) to ensure the maintenance or recovery of operations, including service delivery to the consumers, when confronted with adverse events such as a disruption or failure of our systems or operations in the event of a major earthquake, weather event, cyber-attack, terrorist attack, or other catastrophic event which could cause delays in completing sales, providing services, or performing other mission-critical functions. A significant portion of our research and development activities, and certain other critical business operations are located in Noida, India (our corporate headquarters) which is adjacent to the national capital of India, Delhi. Here it may be worthwhile to mention that, according to a seismic zoning map issued by the Bureau of Indian Standards and quoted in the National Disaster Management (NDM) report, Delhi belongs to Zone IV, a severe intensity seismic zone. Any catastrophic event that results in the destruction or disruption of any of our critical business or information technology systems could harm our ability to conduct normal business operations.

To counter this risk, we have setup an Online disaster recovery site

to replicate our IPR (Source code) in different seismic zone and backup copy on tape. In addition to this we are also having Disaster Recovery setup for few customers in different seismic zone who has agreement with Nucleus for business continuity and uninterrupted support. Though this facility is not in place for all the customers. The Company is continuously investing in security of its operations & processes and evaluating the risks on periodic basis. We are an ISO 27001: 2013 (ISMS) certified organization, which reflects our attitude to increase adherence to secure practices. On the security front, strict procedures are in place to control the level of access to Datacenters and other sensitive areas. Access to the premises is controlled through Biometric access control systems and proximity cards. The Company has invested significantly in a state of the art network infrastructure for managing its operations and for establishing high-speed redundant links to overseas destinations. Additionally, the Internet filtering tools prevent any type of non-business usage over Internet within office and outside office. We have implemented Data loss prevention on mail gateway and laptops to safe guard the company IPR.

### **Adverse geo-political and market conditions may harm our business.**

Our business is influenced by a range of factors that are beyond our control. These include:

- General economic and business conditions;
- The overall demand for enterprise software;
- Customer budgetary constraints or shifts in spending priorities; and
- General political developments

The banking software industry is highly competitive and continues to evolve and innovate at a rapid rate. The rate of potential product obsolescence and level of competition amongst the providers is significant. We respond to these economic conditions through our commitment to product innovation and new product strategies.

Your Company has customers located in more than 50 countries and nearly 70% of the revenue comes from international sales. The global nature of business creates operational and economic risks such as deterioration of social, political or economic condition in a country or region and difficulties in staffing and managing foreign operations.

Adverse geo-political and economic conditions leading to negative / low GDP growth may cause lower IT spending and adversely affect our revenue. Customers may curtail and /or postpone their budgets for investments in technology. Challenging economic conditions also may impair the ability of our customers to pay for products and services they have purchased. As a result, provision for doubtful accounts and write-offs of accounts receivable may increase. Our global exposure enables us to leverage growth from both Developed and emerging economies and focusing on value based solutions which enable our customers to significantly reduce cost in a difficult environment.

### **Risks Associated with Acquisitions and New Product Lines and Markets.**

The transactions and arrangements such as acquisitions and development and launch of new product categories and product lines, involve significant challenges and risks including that they do not advance our business strategy, that projected or satisfactory level of sales, profits and/or return on investment for a new business will not be generated, that we have difficulty, delays and/or unanticipated costs in integrating the business, operations, personnel, and/or systems of an acquired business or that they distract management from our other businesses, the Company's ability to retain and appropriately motivate key personnel of an acquired business. The

success of these transactions and arrangements will depend in part on our ability to leverage them to enhance our existing products and services or develop compelling new ones. It may take longer than expected to realize the full benefits from these transactions and arrangements, such as increased revenue, enhanced efficiencies, or increased market share, or the benefits may ultimately be smaller than we expected.

**There is always an inherent risk of Insider Trading that may happen in the shares of your public Limited Company.** With your Company shares listed on National Stock Exchange of India Ltd. and Bombay Stock Exchange Ltd., there is always an inherent risk of Insider Trading that may happen in the shares of the Company. Trading in Nucleus shares by the designated employees of the Company on the basis of price sensitive information or communication counseling or procuring any unpublished price sensitive information to or from any person may be termed as insider trading. Insider trading is a matter of concern for the Management of the Company and to mitigate this risk, “Code for Prevention of Insider Trading” is implemented in the Company, and is reviewed by the Audit Committee time and again to ensure compliance and updation with the regulatory amendments. Secretarial audit

includes a review of policies and processes governing any trading in the Company’s shares by various stakeholders.

**We have partnerships with third parties for product delivery; failure on their part to deliver, could affect our performance.** In some cases, we partner with third party vendors, for both software and hardware, who provide embedded or aligned products to support the services and product offerings provided by us. In such instances, our ability to deliver complete solution to our customers depends on our and our partners’ ability to meet the quality standards of our customers’. If we or our partners fail to deliver appropriately, our ability to complete the contract may be adversely affected, which may have a material and adverse impact on our revenue and profitability. Also, if we fail to develop new relationships and enhance existing relationships with channel partners, software suppliers, system integrators, and independent software vendors (ISVs) that contribute to the success of our products and services, our business, financial position, profit, and cash flows may be adversely impacted. To counter this risk the Company has a dedicated Alliance Management Team to enhance the partnership with reputed firms and ensure proper contractual formalities before aligning with any such partner to reduce or limit the risk of their non/low performance.