

# Technology

# **Our recent updates**



# <page-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><image><image><image>

# Productivity gains and Indian IT – What is the value at risk?

Among generative AI's many use cases, its potential to disrupt the Software Development Life Cycle (SDLC) stands out as the most immediate and tangible. While the debate rages on around the revenue accretive potential of GenAI, it is clear that organizations are already seeing clearly quantifiable productivity benefits in one area: SDLC or Application Development and Maintenance (ADM), which accounts for 35-45% of the IT service industry's revenues.

We took a two pronged approach to estimate the time savings delivered by tools such as GitHub Copilot. First, we did some digging into the research available so far—rather than relying on anecdotal evidence, there is now concrete research that documents time savings across various IT services tasks (as listed in the appendix on page 8). We have also been picking the brains of industry experts (we recently invited Mr. Saurabh Gupta from HFSResearch for a fire-side chat on the same topic). Our key findings: 1) Across various stages of the SDLC, there is a 10-50% productivity gain from GenAl tools, 2) The upper-end of these estimates assumes enterprise-wide scale-up of Agentic AI.

Key takeaways from the report: For most IT companies, ADM accounts for 30-40% of total revenue. Our research suggests a ~40% productivity gain from enterprise-wide implementation of GenAI Copilot, putting ~10-15% of IT services revenues at risk.

# Key components of SDLC and the impact of GenAI on each of them

- We have broken down the SDLC into six operational buckets, each representing a different share of the total engineering effort within ADM.
- Low-level coding/routine feature work (20% of ADM): GenAI tools like Copilot drive ~55% efficiency in repetitive coding tasks, translating to ~11% of total ADM hours saved.
- Code review & test writing (20% of ADM): Automated suggestions and Algenerated test cases reduce effort by ~40%, resulting in an overall time saving of 8%.
- Debugging & incident response (28% of ADM): Al-driven root cause analysis and auto-remediation enable ~35% savings, cutting ~9.8% of the total engineering hours.
- Security fixes (15% of ADM): Copilot Autofix reduces remediation time by ~50%, saving ~7.5% of ADM effort.
- Documentation & deployment (17% of ADM): AI-generated documentation and scripted release pipelines deliver ~50% blended savings, accounting for ~8% of total hours.

This totals 44% of ADM hours that are potentially automatable in the near term. Since ADM accounts for ~30% of total IT services revenue, the revenue at risk from GenAI-driven productivity shifts is ~12-13%.

Abhishek Pathak - Research Analyst (Abhishek.Pathak@MotilalOswal.com)

Research analyst: Keval Bhagat (Keval.Bhagat@MotilalOswal.com) | Tushar Dhonde (Tushar.Dhonde@MotilalOswal.com)

Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.



# Is this real? Yes—assuming Agentic AI is real

- Our evidence stack for these figures includes research papers, GitHub product demos, and public rollouts of GitHub Copilots to date (sources are mentioned below). However, these numbers assume an almost utopian rollout of Agentic Al across enterprises—and herein lies the catch.
- AI agents can perform tasks autonomously and are capable of project-level orchestration; however, their implementation will require enterprises to transform their IT stack.
- This presents a chicken-and-egg situation—clients are reluctant to modernize their tech stacks as they continue to cope with macro uncertainty, which may result in a slower pace of change.
- That said, we echo the views of Mr. Gupta (summary of our interaction below): there is only so much cost saving in labour arbitrage and off shoring now, and the industry needs to enter a new "S curve" of efficiency gains.

# Parallels between the 'digital' vs 'legacy' divide in 2018-21

- The 2018-21 digital vs. legacy revenue divergence offers some insight into today's GenAI-led transition. As shown in Exhibits 2-4, digital revenues for TCS, Infosys, and HCL surged—rising as high as 57% YoY for TCS—while core (legacy) revenues remained flat or declined.
- In the current GenAI phase, we're seeing early signs of a similar nature: ADM and core IT services are facing productivity and pricing pressures, however the revenue uplift from scaled GenAI programs is still to materialize. This is exerting pressure on top-line growth, especially for large-cap companies. For Indian IT firms, the key is whether they can again bridge this value shift— by scaling GenAI from pilots to production.

# Key takeaways from our conversation with Mr. Saurabh Gupta (President, Research and Advisory Services, HFS Research)

- The industry is entering a new S-curve of productivity, with GenAI—particularly Agentic AI—driving faster-than-expected gains across development, testing, and maintenance.
- While legacy models of offshoring and rate card-based FTEs continue to dominate, their limitations are becoming increasingly apparent. Enterprise-wide tech debts—including data debt, process debt, and skill debt—pose significant roadblocks that must be addressed to successfully scale GenAI.
- GenAl adoption faces bottlenecks from outdated procurement practices, weak process maturity, and an underprepared talent ecosystem, despite evidence of 30%+ productivity gains in in-house use cases.
- SDLC is a major impact zone, along with cybersecurity and commoditized BPO tasks. Market dynamics are shifting rapidly, with competition intensifying from startups and SaaS players; consulting firms crowding in; and traditional IT vendors needing to rethink their delivery models, pricing strategies, and IP-led differentiation.
- While GenAl delivers the best performance in modern stacks like Java and C++, significant challenges persist in complex legacy systems. The real opportunity lies not in efficiency alone, but in building new value streams—requiring deep production-grade capabilities, vertical specialization, and partner ecosystems to scale AI meaningfully.



# Key components of SDLC and the impact of GenAI on each of them

We have broken down the SDLC into six operational buckets, each representing a different share of total engineering effort within ADM. These buckets reflect how time is actually spent across delivery teams and serve as the basis for estimating GenAI-driven efficiency gains:

# Low-level coding / routine feature work:

 GenAl tools like Copilot drive ~55% efficiency in repetitive coding tasks, translating to ~11% of total ADM hours saved.

# **Code review & test writing:**

 Automated suggestions and AI-generated test cases reduce effort by ~40%, resulting in an overall time saving of 8%.

# **Debugging & incident response:**

 Al-driven root cause analysis and auto-remediation enable ~35% savings, cutting ~9.8% of total engineering hours.

# Security fixes:

■ Copilot Autofix reduces remediation time by ~50%, saving ~7.5% of ADM effort.

# **Documentation & deployment:**

 Al-generated documentation and scripted release pipelines deliver ~50% blended savings, accounting for ~8% of total hours.

This totals 44% of ADM hours that are potentially automatable in the near term. Since ADM accounts for ~30% of total IT services revenue, the revenue at risk from GenAI-driven productivity shifts is ~12-13%.



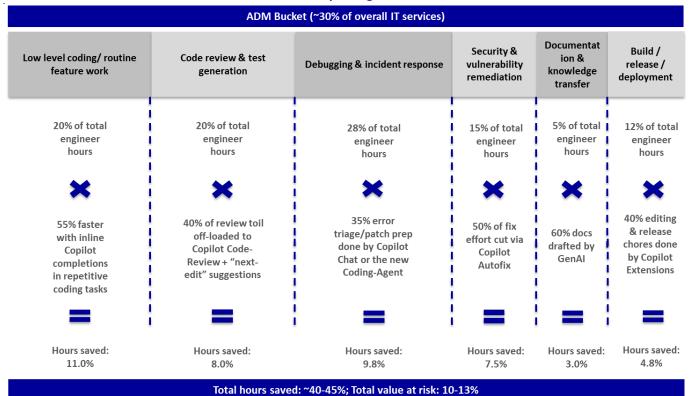


Exhibit 1: GenAI could automate ~43% of ADM hours, putting ~13% of overall IT services' value at risk

Source: Industry, MOFSL

# Research referred to for the gains mentioned above:

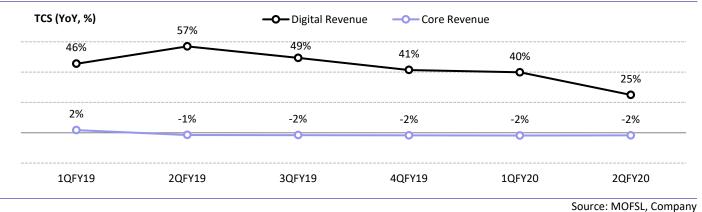
- 1. Generative AI and Security Operations Center Productivity: Evidence from Live Operations (Microsoft Security blog, 2025)
- 2. Copilot autofix announcement: <u>https://github.blog/news-insights/product-news/secure-code-more-than-three-times-faster-with-copilot-autofix/</u>
- 3. Security Copilot: Evidence of Productivity Gains in Live Operations (Microsoft Security blog, Nov 2024)
- 4. <u>Is Github Copilot worth it? Here is what the data says Faros + Github study,</u> <u>May 17, 2024</u>
- 5. The Impact of AI on Developer Productivity: Evidence from GitHub Copilot (2023, Sida Peng, Eirini Kalliamvakou, Peter Cihon, Mert Demirer)



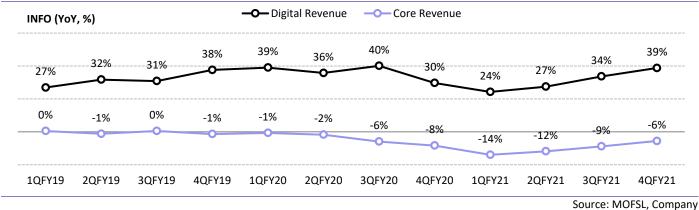
# Parallels between the 'digital' vs 'legacy' divide in 2018-21

- The 2018-21 digital vs. legacy revenue divergence offers some insight into today's GenAI-led transition. As shown in Exhibits 2-4, digital revenues for TCS, Infosys, and HCL surged—rising as high as 57% YoY for TCS—while core (legacy) revenues remained flat or declined.
- In the current GenAI phase, we are seeing early signs of a similar nature: ADM and core IT services are facing productivity and pricing pressure, however the revenue uplift from scaled GenAI programs is still to materialize. This is exerting pressure on top-line growth, especially for large-cap companies. For Indian IT firms, the key is whether they can again bridge this value shift— by scaling GenAI from pilots to production.

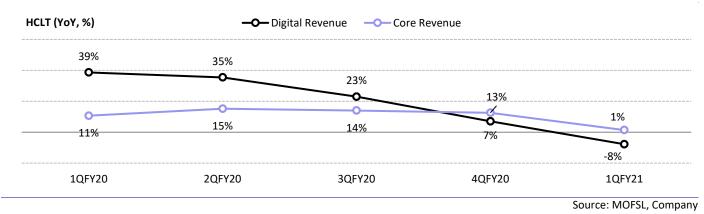
# Exhibit 2: TCS's digital revenues accelerated in pre-COVID years as enterprises prioritized transformation



# Exhibit 3: Infosys's core business faced revenue pressure during the same period, as digital adoption cannibalized legacy services



# Exhibit 4: HCLT followed a similar trend, with the surge in digital revenues weighing on legacy services



5 June 2025



# Appendix

This section provides a comprehensive overview of the key infographics and reference sources that were utilized in the preparation of this report.

Exhibit 5: Early results from the 'Copilot Autofix'—a beta feature built on AI agents—showed 3x faster fixes than manual efforts, while code scanning helped detect vulnerabilities, thereby improving efficiency and delivering better security outcomes



Source: GitHub blog: "Found means fixed: Secure code more than three times faster with Copilot Autofix", 21 January 2025

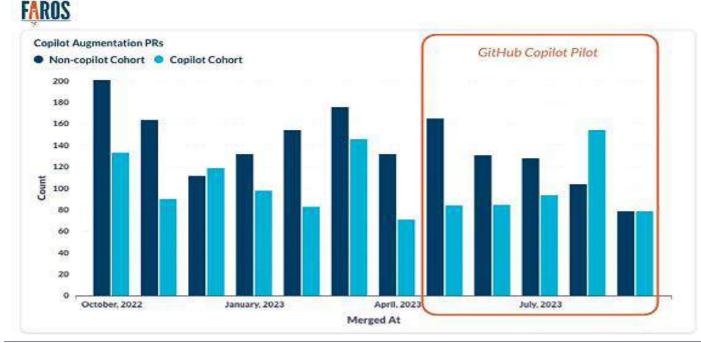
# Exhibit 6: Estimated productivity gains from the adoption of Generative AI

Domain	Estimated productivity gain
Customer technical support	<b>34%</b> reduction in task completion time for novices
Security incident laboratory experiment	23% decrease in task completion time
Laboratory experiment implementing HTTP server in JavaScript	55.8% decrease in time to completion
Field study of software development tasks	26.08% increase in tasks completed
Laboratory study of IT Admins	34.53% accuracy improvement and 30.69% reduction in task completion time

Source: Security Copilot – Evidence of Productivity Gains in Live Operations (Microsoft Security, Mar'25)

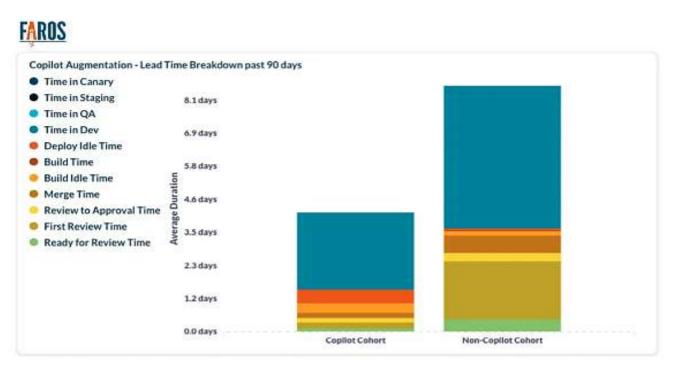


Exhibit 7: GitHub Copilot was generating more Pull Requests (PRs)—i.e., submitting more changes or contributions to the codebase—suggesting greater productivity



Source: Faros.ai Blog: "Is GitHub Copilot Worth It? Real-world Data Reveals the Answer", 17th May, 2024

Exhibit 8: Lead time to production decreases ~55% for PRs generated by GitHub Copilot, with most savings generated in the *development and code review stages* 



Source: Faros.ai Blog: "Is GitHub Copilot Worth It? Real-world Data Reveals the Answer", 17th May, 2024



Key takeaways from our conversation with Mr. Saurabh Gupta (President of Research and Advisory Services, HFS Research)

We hosted an expert session with Mr. Saurabh Gupta, President of Research and Advisory Services at HFS Research, to understand Gen AI driven productivity gains to Indian IT companies and its broader impact. Below are the detailed key takeaways:

- The industry is entering a new S-curve of productivity, with GenAI—particularly Agentic AI—driving faster-than-expected gains across development, testing, and maintenance.
- Large enterprises are encountering the law of diminishing returns. The limits of offshoring have been reached, and jumping into a new "S-curve" of value creation is increasing.
- Agentic AI, with its autonomous capabilities, holds greater promise to drive meaningful impact.
- Most enterprises continue to operate with outdated procurement models—such as buying services based on FTEs and rate cards. New tools are often deployed using the old playbook, with 80 percent of services still driven by FTE-based models. To fully realize the potential of GenAI, new delivery models are required.
- External pressures, such as tariffs, have added urgency, prompting enterprises to invest in AI as a means to absorb the shocks. Enterprise-wide tech debts including data debt, process debt, and skill debt—present significant roadblocks that must be addressed to scale GenAI.
- GenAl adoption faces bottlenecks from outdated procurement practices, weak process maturity, and an underprepared talent ecosystem, despite evidence of 30%+ productivity gains in in-house use cases.
- SDLC is a major impact zone, along with cybersecurity and commoditized BPO tasks.
- The competitive landscape has now leveled, not only between large and midtier IT players but also between traditional Indian IT companies and emerging startups.
- Consulting firms (like KPMG/PwC) and software/tech providers (like Salesforce) are entering the space.
- Market dynamics are shifting rapidly, with competition intensifying from startups and SaaS players; consulting firms crowding in; and traditional IT vendors needing to rethink their delivery models, pricing strategies, and IP-led differentiation.
- Most IT firms now offer GenAI implementation services; however, the true differentiator lies in the ability to scale these solutions and deploy them into production. Much of the IT industry remains focused on maintenance rather than transformation, with the DNA of organizations not inherently geared toward innovation.
- Partner ecosystems are becoming a hygiene factor. Vendors will need to align with hyperscalers like Nvidia and Salesforce as a minimum requirement, but true differentiation will arise from vertical-specific partnerships and IP.



- Agentic AI could absorb much of the gains from GenAI when implemented at the production level. The key is not only to automate for productivity/efficiency but also to create new value streams.
- While GenAI delivers the best performance in modern stacks like Java and C++, significant challenges persist in complex legacy systems. The true opportunity lies not in efficiency alone, but in building new value streams—requiring deep production-grade capabilities, vertical specialization, and partner ecosystems to scale AI meaningfully.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.



NOTES

# motilal oswal

Explanation of Investment Rating		
Investment Rating	Expected return (over 12-month)	
BUY	>=15%	
SELL	< - 10%	
NEUTRAL	< - 10 % to 15%	
UNDER REVIEW	Rating may undergo a change	
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation	

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

# Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on <u>www.motilaloswal.com</u>. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (INSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDL), NerL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Services Limited are available on the website at <a href="http://onlinereports.motilaloswal.com/Dormant/documents/List%200%20Associate%20companies.pdf">http://onlinereports.motilaloswal.com/Dormant/documents/List%200%20Associate%20companies.pdf</a>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <a href="https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx">https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx</a>

A graph of daily closing prices of securities is available at <u>www.nseindia.com</u>, <u>www.bseindia.com</u>. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

# Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

# For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong. **For U.S.** 

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the"1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to 1934, as amended (the "Exchange Act") and will be engaged in interpretations thereof by the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

# For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to grievances@motilaloswal.com.

Nainesh Rajani

Email: nainesh.rajani@motilaloswal.com

### Contact: (+65) 8328 0276

# **Specific Disclosures**

 Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies). MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: Yes. Nature of Financial interest is holding equity shares or derivatives of the subject company

Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately
preceding the date of publication of Research Report.

MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report:No

3. Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.

- MOFSL may have received compensation from the subject company(ies) in the past 12 months.
- 4. Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.
- MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
- 5. Research Analyst has not served as an officer, director or employee of subject company(ies).
- 6. MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
- 7. MOFSL has not received compensation for investment banking /merchant banking/brokerage services from the subject company(ies) in the past 12 months.
- 8. MOFSL may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company(ies)



in the past 12 months.

- 9. MOFSL may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.
- 10. MOFSL has not engaged in market making activity for the subject company.

# The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

# Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

# Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opnions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

# This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263;

www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No::022-40548085.

Grievance	Redressal	Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN .: 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.