



SUPPLY CHAIN DIGITALIZATION WITH E2OPEN

Abstract

Even in today's digital world of business, many organizations continue to rely on traditional ERP systems to meet their supply chain requirements. This has been evident from the unmanageable disruptions caused by COVID-19. The supply chain is one of the most impacted areas as unpredictability poses a risk for every stage, from raw materials to the production of finished goods. This is driving strategic shifts in the way organizations look at their supply chains. This paper discusses the specifics of supply chain collaboration with e2open, a cloud-native SaaS platform that has the capability to connect all parties involved. It further explains how this platform can address some of the key challenges to enable a more efficient and responsive supply chain. We also demonstrate how Infosys helps navigate this digital transformation by seamlessly integrating any ERP with e2open.

Contents

Abstract	1
Introduction	2
Business Challenges in the Current Landscape	3
Case Study - High-level Design for a Client	4
Core Tenets of the Infosys Solution	5
Measuring the Performance Efficiency Introduced by e2open	6
Benefits	6
Conclusion	8
Resources	8
About the author	8

Introduction

Major enterprise resource planning (ERP) companies are realigning their business models in response to the demands of Supply Chain 4.0 by incorporating the Internet of Things (IoT) applications, advanced analytics, embedded artificial intelligence, and machine-learning services. But supply chain collaboration is one area that calls for greater focus as it goes beyond the limits of a traditional ERP. Customers and their suppliers could be on different ERP platforms, exchanging vital business information via some extant B2B messaging mechanism. In some cases, suppliers secure access to a standalone portal offered by the customer's ERP, where a supplier representative can perform basic operations such as acknowledging a purchase order (PO) or creating an advance shipment notice (ASN). However, customers struggle to onboard suppliers to such portals since there is limited incentive in it for suppliers.

The challenge is compounded further if a customer is using multiple ERPs because of the advent of SaaS applications or due to regional or geographical business considerations. For example, one region or line of business of a customer could be using Oracle EBS applications, and another may have migrated to Oracle Cloud Applications. In some cases, different regions may be using different ERPs in the wake of mergers and acquisitions.

e2open is a cloud-native, SaaS technology offering that has the capability to connect all parties in the supply chain, including suppliers with customers. Stakeholders can access the portal and collaborate on POs, ASNs, receipts, on-hand balances, forecasts, and sales and operations planning (S&OP). With the right access controls and privileges, all changes are visible instantaneously to other parties. e2open further provides a host of alerts that can be configured according to business needs to stay on top of relevant tasks. Additionally, several reports and KPIs are available to help managers and C-Suite executives make important decisions related to their supply chain.

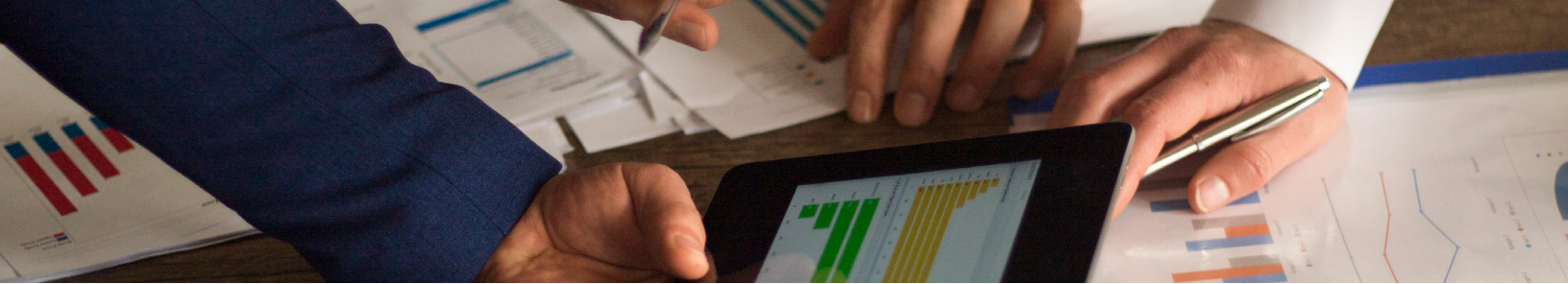




Business Challenges in the Current Landscape

There are several challenges involved in the traditional way of collaboration between customers and suppliers:

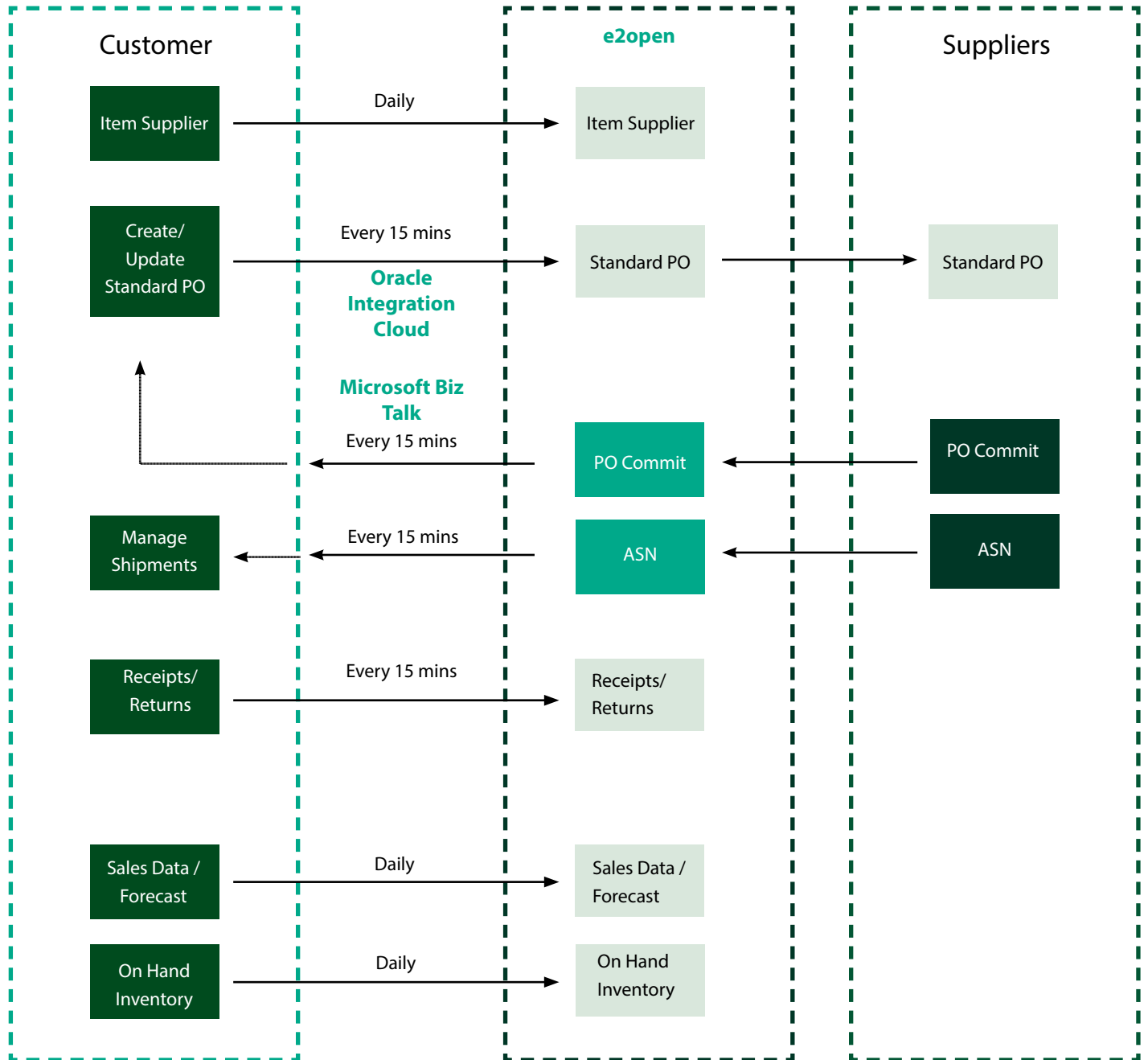
- Suppliers are forced to use multiple and, often, legacy tools for collaboration leading to dissatisfaction and delays. This places additional strain on supplier resources who must familiarize themselves with different processes and portals.
- In many cases, suppliers do not use any collaboration portal. In such cases, buyers and warehouse personnel need to spend significant time tracking the status of their POs or shipment/delivery of goods through emails and calls. This takes time away from value-added work.
- Central leadership usually lacks holistic visibility into supplier KPIs, which in turn becomes a roadblock for timely interventions in the supply chain.
- Organizations may miss the benefit of greater leverage in supplier negotiations because different regions or lines of business tend to proceed on the basis of individual discussions. This scenario is particularly prevalent in a landscape with multiple ERPs.
- Traditional methods induce inelasticity in responses wherein sudden changes in supply and demand tend to upset the balance in the supply chain, leading to stockouts or overstocking. This proves detrimental to top-line growth.



Case Study – High-level Design for a Client

An Ohio-based global provider of power, thermal, and infrastructure management solutions had embarked on a multi-year supply chain digitalization (SCD) journey.

We implemented e2open for several ERPs of the customer. This included three separate regional instances of Oracle EBS, Oracle Cloud, SAP, and GEIST. The figure below represents the high-level integration design of this project.



*OIC for Oracle Cloud and BizTalk for other ERPs

Figure 1 – High-level integration design for e2open

Core Tenets of the Infosys Solution

Infosys leveraged its deep domain expertise and industry best practices to successfully integrate e2open with the various ERPs used by the customer. Our solution was based on three primary pillars of e2open as shown in the figure below.



Figure 2 – Three pillars of e2open

The figure below outlines the tenets of the core solution.

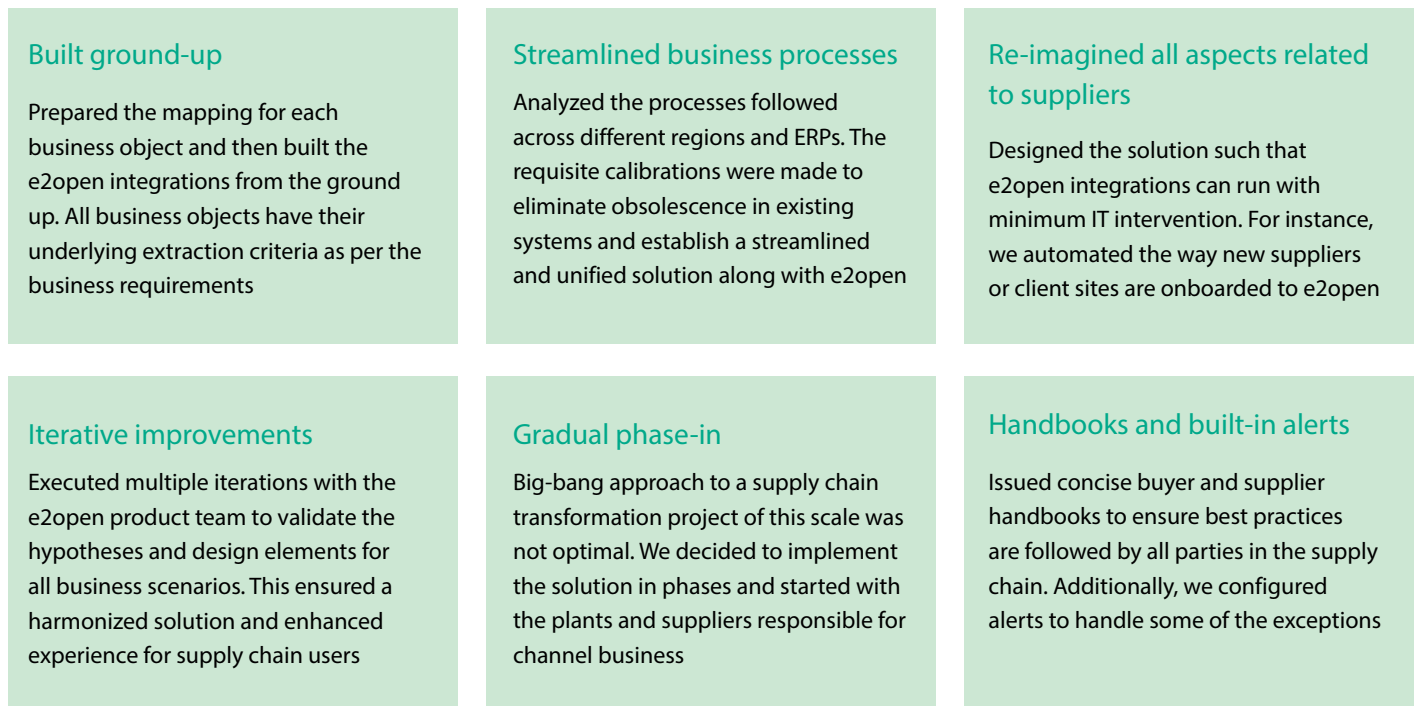


Figure 3 – Core tenets of the e2open solution

Measuring the Performance Efficiency Introduced by e2open

After setting up seamless supplier collaboration, it is important to periodically measure the efficiency of operations. e2open has many in-built key performance indicators (KPIs) that help gauge the overall health of the supply chain. Some of the KPIs available in e2open include:

- On-hand inventory by site, by line of business (LOB) and total
- On-time delivery and promised delivery service level (OTD-PDSL): Shipment to supplier's first commit
- OTD-RDSL (requested delivery service level): Shipment to customer request
- OTD - Lead-time in days between PO receipt and PO shipment relative to defined lead-time
- Order acknowledgement turnaround time (TAT) (Number of days between PO issue and receipt of commit/promise)
 - Shortages by supplier by site
 - Forecast rollup by LOB
 - Forecast rollup by supplier
 - Forecast value by site, by LOB, and total by supplier
 - Forecast delta by site, by LOB, and total by supplier
 - Forecast accuracy by site: actual order vs forecast
 - Value of in-transits by supplier by LOB, by incoterm
 - Past due POs
 - POs released per defined lead-time by supplier
 - » > lead-time
 - » < lead-time
 - » Per lead-time

Benefits

Infosys' supply chain digitalization solution with e2open can help organizations transform their supply chains and reap benefits on multiple fronts as shown in the figure below.

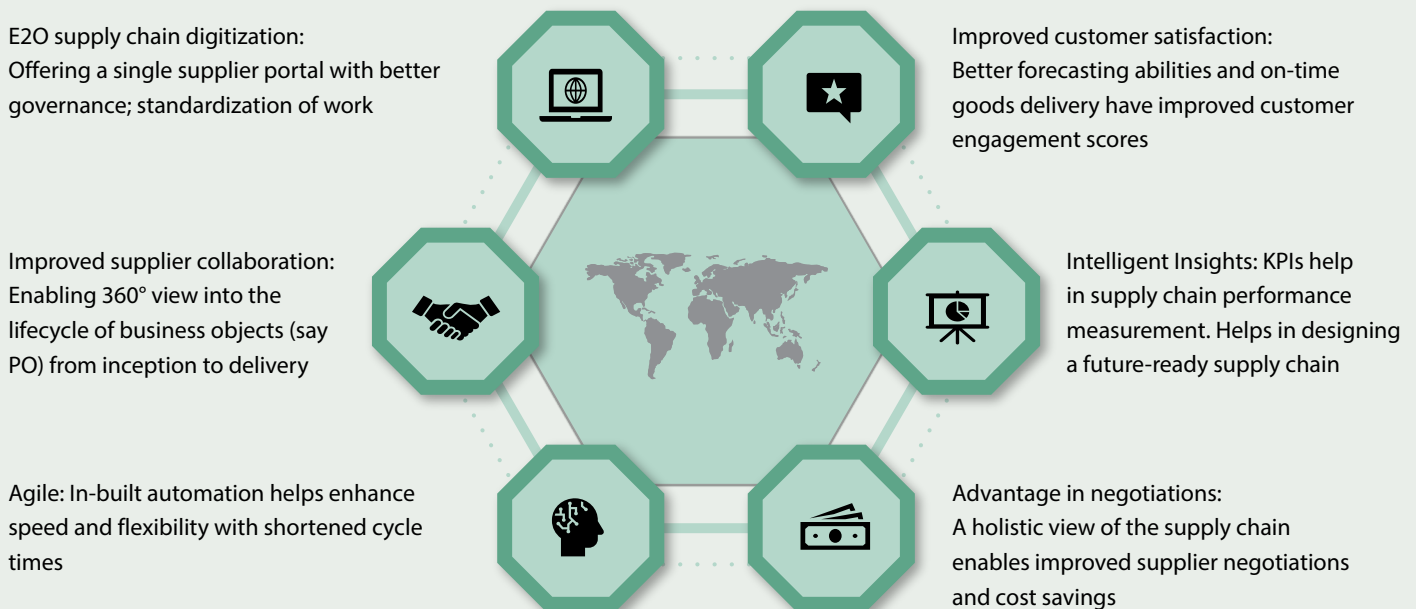


Figure 4 – Benefits of Infosys supply chain digitalization with e2open

Following go-live, we witnessed following positive trends in the customer's supply chain:

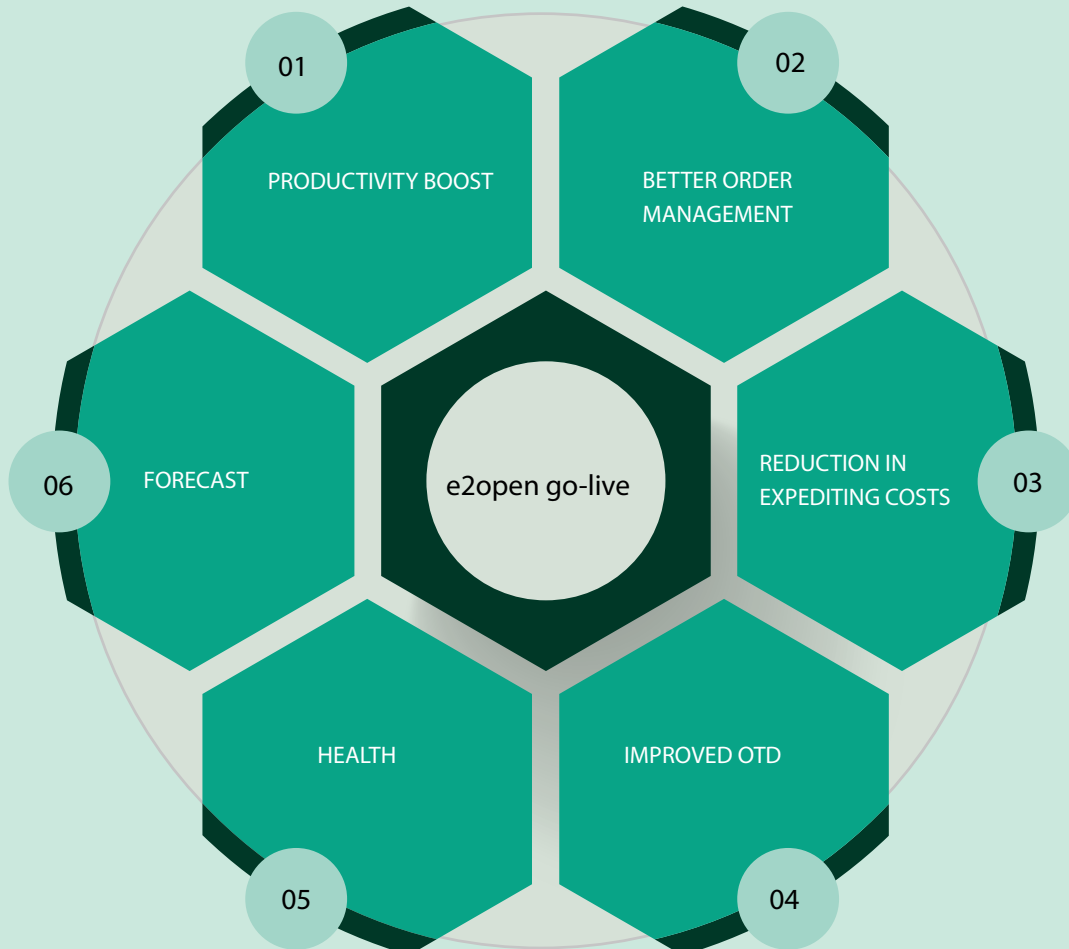


Figure 5 – Improvements in KPIs

- Increase in the productivity of buyers, planners, and warehouse personnel due to automation and predictable processes
- Improvement in customer order fill rates due to better alignment of raw material supply and demand for finished goods
- Less mismatches between forecasts and commitments made by suppliers
- Margin improvement through better forecasting, lower inventory costs arising out of stock-outs or overstocking
- Improvement in on-time deliveries by suppliers
- Reduction in shipping expediting cost due to better visibility into operations



Conclusion

Any organization embarking on a digital transformation journey should conduct a rigorous analysis of its supply chain operations. Business leaders responsible for the performance of their supply chains must develop a mindset for change and drive change management throughout their organization. This especially holds true with the emergence of Industry 5.0. While Industry 4.0 has been focusing on new-age digital technologies, Industry 5.0 aims for a more human-centric approach. Automation takes care of regular supply chain operations with minimal oversight needed, leaving workers with time to spend on the design and delivery of better products and services. But this upcoming shift from Industry 4.0 to Industry 5.0 will only be possible once the supply chain has been revamped. The desired level of automation and agility can be achieved with a dedicated SaaS supply chain platform like e2open. The implementation partner has a key role to play in this transformation since the reengineering must take into account the existing system architecture and modern best practices.



Resources

<https://www.e2open.com/>

Author



Amandeep Malik

Digital Solutions Specialist

Amandeep is a Digital Solutions Specialist with the Oracle Supply Chain Management COE of Infosys. He is an Oracle SaaS, PaaS, and business processes certified professional. He holds an MBA degree. Recently, he has also completed a program in Digital Leadership from Cornell University. Amandeep has successfully collaborated with several global clients across industry verticals such as manufacturing, hi-tech engineering, retail, construction, services, and banking on their digital transformation journeys. A keen analyst of IT and business trends and practices of clients, he has expertise in handling implementation, change management, data migration and integration as well as process improvement life cycles.

Infosys Cobalt is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 35,000 cloud assets, over 300 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance come baked into every solution delivered.

For more information, contact askus@infosys.com



© 2024 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.