

WHITEPAPER

## ERP COMPARISON

MICROSOFT DYNAMICS 365 OVER SAP



#### PREVIEW

The importance of Enterprise Resource Planning (ERP) software has grown over the years. From what was a typical back office software a decade ago is now an integral part of an organization's technology assets. ERPs have traversed the path of being a record-keeping tool to now incorporate cutting edge technology such as machine learning (ML) and Internet of Things (IoT) to enhance data accuracy and speed up business functions. Modern-day ERPs such as Microsoft Dynamics 365 extends intelligence to enterprises by breaking the monotony of unstructured data into insightful dashboards that aids in informed decision making.

ERPs such as Microsoft Dynamics 365 offers extensive functionality, ease of integration with other applications and cloud, making it a complete one-stop-technology-solution for your enterprise's business functions. Implementing the right technology that is supported by the enhanced flexibility and scalability of the modern cloud is enabling more and more customers to reach greater levels of maturity as they continue their digital evolution.

## Executive Summary

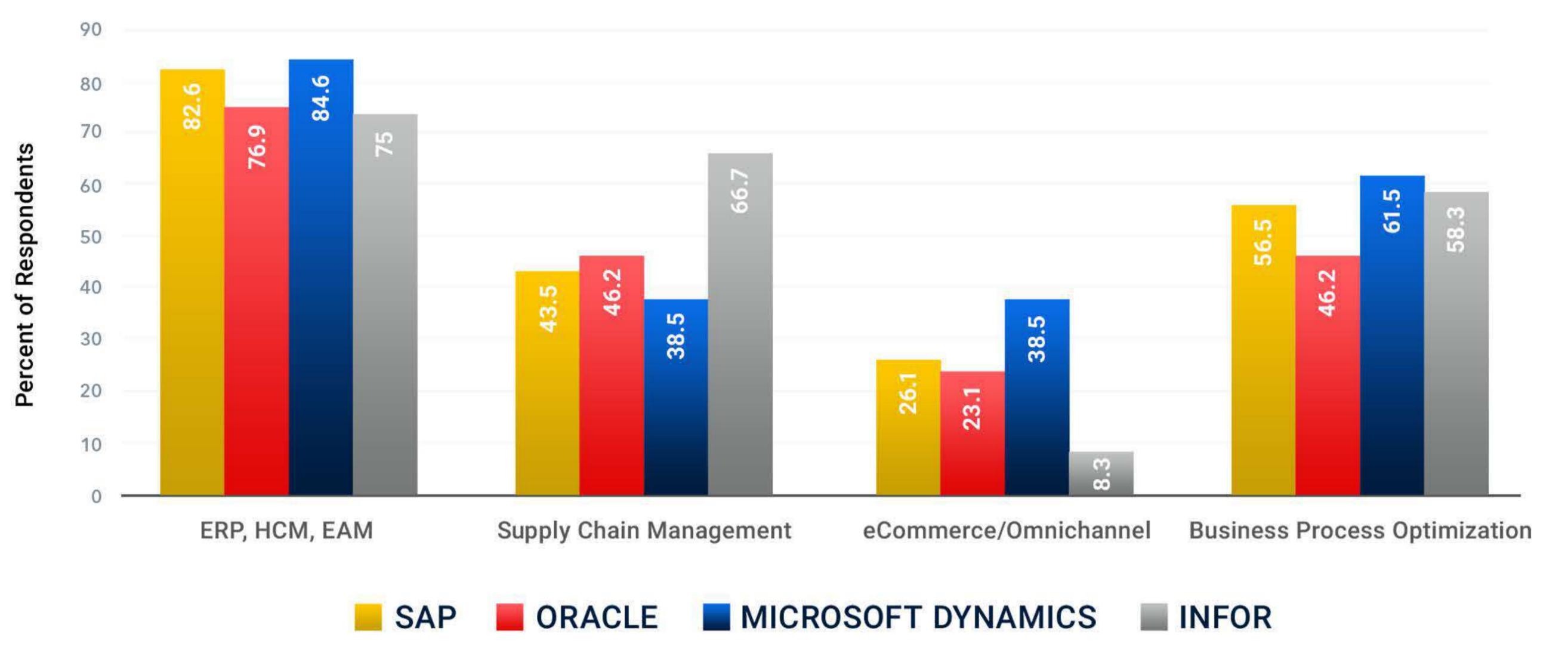
- ERP systems play a vital role in running the operations of an enterprise. They have a long-term impact on people and processes within a company.
- Evaluation of ERP systems is overwhelming and requires thorough vetting of various factors that are important to your company.
- Microsoft Dynamics 365 offers the lowest Total Cost of Ownership (TCO) among all tier 1 ERP vendors. Its payback period is 18 months lower than that of SAP.
- Microsoft Dynamics 365 offers the highest ROI of approximately \$17 per one dollar spent within the first three years. This return is exponentially higher considering the ROI for competing ERP and CRM products are \$7.23 and \$8.71, respectively.
- Microsoft Dynamics is best suited for progressive mid-market companies aiming to make it big to support growth to an exponential degree.

## OVERVIEW

You have a lot to gain or lose from an ERP system. You have established a core team to evaluate ERP systems and spent the last few months evaluating a number of Tier 1 and Tier 2 ERP Vendors. Your team sat through hours of very boring and a few exciting demonstrations of the system and how they fit your organization.

Evaluating an ERP is overwhelming. Our series of articles focused on ERP comparison will help you make informed decisions. We examined various business applications and how they compare to Microsoft Dynamics 365. Our hands-on experience in ERP systems like SAP, Oracle, Microsoft Dynamics, Infor etc. allows us to provide an objective comparison of the strengths, weaknesses and relevance of these applications.

Microsoft Dynamics 365 gives an edge over other ERP Solutions in almost all business initiatives including in Digital Strategy



Source: Panorama Consulting 2019 Clash of the Titans Report

The key to a successful ERP selection is developing a digital strategy with a five to seven year outlook. However, many organizations begin executing a strategy without taking the time to develop it and ensure alignment.

## WHAT MATTERS?

An ERP system is at the heart of every company's IT infrastructure. It helps unify people, processes and technology across the organization so that business units function efficiently and work in unison towards a common objective.

#### WHEN EVALUATING AN ERP, HERE ARE A FEW KEY PARAMETERS THAT MATTER MOST -

- Business process mapping and requirement analysis
- Budget
- ERP Vendor Comparison
  - Total cost of ownership (TCO)
  - Return on Investment (ROI)
  - Out-of-the-box Features & Functions
  - Duration of Implementation
  - Types of Deployment
  - Operational Disruption
  - Competency of the partner, partner network and resources
  - Evaluation of not just the application but the Ecosystem
- 4. Technical evaluation including role of ERP in the company's overall digital strategy

Requirements vary across organizations and so does budget – these are discussions that need deeper consultations and analysis. What stands out as a benchmark is the comparison of functionality, strengths, ease of use, pricing, and value proposition offered by vendors.

## DO IT ONCE, DO IT RIGHT.

## MICROSOFT HAS PERFECTED IT!

Microsoft has put in visible efforts towards tethering customers into a Microsoft-centric world that is themed around user-friendliness. The company's continued investment in cloud, user experience, analytics and integration is aimed to increase productivity while reducing overall costs.

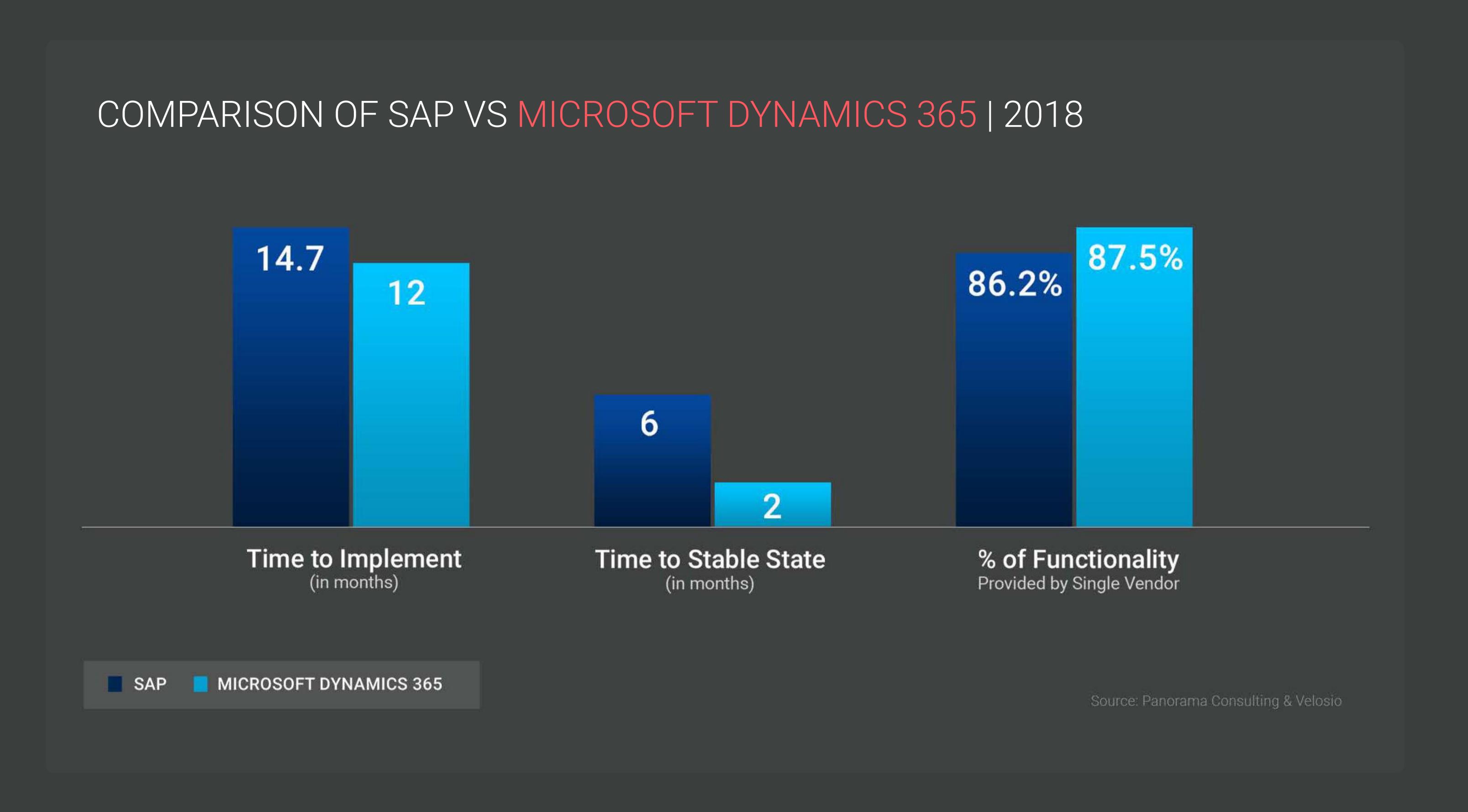
Windows from Microsoft is the most popular operating system owing to its ease of use; and per NetMarketShare, the OS is used in over 87% of desktop/laptop globally. Continuing its recipe for success, Microsoft has ensured that the Dynamics platform resonates similar minimalistic yet powerful productivity & design elements of Windows. Multiple acquisitions including Navision, Axapta and Great Plains have helped Microsoft build its flagship ERP product today - Microsoft Dynamics 365 for Finance & Operations.

Microsoft Dynamics 365 for Finance & Operations has been built consistent with the intent of creating a simple, powerful and a common ecosystem. An ecosystem that is easy to use, secure and scalable.

Microsoft Dynamics 365 arguably enjoys a dominant position across small and medium enterprises. The scalability of the application has allowed successful deployments at large retail and manufacturing companies with thousands of users. Microsoft Dynamics has established itself as a viable alternative by voiding the complexities of larger applications such as SAP and Oracle.

ELOW ARE	JUST A FEW WELI	L-KNOWN LARG	SE ENTERPRISES	S THAT USE MIC	ROSOFT DYNA	MICS 365
Macys	Hewlett Packard	Ecolab	Seattle Seahawks	Michael Hill	Pandora	Marc Jacobs
Chemonics	Adobe	AccuWeather		Siemens	TGI Fridays	Amway

## THE COMPARISON



FACTORS SUCH AS IMPLEMENTATION TIME, TIME TO ACHIEVE STABLE STATE AND AVOID DISRUPTION TO BUSINESS FUNCTIONS ARE AMONGST THE TOP QUALITATIVE PARAMETERS.

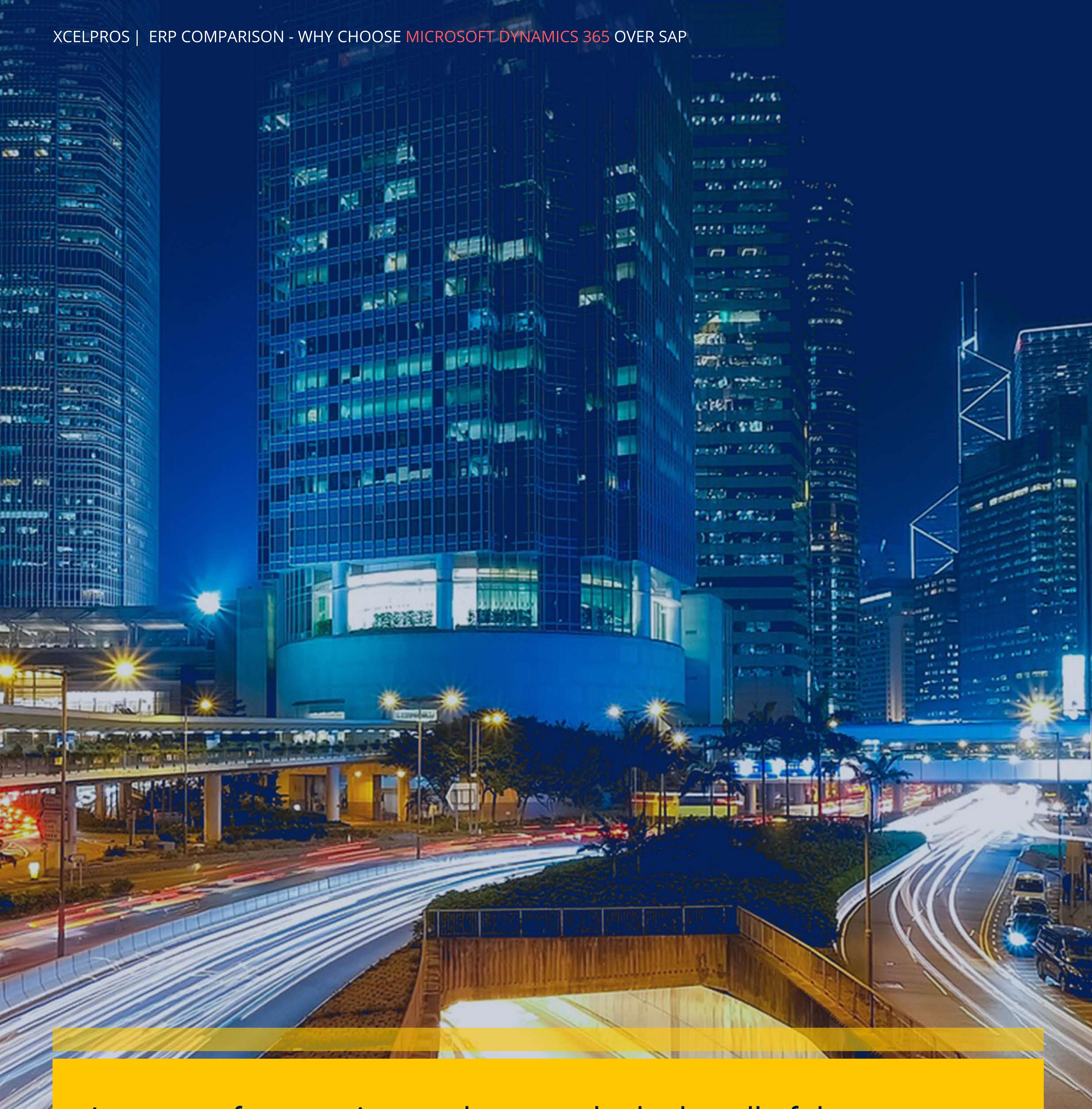
- Per Panorama Consulting, Microsoft Dynamics 365 users reported an average 12 months implementation time compared to its peer SAP with close to 15 months time.
- Average timeline of 12 months is relevant to medium and high complexity implementations.
- For smaller companies and low complexity implementations, the time to implement is less than 12 months. Get more information from XcelPros on rapid / accelerated implementations for Microsoft Dynamics.
- Compared to SAP, Microsoft Dynamics 365 users took maximum of two months to achieve stable state as against six months in case of the former.
- The above finding was also echoed by Forrester Research which reported that SAP users experience more material operational disruption during their implementations than the other Tier 1 providers and that Microsoft Dynamics 365 had the fewest (2017).

## COMPARISON OF SAP VS MICROSOFT DYNAMICS 365

Parameters	SAP	Microsoft Dynamics 365	
	Quantitative		
Annual Maintenance (On-Premise)	22%	16%	
Cost of Cloud	SAP Cloud Platform is priced 2 ways	Microsoft's Cloud Pricing is straightforward - 3 tiers of license no other charges -	
(As of December 2018)	<ul> <li>Subscription Based (or)</li> </ul>	• \$190 for Enterprise (highest level user)	
	∘ Consumption Based	• \$50 for a Functional User	
	Commercials & Discounts are based on services chosen / consumed.	<ul> <li>\$8 for a Task User</li> <li>Min. 20 Enterprise Users         <ul> <li>(Priced per user per month)</li> </ul> </li> </ul>	
Total Cost of Ownership (TCO) & ROI	Higher	Lower, leverages investments in the ecosystem	
		<ul> <li>Per Nucleus Research, ROI for every dollar spent on Microsoft Dynamics 365 is ~ \$17</li> </ul>	
Time to Implement (Average)	~15 months	8-12 months   Lower for "Rapid" deployments  Talk to XcelPros to get more information on Rapid / accelerated deployment of Microsoft Dynamics 365 for Finance & Operations	
Time to Achieve "Stable State"	Can range up to 6 months	Significantly Lower, maximum of 2 months	
	Qualitative		
Suitability	Large organizations	Organizations of all sizes	
Business Continuity	Complex functionalities	Uninterrupted due to simplicity	
Cost of Implementation	High A	Low	
Ease of Use	Low	High A 170	
	Per study published in Velosio, a mere half of SAP users cited using approx. 40% of functionality offered by SAP.	<ul> <li>Per the same study Dynamics 365 users rate it to be 17% more usable than SAP and up to 27% more user friendly across functions.</li> <li>Dynamics 365 users are 10% more likely to achieve the stated benefits of the software over SAP.</li> </ul>	
Ease of Customization	Low	High	
Ease of Integration with	Low	High () Uses Microsoft's native integration tool - "Microsoft Flow"	
	Capabilities & Compliance		
Inherent Strength(s)	Large market share, huge resource base, strong partner network, APIs and Plugins to third-party such as Office 365, Tableau, Salesforce.com, etc.	Large market share, huge resource base, strong partner network, native integration to Office 365, Power BI, Dynamics CRM, Flow connectors to a huge set of applications such as DocuSign	
Industry Strengths	Manufacturing, Industry-specific functionality delivered via IS solutions, Big Pharma, Chemical, Distribution	Out-of-the-box functionality to meet the functional needs of the following industries - Chemical, Pharmaceutical, BioTech, Discrete Manufacturing industries, Retail (incl POS), Consumer Goods, Distribution, Financial & Government	
Customer Relationship	Yes	Native CRM functionality + Plus industry leading functionality by virtue of Microsoft Dynamics 365 CRM	
Supply-Chain Management (SCM)	Yes	Yes	
Advanced Warehouse	Yes, complex deployment	<ul> <li>Yes, extensive functionality</li> <li>Significantly shorter time to implement</li> <li>Integrated Mobile Supply Chain</li> </ul>	
Financials	Yes, FiCO modules in SAP are extensive and take longer to implement	Yes, Includes GL, AP, AR, Fixed Assets, Cash and Bank Management & Budgeting	
Embedded Reporting & BI	Yes	Embedded Reporting + Native Integration with Power BI (for reporting & analytics)	
Compliance to 21 CFR Part 11	Yes	Yes	
GAMP Category	Category 4	Category 4	
GAAP/SOX Compliance	Yes	Yes	
Cloud Deployment	Both have cloud solutions	Proprietary cloud hosting services allows Dynamics to reduce deployment time by 95% and hosting cost by 75%	
Business Intelligence (BI) & Reporting	Needs users to deploy SAP BusinessObjects Platform or integrate with other third party BI tools such as Tableau which consumes additional resources such as server, database, etc.	<ul> <li>Microsoft Dynamics 365 has extensive out-of-the-box reports in every functional area.</li> <li>Business Intelligence is enhanced by virtue of its native integration with Microsoft Power BI.</li> <li>Microsoft Power BI is the industry leading visualization and advanced analytics platform that is accessible to everyone for just \$9.99 per month.</li> </ul>	

## MICROSOFT MADE IT SIMPLE, MAKING IT AN IDEAL SOFTWARE FOR MID-MARKET

- As evident from the above comparison, Microsoft Dynamics 365 scores over SAP in most categories including critical parameters such as time for installation, ease of customization, user experience, TCO, and customer support.
- A business user needs simplicity. Unlike SAP, which has approx. 70,000 screens for a user to navigate and discover what is useful for his business, Microsoft provides ease of use resonating the very familiar daily used products such as Outlook, Word and Excel.
- Dynamics 365 allows users to customize the aesthetics of the system for a person-alized experience. This includes customization of themes, color, user dashboard both on desktop and hand-held devices including mobile.
- With embedded business intelligence, the platform assimilates and analyzes cus-tomer data to understand patterns and suggest appropriate actions so that sales and marketing organizations are better equipped. Features such as relationship assistant, cortana intelligence, auto capture, and email engagement help gather better sales intelligence and actions thereafter.
- With Microsoft's vast ecosystem, Dynamics 365 users can access every module within the system, without the need for investing in other applications. Upgrades and security patches are seamlessly delivered automatically through cloud without causing any disruption to the business functions.



In terms of competing products, we looked at all of them, including SAP and Oracle. With Microsoft Dynamics, we are seeing a substantially lower cost of implementation and cost of support than we see with other solutions.

- BILL SCHLAGETER VP & CIO, DENTSPLY

## AN USER STORY HIGHLIGHTING THE POWER OF MICROSOFT DYNAMICS 365

Background: A multinational Jeweler needed to modernize its IT services to make use of data collected over time and move from predictive analytics to peerless point-of-sale customer experience.

Problem statement: The global Jewelry house wanted to empower its sales and marketing team with an unified and all-inclusive customer database to create a personalized experience for its customers across all channels (in-store, web, and mobile). They needed to overhaul their IT system to reflect modern age aspects of the business involving back-end IT to POS interactions and facilities management.

Solution: The Jeweler entrusted this responsibility on Microsoft Dynamics for Retail, Finance and Operations, and Customer Service. Integrating information across stores and online channels, staffers were equipped with behavior and purchase patterns of their customers. Using a mobile device, sales personnel were able to access the business relationship, personal information such as birthday, anniversaries, special occasions, to develop better personalized relationship. Marketing team was able to enhance the relation with curated messaging, new product launch and discount offers.

Result: With data consolidated and centralized within Microsoft's ecosystem, pulling up customer data that otherwise took four minutes were available in few seconds. Using Power BI, the company was able to create actionable insights visualized over an interactive dashboard. With the assurance and reliability of Microsoft's ecosystem, the Jeweler was able to streamline business processes that helped in further expansion of business.

## POWER OF ONE MICROSOFT ECOSYSTEM -THE NEED FOR MORE THAN JUST A GOOD ERP



- Not all ERPs completely address the needs of an organization. Every organization needs an ecosystem to support their unique business needs and conduct operations efficiently. Microsoft's ecosystem boasts of an exhaustive product repository that is secure, scalable, and curated to complement your requirements.
- The one-Microsoft ecosystem contains a range of applications including a range of applications ranging from analytics, visualization, artificial intelligence, IoT, PowerApps, CRM, Office 365, and a host of other third-party applications. What differentiates these applications is the ability to seamlessly integrate with each other, creating a strong synergy for faster and efficient functioning of business processes. A few benefits of the ecosystem.
  - Improved connectivity without the need for additional customizations
  - Improved productivity to enhance efficiencies
  - Improved visibility of information across business functions
  - Significantly lower spend and faster ROI than any other solution
  - Ability to download and implement additional functionality / apps from appsource.microsoft.com. This gives you the power to scale with industry and function specific apps on Microsoft AppSource
  - Capabilities to support CRM, ERP, and human capital management modules

- Higher accuracy to determine project costs and increased operational efficiency
- Seamless integration with SharePoint / best document management system
- Advanced analytics and scope of cross-selling/up-selling using Field services
- Faster application development (with PowerApps)
- Higher efficiency when onboarding vendors/customers due to familiarity with other Microsoft products

BELOW IS A HIGHLIGHT OF JUST A FEW MOST COMMONLY USED APPLICATIONS WITHIN THE MICROSOFT ECOSYSTEM -

#### 0.1 DOCUMENT MANAGEMENT SYSTEM

Microsoft Ecosystem includes the world's best document management system - Microsoft SharePoint. This is natively integrated and connected to Microsoft Dynamics 365 for Finance & Operations, You need a document management system to store sales order documents, invoices, purchase orders, legal documents, agreements and many more business attachments. You are able to store and access these documents seamlessly from Microsoft Dynamics 365 without any additional customizations. You are able to experience this interoperability from practically any module, transaction or form within Microsoft Dynamics 365. Microsoft SharePoint Online is available both as an offering within the Microsoft Office 365 Suite or independently.

SAP does not include native integrations with Microsoft SharePoint within its modules or forms. You will need extensive customizations and additional spend to make this happen.

## 0.2 EMBEDDED ANALYTICS & REPORTING WITH MICROSOFT POWER BI

An analytics tool like Power BI delivers remarkable operational efficiencies to companies. Most of our customers have published Power BI dashboards to big screen TVs at strategic points along the shop-floor and production facilities. Power BI and Microsoft Dynamics 365 for Finance & Operations are seamlessly integrated.

Our customers noticed a few of these efficiencies rather quickly -

- Gain an accurate view of the current business operation.
- Integrate data from multiple sources.
- o Convert data into visual formats and help people to see trends and patterns.
- Support all sorts of analysis, including trends and "what-if" scenarios.
- Fuel communication and collaboration across the company.

SAP does not belong to an ecosystem like Microsoft and therefore unable to deliver such an integration with Analytics & Reporting.

#### 0.3 AUTOMATED WORKFLOWS WITH MICROSOFT FLOW

By virtue of Flow, you are now able to build automated processes with your customers, vendors or even with internal cross-platform applications. You are able to send and receive notifications related to sales or purchase transactions, shipments, production orders, receipts, quality issues, provide visibility of on-hand inventory to your customers, synchronize files, collect data and so much more - the applications are endless.

#### 0.4 MICROSOFT DYNAMICS 365 CRM

Having an industry leading CRM within the ecosystem is a huge competitive advantage for Microsoft. The strength is in the interoperability between the other suite of Microsoft products, Microsoft Dynamics 365 for Finance & Operations and Microsoft Dynamics 365 CRM. You are able to quickly integrate sales and invoice data from the Microsoft Dynamics ERP to Microsoft Dynamics 365 CRM. This makes a big difference for the sales team as they now have the visibility into all data relevant to a customer. Microsoft Dynamics 365 CRM has extensive functionality built into the following modules -

- Sales
- Customer Service
- 3. Field Service
- 4. Marketing
- 5. Project Service Automation
- 6. Talent Management
- 7. Al for Sales
- 8. Al for Customer Service
- 9. Al for Market Insights

## 0.5 CUSTOM BUSINESS APPLICATIONS USING MICROSOFT POWERAPPS

You can now build custom business applications that you need for your organization in hours without any reliance on IT resources and developers.

#### 0.6 MICROSOFT APPSOURCE

This is a key element of the Microsoft Ecosystem. Similar to Apple's App Store, Microsoft AppSource has a huge repository of tailored business applications developed by industry experts. Appsource gives you the power to scale with industry and function specific apps for your unique business needs.

#### INTEGRATED CHEMICAL MANAGEMENT (ICM) FOR CHEMICAL, PHARMACEUTICAL AND FOOD INDUSTRIES

- Integrated Chemical Management (iCM) is an industry-first integrated solution for Microsoft Dynamics that offers comprehensive functionality for SDS-Authoring and Maintenance, Label Management (including Private Labels) and DEA Management in compliance with the GHS guidelines. It is available on Microsoft AppSource and proves to be of immense value to Chemical, Pharmaceutical, Life Sciences and Food Industries.
- Organizations within these industries need to be able to print labels integrated within business processes and author / maintain SDSs for all the chemicals they interact with. Without this application, companies need to spend tens of thousands of dollars to customize the workflows, develop new reports and create many more new elements within Microsoft Dynamics 365.
- An ERP such as Dynamics 365 with an integrated labeling and SDS management capability using iCM is the answer to most of the GHS, OSHA, WHO related compliance standards.

#### VALUE PROPOSITION OF ICM

- O Eliminate the cost of integration to 3rd-party labeling and SDS systems
- O Integrated Safety Data Sheets Management
- Real-time safety data sheets and label data management, that are consistent and GHS complaint
- O Reduce Total Cost of Ownership (TCO) by removing the need to maintain product safety documentation and data in-house
- O Integrate 3rd-party systems to fast-track processes and time to market

Talk to the experts at XcelPros to get a case study on cost avoidance using iCM

## Higher Return on Investment (ROI) and Lower cost of ownership (TCO)

Cost is one of the key parameters that differentiates Microsoft Dynamics 365 from its competitors. Dynamics 365 is designed to be flexible and adapt to the changing needs of customers. Independent surveys conducted by research and consulting houses unanimously rate Microsoft Dynamics 365 to have the highest return on investment (ROI) and low overall cost of ownership platform.

# MICROSOFT'S RETURN ON INVESTMENT OF \$16.97 FOR EVERY DOLLAR SPENT

- While ERP is a significant investment, the return on investment too is faster, especially in case of Microsoft Dynamics 365 which offers the highest ROI of \$16.97 for every dollar spent within the first three years.
- Dynamics 365 offers an exponentially higher return, considering the ROI for competing ERP and CRM products is \$7.23 and \$8.71 respectively. Microsoft's continued investment in cloud, user experience, analytics and integration is aimed to increase productivity while reducing overall costs.

NOTE - Click on the link above to access the report from a 3rd party industry research company - Nucleus Research.

- Microsoft Dynamics is offered on-premise and in the cloud.
- Licensing has been designed to include all roles and responsibilities within an enterprise.
- At a high-level, On-premise and Cloud have 3 tiers of user licenses and a device license.
- Cloud is priced at per user per month.



On-premise is priced at a one-time license fee + 16% Annual Maintenance Fee.

# MICROSOFT DYNAMICS 365 CAN SCALE UP/DOWN WITH YOUR CHANGING BUSINESS NEEDS

Scalability is a key element of any ERP you choose. Only Microsoft allows users to scale up/down as per their business needs. In the case of on-premise, you have the ability to lock your maintenance to the price paid at the time of signing the contract. Customers like this flexibility to add / alter licenses as their resource & business needs change.

- Benchmarked with efficient performance scaling up thousands of users, Microsoft is completely capable of handling your business requirements. It offers extensive functionalities across financials, supply chain management, and customer relationship management.
- E.g. You can start with the ERP today and add Microsoft Dynamics CRM later. The scalability aids in adding functionality later as required.
- Dynamics 365 offers enterprise-wide reporting, powerful business insights, tools that support decision making – all these at a relatively lower cost while scoring high on flexibility and ease of use.

#### KEY TAKEAWAYS

- Microsoft Dynamics 365 is an affordable enterprise suite to run all business functions. It's user experience has been unanimously rated highest on ease of use. Coming from the makers of Windows (used by over 87% of desktops and laptops), Dynamics 365 is aesthetically familiar, easy to use and adapt.
- Microsoft Dynamics 365 offers extensive out-of-the-box functionality for a variety of industries without the need for additional spend on customizations.
- Leveraging its proprietary cloud hosting services in form of Azure cloud,
   Microsoft is able to reduce deployment time by 95% and hosting cost by
   75% for Dynamics 365 users.
- With the power of the One-Microsoft ecosystem, Microsoft Dynamics 365 is the only business application you will need today and to support your growth for future!