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# ERP

#### What Is Enterprise Resource Planning (ERP)?

#### ERP definition

* Enterprise resource planning (ERP) is a system that manages the day-to-day operations plus business processes and is based on software applications that are connected.

ERP system makes the day-to-day operation more connected and it does some analysis on what happens on day to day to see how everything is doing just from a click, the system can report back data that would be useful for future digestion making

Each ERP system would be designed and built for a specific company and it has its uses depending on the company.[1]

#### Benefits of ERP

* ERP systems are made/built for companies so they can have improvment over the enterprise busness operation in multiple diffrent ways and that is by having all of the inventory details and data in one system that would be connected to multiple difretn departments such finance so when one thing happens in one system the other one would be changed like having a cutomer buying a product the system would just updtae the inventory and add it to sales and you can check the change in the finacne report from the other department, each system would have its own reporting system depending on the company and the system that had been installed and sense it connected to other systems it stays updated.[1]
* A lot of the ERPs come with an customer relationship managments system/tools, so the system would be able to track the behavior of the cutmer or cutomer interactions with the product which really depends on the company and what it does, but over all the system would be able to provide a better idea about what the customer need/ wants and be able to create a better ideas for futuer updates/products.[1]
* Depending on the company ERP systems can also be a great part of manifacturing, by enabling the company to create an automation manifacturing system, and the system can do supporting on the processes in manifacturing and it would be able to set and collect more details across units in the organisation regardless of locaion but it all comes back to what the company wants/ needs. [1]
* ERP system can be able to provide some other services like HR, where it can give back multiple diffrient report such as employee time report instead of hving a normal person calculating it plus it can calculate expenses, skill maching and training which would make the process simpler and faster and all that adds to the point of having all of the deparments connected and updated with each other.[1]

#### Key features of ERP systems

#### characteristics:

* Enterprise-wide integration. here the system checks end to end process among all departments and operations such as having ordering a new product from a company and having the system do a follow / check up on the steps of getting the product to the customer and then afterwords its been shipped and dilverd it sends the invoice [1]
* Real-time (almost real-time) operations. the idea here is the process when it reaches the person responsbile for the process such as when the inventory recives a receipt with in few seconds from the order which is real time but we also have to look at how much time it take the receipt to finnsh from this stage, this is the ERP system going in details in the process it self and its real time because the the process show up with in multiple seconds from the order being oredered and here we can see a problen occuring which is that the seller would need more time to fix/find a solotion to this situation plus the person need to understand the problem fast.[1]
* A common database. here we establish a common data base that is shared among the ERP system so it would be established once for the departments but in some case when the data base becomes big it may result in slowing down the server/machine, so to improve performance the data base may get splited phisicly. [1]
* Consistent look and feel. ERP systems come with an user interface that show that is constantly updated, and this results in cutting cost on training and having an interface to interact with it means the vendor company may update the system with having much changed by restoring the same user interface and i have to say that the user word is important because of having each user see only they need to see.[1]

#### Types of ERP solutions

ERP systems are categorized in tiers based on the size and complexity of enterprises served:

* Tier I ERPs that carry out a large global besness which is capable of handeling all issues by including currency, language, alphabet, postal code, accounting rules, etc, in the internationalization process. Tier I vendors include Oracle, SAP, Microsoft, and Infor.[1]
* Tier I Government ERPs support large, mostly federal, government agencies. Oracle, SAP, and CompuServe PRISM are considered Tier I with Infor and CGI Momentum close behind.[1]
* Tier II ERPs that carry out a large besness that are not able to funcation in multiple countries but the compny it self cannt go global, in this Tier II there can be found 25 to 45 vendors that are categorized and they are standalone enrires / besness units.[1]
* Tier II Government ERPs focus on state and local governments with some federal installations. Tyler Technologies.[1]
* Tier III that carry out a mid besness, and its capable of handling a lot of languages and currencies but only a single alphabet. Depending on how ERPs are categorized, there are 75 to 100 Tier III ERP solutions.[1]
* Tier IV that carry out a small besness and often focus on accounting.[1]

#### Evolution of ERP System

Enterprise Resource Planning (ERP) is designed to automate various tasks. With ERP, it is simple to manage every department through a single database. This is a time-efficient and easy way to work.[2]

For instance, an enterprise’s planning, manufacturing, sales, and marketing efforts can be consolidated under one management system and integrated into a single database system.

ERP system has evolved over time,

1. Material Requirement Planning (MRP) –

Material Requirement Planning, first created in the 1970s, is a prevalent method for production planning and scheduling in the industry. Many commercial software programs include MRP as an embedded function. The purpose of MRP is to ensure the availability of materials by generating the necessary quantities at the appropriate time. This is accomplished by keeping track of inventory and demand, resulting in the automatic generation of purchase or production proposals. The ultimate goal of MRP is to determine the materials needed, the amount needed, and the deadline for when they are required.[2]

###### 2. Manufacturing Resource Planning (MRP II) –

Manufacturing Resource Planning (MRP II) is an advanced version of closed loop MRP that was developed in the 1980s and is designed to manage the entire manufacturing process of a company. This system offers information that is beneficial to all functional departments and promotes cross-functional collaboration. MRP II assists sales and marketing by providing a capability for order promising, and it is a comprehensive system for coordinating resources that involves other areas of the company in the planning process, such as marketing, finance, and human resources.[2]

###### 3. Enterprise Resource Planning (ERP) –

Enterprise Resour[ce Planning (ERP) was developed in the 1990s and is a fundamental system for both domestic and global operations, providing support for most or all functional areas in their daily operations. It is a widely used category of business software, particularly for large-scale businesses. ERP is a business strategy and a collection of industry-specific applications that create value for customers and shareholders by enabling and optimizing operational and financial processes within and between organizations. At its core, ERP is an efficient method of centralizing information and workflow processes through data management by keeping all workflow data in one location.[2]

###### 4. Enterprise Resource Planning(ERP II) –

ERP II, developed in the 2000s, is now used to refer to ERP. It can be considered as the next generation of ERP, and it is a business strategy that involves collaborative operational and financial processes internally and beyond the enterprise. These new business models emphasize increased internal integration. It is applicable to all sectors and segments, with data that is both internally and externally published and subscribed. It encompasses departmental modules, Customer Relationship Management (CRM), Supply Chain Management (SCM), and other stakeholders' modules and places a strong emphasis on intangible assets.[2]

The evolution of ERP systems has been driven by several factors, including advancements in technology, changes in business needs, and increased competition. One of the major factors that contributed to the evolution of ERP systems is the development of more powerful and cost-effective hardware and software. This has allowed ERP systems to process more data, support more users, and handle more complex processes.[2]

Another factor that has contributed to the evolution of ERP systems is the increased use of the internet and cloud computing. This has made it possible for businesses to access ERP systems remotely and has allowed for real-time data sharing and collaboration across different departments and locations.[2]

ERP systems have also evolved to become more user-friendly and customizable, with a focus on providing industry-specific solutions. This has made ERP systems more accessible to small and medium-sized businesses, which previously may not have been able to afford or implement them.[2]

ERP systems offer many benefits to businesses, including improved efficiency, cost savings, and better decision-making. They can automate routine tasks, such as inventory management, financial reporting, and customer relationship management, which can free up employees to focus on more strategic activities.[2]

ERP systems can also improve data accuracy and security by centralizing data and providing access controls, and can provide real-time visibility into business operations, which can help businesses make more informed decisions.[2]

However, ERP systems also have some drawbacks. One of the main drawbacks is that they can be complex and expensive to implement and maintain. Businesses may need to invest in new hardware, software, and staff training, which can be a significant cost.[2]

Another drawback is that ERP systems can be inflexible and may not be able to adapt to the unique needs of a business. This can lead to a lack of user adoption, which can negatively impact the effectiveness of the system.[2]

In conclusion, ERP systems have evolved over time to meet the changing needs of businesses, and they offer many benefits in terms of efficiency, cost savings, and better decision-making. However, businesses should weigh the costs and potential drawbacks of ERP systems before deciding to implement one[2]

# Advantages

An ERP system is a software solution that helps businesses manage various processes and improve efficiency.

1. Cost Reduction: By automating tasks such as report drafting, invoice allocation, and employee payroll, an ERP system saves time and reduces costs in the long run.
2. Improved Visibility and Data Reliability: ERP software allows businesses to access data from all departments, making it easier to make informed decisions.
3. Better Reporting and Planning: With a unified reporting system, an ERP system generates valuable reports and analytics for improved decision-making.
4. Flexible Modularity and Scalability: An ERP system is modular, meaning businesses can choose the components that work best for them, and can easily accommodate growth in the future.
5. Increased Efficiency: By reducing repetitive manual processes, an ERP system improves efficiency and frees up team members to focus on revenue-affecting tasks.
6. Stronger Customer Service: By centralizing customer information, an ERP system strengthens customer relationships and improves customer satisfaction.

# Disadvantages

1. The Cost of ERP Software: Investing in traditional ERP systems, like SAP Business One, can cost a lot of money for a single license. This cost can be a problem for small and medium-sized businesses. A cloud-based solution has monthly fees instead of an upfront cost, and open-source ERP software is another cost-saving option.
2. Customizing the Software: Customizing ERP software is a good thing, but it can take a lot of time, effort, and money. Sometimes businesses don't plan well and end up overspending or not completing their customization. This can also make it harder to upgrade the software later.
3. Complexity and Need for Training: ERP software has many capabilities, but this also means it can be complicated to use. Sometimes companies get too excited about the potential of the software and don't plan for the implementation well enough. This can lead to a poor return on investment if the software is too complex for the business or if the team doesn't want to use it. To prevent this, invest in training and choose a system with just the functionality you need.
4. Slow Implementation: Installing ERP software takes a long time, sometimes up to two years. Even a cloud-based solution can be slow to implement. The organization needs to allocate time to learn the new software after implementation, and everyone will need time to understand the system.
5. No Quick Results: Implementing, training, and using ERP software takes time and patience. You won't see results right away, but with the right solution for your business, you will see a return on investment over time. No shortcuts are available, so plan accordingly.

# Microsoft

##### Revised ERP definition:

Enterprise resource planning (ERP) is a technology solution that streamlines and integrates various business processes such as finance, supply chain, manufacturing, human resources, retail, and operations. It provides leaders with a comprehensive view of the organization, breaking down data silos and improving decision-making.[4]

##### Examples of ERP impact in business:

ERP systems provide a unified view of an organization, connecting various operations and departments. It helps identify issues, remove barriers, and drive growth by bringing business intelligence to the forefront. Here are a few areas where ERP systems can optimize business performance:[4]

* Finance:

ERP can enhance profitability, reduce errors, eliminate duplicates, and ensure compliance by providing relevant financial information.[4]

* Manufacturing

ERP systems in manufacturing accelerate product delivery and production, offering a comprehensive solution for tracking, scheduling, and optimizing product manufacturing and delivery, ensuring seamless support from product to customer.[4]

* Retail

ERP systems ensure a harmonious retail experience by managing product details, stock levels, customer promotions, and sales figures centrally, enhancing both in-store and online sales.[4]

* Supply Chain

ERP systems optimize the entire supply chain from sales to delivery, enhancing visibility, streamlining logistics across all sites and facilities, and improving the overall supply chain.[4]

* Human resources

Human capital management systems within ERP systems offer centralized employee data, supporting success with benefits administration, absence management, talent attraction, and compliance tools.[4]

###### Features and benefits of ERP systems

ERP systems enhance decision-making with real-time visibility, prevent problems before they arise, and boost productivity. By consolidating data from multiple sources, ERP systems streamline operations and provide a comprehensive view of business processes, allowing for prompt responses to regulatory changes and compliance across the organization.[4]

benefits of ERP systems:

* Efficient processes

ERP systems enhance control over previously disparate business operations through automation, task prioritization, and integrated data.[4]

* Collaborative teams

ERP systems increase business productivity, streamline data flow among departments, and foster teamwork by breaking down data barriers.[4]

* Consolidated data

ERP systems eliminate duplication, minimize errors, and boost data accuracy by centralizing all department data in one location.[4]

* Enhance decision-making

ERP systems provide real-time organization information, enabling predictive insights and data-driven decision making.[4]

* Reduced expenses

ERP systems prevent mistakes and anticipate issues before they arise, leading to increased efficiency and lower costs throughout the business.[4]

###### Selecting an ERP system for your business

ERP systems can help businesses of all sizes grow and overcome software limitations. Choosing the right ERP system requires evaluating factors such as structure, suitability, and definition. These considerations are key to finding a well-rounded ERP system that meets your organization's needs.[4]

* Scalable to meet evolving needs:

Choose an ERP system that can adapt to your organization's growth and changing requirements.[4]

* Customizable:

Select a solution that allows you to customize and extend it to fit your specific needs, and integrate with other industry systems.[4]

* Accessible from anywhere:

Opt for an ERP system that is cloud-based and mobile-friendly, ensuring your team stays connected whether in the office or on the go.[4]

* Comprehensive business overview:

Go for a solution that offers more than just ERP, incorporating features like CRM, human resources, and other tools to give you a broad view of your organization.[4]

* Seamless integration:

Invest in an ERP system that enables seamless data sharing and integration across different applications for a unified experience.[4]

###### What Microsoft Dynamics 365 can do for your business

With Dynamics 365, eliminate data silos and enhance your decision-making process with intelligent business applications that exceed traditional ERP systems. Integrate data and relationships, incorporate intelligence into your decision-making, and achieve exceptional outcomes with this comprehensive cloud application suite.[4]

1. **Dynamics 365 Finance**

Capabilities

* 1. Enhances financial decision making with accurate cash flow projections, reliable customer payment predictions, intelligent budget proposals, and faster book closing.
  2. Unifies and automates business processes, including vendor invoices, credit risk management, and a single source of truth for business intelligence.
  3. Makes a strategic impact while reducing costs through efficient business management, compliance with local tax regulations, and meeting global business needs.

1. **Dynamics 365 Project Operations**

Capabilities

* 1. Improves deal management with customized costing, tailored project-based deal structures, and a unified sales dashboard.
  2. Drives success with enhanced project management tools, collaboration, and insights.
  3. Optimizes resource profitability through efficient utilization and intelligent scheduling.
  4. Simplifies time tracking and expense management with mobile submission, team member compliance, and accurate reporting.
  5. Streamlines project financials for improved revenue recognition, invoicing, and project accounting.

1. **Dynamics 365 Business Central**

Capabilities

* 1. Adapts to business growth with cloud or on-premises deployment, data storage and transmission, and tailored software options.
  2. Works smarter and faster with insights, workflow automation, and data integration with Microsoft 365.
  3. Activates financial and business insights through financial data control, global market expansion, and better reporting for financial decisions.
  4. Accelerates sales processes with lead prioritization, flexible pricing, customer outcomes, and cash management.
  5. Delivers exceptional customer service with smooth sales to service transitions, customer returns tracking, and service promise fulfillment.
  6. Facilitates project success with optimized project costing, resource levels, and project insights.
  7. Optimizes warehouse management with supplier engagement, inventory view, and stock replenishment prediction.
  8. Provides optimal manufacturing outputs through storage facility organization, receiving and shipping streamlining, and customer and operation connections.

1. **Dynamics 365 Supply Chain Management**

Capabilities

* 1. . Planning with confidence and agility - helps with continuous planning, better demand forecasting, no stockouts, optimized inventory, and real-time collaboration.
  2. Procurement with strategy and cost efficiency - helps with efficient vendor collaboration, cost management, simple procurement process, resilient supplier networks, and smart purchasing decisions.
  3. Manufacturing with innovation and sustainability - helps create a connected factory, innovate with intelligent manufacturing, improve production visibility, and transform the workforce.
  4. Delivery with consistency and speed - helps deliver on customer promises, maintain customer loyalty, unify warehousing data, improve warehouse operations, and increase throughput.
  5. Operating with precision and foresight - helps reduce machine downtime, improve equipment efficiency, coordinate maintenance and production, enhance inventory accuracy, and manage product quality.

1. **Dynamics 365 Intelligent Order Management  
   Capabilities**
   1. The Automate and Optimize Fulfillment feature helps to:
      1. Improve order fulfillment by using rules-based management and real-time data
      2. Manage the entire order process using an intelligent solution and address any issues proactively
      3. Easily adapt to changing business models with a user-friendly interface and collaboration tools
      4. Quickly set up and scale for peak order volumes while maximizing existing investments
      5. Enhance customer experience by increasing on-time and in-full order fulfillment, providing omnichannel options, and real-time inventory and order status updates.
   2. The Manage the Entire Order Lifecycle feature helps to:
      1. Automate the entire order process using an intelligent solution and proactively address any issues
      2. Optimize stock levels and handle returns easily.
   3. The Adapt Faster to Changing Business Models feature helps to:
      1. Easily adapt to changes with a user-friendly interface and collaboration tools
      2. Proactively respond to disruptions and constraints
      3. Keep up with the evolution of e-commerce and rapidly design and build order flows.
   4. The Get Up and Running Quickly feature helps to:
      1. Easily extend your business with out-of-the-box connectors
      2. Quickly scale for peak order volumes and maximize existing investments
      3. Deploy without dependencies.
   5. The Enhance Your Customers' Experience Sustainably feature helps to:
      1. Increase on-time and in-full order fulfillment
      2. Meet customers with omnichannel fulfillment options
      3. Enhance customer loyalty by providing real-time inventory and order status updates.
2. **Dynamics 365 Commerce  
   Capabilities**
   * 1. Omnichannel Engagement: Provide a smooth and personalized shopping experience, offer easy customer interaction, give customers choices, manage sales promotions, and expand partnerships.
     2. Customer Loyalty and Personalization: Personalize customer experiences, increase customer options, understand customers completely, empower employees, and improve sales abilities.
     3. Streamlined Digital Commerce: Create appealing digital stores, engage shoppers, improve B2B purchasing, manage channels easily, and quickly test and update digital channels.
     4. AI-Driven Intelligent Commerce: Improve sales, protect reputation, increase customer conversion, make it easy for customers to find products, and improve accessibility.
     5. Connected Customer Journeys: Make customer experiences seamless, increase customer conversions, quickly meet customer needs, improve customer satisfaction, and target customers effectively.
     6. Headless, Scalable API-first Solution: Start and deploy API-first commerce quickly, customize the solution easily, meet global business needs, and protect data proactively.
3. **Dynamics 365 Fraud Protection  
   Capabilities**
   1. **Account protection**
      1. Its about making sure accounts are safe. It includes ways to detect fraud and protect accounts using a fraud protection network, device tracking, and adjusting rules to fit the business. Bot protection is also provided.
   2. **Purchase protection**
      1. Its about making sure purchases are safe. The focus is on profitability and protection of transactions by collaborating and checking fraud with multiple data points. The plan can be adapted to fit the business and increase transaction acceptance. It also helps improve customer service when things go wrong.
   3. **Loss prevention**
      1. its about preventing losses. It uses intelligent technology to detect any strange activity and protect against in-store losses, return fraud and other problems. Reports are provided to show any issues and actions to be taken. The system can automatically discover any problems.

[4]

# ACUMATICA

Acumatica is the only cloud- and browser-based ERP solution that adapts to the needs of growing small- and mid-sized businesses (SMBs) economically and securely. [5]

1. Adapts to different industries: Distribution, Manufacturing, Retail/eCommerce, Services (Professional, Business, Repair, and Not-for-Profit)
2. All-in-one web-based system with integrated applications and centralized database
3. User-friendly interface that works on any device
4. Document management for central repository of documents and media
5. Automated workflows and approvals for control
6. Can be extended for specific needs through standard tools and APIs
7. Easy reporting and self-service BI to create personal dashboards.

#### ACUMATICA CLOUD ERP SOLUTIONS

1. Financial Management:
   1. Acumatica's Financial Management Suite offers powerful financial solutions that are simple enough for small businesses and comprehensive enough for complex multinational corporations. It includes standard financial processes (GL/AP/AR) and reports used by many organizations, as well as intercompany and multicompany accounting, fixed assets, recurring and deferred revenue, and cash management.[5]
2. Customer Management:
   1. Customer Relationship Management (CRM) is fully integrated into Acumatica's suites and provides real-time customer information through dashboards and reports, including quotes, orders, invoices, payments, and support cases. Customers can access information through a self-service portal.[5]
3. Distribution Management:
   1. Acumatica's Distribution Management Suite works with the Financial Management Suite to provide a complete distribution solution, streamlining processes from quote-to-cash and purchase requisition-to-payment. Features include multiple warehouses, lot and serial number tracking, automated POs, configurable order types, discounts, and promotions.[5]
4. Project Accounting:
   1. Acumatica's Project Accounting Suite helps you deliver projects on time and on budget, with complex billing rules and project revenue calculation. It tracks costs and includes project costs in company-wide financial reports.[5]
5. Manufacturing Management:
   1. Acumatica's Manufacturing Management Suite integrates production planning, customer management, sales orders, inventory, purchasing, and accounting. Features include BOM and Routing, Material Requirements Planning (MRP), Production Scheduling and Control, Quoting and Estimating, and Product Configurator.[5]
6. Field Services Edition:
   1. Acumatica's Field Services Edition offers real-time customer activity tracking across all operations, with streamlined dispatching, reduced response times, and minimized costs. It integrates with CRM, sales, inventory, purchasing, accounting, and financial reporting.[5]
7. Commerce Edition:
   1. Acumatica's Commerce Edition delivers a consistent customer experience across sales channels, with full integration between online, mobile, and in-store service. It integrates a robust eCommerce platform with Acumatica's financials, sales, inventory, CRM, and fulfillment systems using Magento, with a two-way connector provided by Kensium.[5]

###### KEY BENEFITS[5]

1. FLEXIBILITY TO WORK YOUR WAY:
   1. Use Acumatica's robust platform to perform customizations, even in a SaaS environment.
2. MAXIMUM PERFORMANCE:
   1. Meet the needs of high-volume businesses and provide employees with access from any device, anywhere.
3. ENABLES BUSINESS GROWTH:
   1. Unlimited users at the same cost, reducing budget restrictions.
   2. Latest updates included in subscription without extra cost.
4. LOWERING COSTS:
   1. No upfront expenses for hardware or servers.
   2. Monthly subscription instead of licensing fees.
   3. Acumatica handles hardware and software updates, reducing IT maintenance costs.

###### THE ACUMATICA ERP DIFFERENCE

Acumatica provides a complete set of tools to manage your business that's different from other ERP solutions.[5]

1. Improved Operations:
   1. Automate tasks to save time
   2. Control the way work is done
   3. Access the system from any device, including mobile
   4. Encourage teamwork with inclusive user licensing
2. Customizable Solution:
   1. Choose to use it in-house or in a cloud
   2. Adjust the solution to meet your needs
   3. Add new features such as CRM or data visualization whenever needed
   4. Connect to other solutions and apps outside of ERP
3. Faster Business:
   1. Improve business performance and make better decisions with automated processes, real-time data collection, financial analysis, and forecasting
   2. No extra cost for adding users – the system grows with your business.

# ePROMIS ERP

ePROMIS Solutions is a company that creates software for businesses of all sizes. They are based in Houston, USA and have many customers worldwide. They specialize in making advanced business management systems that help businesses run better. They have over 30 years of experience in this field. Their customers are very happy with their products, with a retention rate of over 95%.[6]

ePROMIS Solutions has made a software for managing businesses called ePROMIS. It's easy to use and covers everything a business needs to make decisions, like accounting, buying, selling, and managing employees and assets.[6]

PROMIS software helps businesses by supporting all their operations and can be changed to fit the industry and location where the business is. The software is made for businesses in construction, contracting, MEP, manufacturing, trading, and retail.[6]

Not sure if ePROMIS is good for you? Try our tool to find the best ERP software, and get a suggestion. Need help? Contact us by phone, email, or chat to get advice from one of our experts.[6]

###### Features[6]

* + Storing and sharing documents
  + Sending and receiving messages within the company
  + Tracking budget and expenses
  + Getting business information through reports and data analysis
  + Managing payroll
  + Using on mobile devices
  + Managing human resources
  + Managing orders and sales
  + Keeping track of finances
  + Managing the flow of goods and materials

# Story's of success

1. **Microsoft**  
   Company: The National Football League Players Association  
     
   Industry: Nonprofit  
   The NFL Players Association (NFLPA) uses Microsoft Dynamics 365 to improve opportunities for its nearly 2,200 current and 3,200 former players.   
     
   As a nonprofit union, NFLPA provides a range of services and protects the rights of professional football players. By adopting a single, cloud-based CRM system, the organization was able to manage player data efficiently and reduce costs.   
     
   This allowed NFLPA staff to automate manual processes and focus on developing new member services. With powerful reporting tools, the staff can now quickly search player data and find opportunities for players faster.   
     
   According to the director of information systems, the organization is now able to reach out to more players with opportunities than ever before[7]  
     
   Customer: Mercedes-Benz USA Products and Services Dynamics 365 Mixed Reality HoloLens Industry Automotive  
   Organization Size: Corporate (10,000+ employees)  
   Country: United States  
     
   Mercedes-Benz, a renowned name in the automotive sector, strives to provide an unparalleled customer experience through its top-notch vehicles and unparalleled service. To meet this objective, the company has selected Microsoft HoloLens 2 and Dynamics 365 Remote Assist to enhance the efficiency of service technicians, speed up problem resolution, and lower service-related travel costs and its environmental impact.[7]  
     
     
   Mercedes-Benz dealerships and technicians are responsible for maintaining the brand's high standards of customer service. However, the ever-growing complexity of modern vehicles poses a challenge. "Cars used to be simple with a few mechanical parts, but now everything is digital and computerized, making it more complex," says Juergen Pietsch, Department Manager for Field Technical Services at Mercedes-Benz USA (MBUS). MBUS provides support to dealer service centers to resolve issues, but the traditional process was often slow and necessitated field technicians to travel across the US.[7]  
     
     
     
     
   For Mercedes of Coral Gables, a family-owned dealership in Florida with 50 service technicians, the long wait for answers from MBUS technicians led to inefficiencies, a backlog of service orders, and frustrated customers. "We handle around 100 cars a day in our limited space here in Coral Gables," says Matias Scolnik, Shop Foreman. "Efficiently working on a car and fixing it as fast as possible is crucial in our location."[7]  
     
   Game changer: Gaining efficiencies with HoloLens 2 and Dynamics 365 Remote Assist[7]  
     
   Using HoloLens 2 and Dynamics 365 Remote Assist, technicians can now solve problems in just 10 minutes instead of days of back and forth phone calls and emails. Service technicians use the HoloLens 2 device to look at a Mercedes-Benz car and can see a 3D model of the car's parts right in front of them. They can also work with remote experts from around the world to help fix problems, as the remote experts can see everything the technician sees and can annotate the visual information. This new technology is a game-changer and helps improve customer service and reduce the amount of travel needed, which also helps the environment. The technology allows technicians to solve problems for many dealerships without leaving their office.[7]

1. **ACUMATICA**   
   Key Code Media  
     
   Key Code Media improved their operations by implementing a single connected solution that includes customer relationship management (CRM), project management, and real-time financial insights. This solution helped manage 300 to 400-plus lines for quoting and project updates efficiently. The manual data entry processes were automated and the need to export data multiple times a day was eliminated, saving time. The technology infrastructure costs were reduced by moving to the cloud and all users were given instant access from home when the pandemic hit. The solution also supported Key Code Media in acquiring two companies during the pandemic, resulting in a 70% increase in revenue and effortless growth in staff.[8]  
     
   Challenges  
     
   Key Code Media is a company that helps businesses with audio and visual equipment and design of facility upgrades. They also provide training for media professionals through Key Code Education. During the pandemic, the demand for their services increased. They have worked with big companies like Microsoft, Walmart, and Netflix. Key Code Media used to use different programs for accounting, customer relationship management, and project management, but it was difficult to get real-time updates and reports. They wanted a single system that could handle project management, CRM, and project coding, so they evaluated different ERP systems, but none of them fit their needs. Finally, they chose a solution that was technologically advanced and customer-driven.[8]  
     
   ERP Solution  
     
   Key Code Media chose Acumatica as its ERP solution due to its transparency, functionality, and scalability. The company appreciated Acumatica's user-friendly low-code tools and open architecture, allowing for easy customization without hiring additional software developers. The pricing model, based on transactions, was more favorable compared to other ERP vendors that required an expensive full-user license for each user, including those who only needed infrequent access. Acumatica's comprehensive features and support for unlimited users also made it an attractive option for Key Code Media to grow its business cost-effectively.[8]  
     
   Outcome  
     
   Key Code Media experienced a 70% growth in employment and revenues with the help of Acumatica. The ERP solution provided centralized access and real-time visibility into customer information, delivery schedules, and project deliverables, which was crucial during the pandemic and supply chain issues. The cloud-based system allowed Key Code Media to go paperless, eliminate manual data entry, reduce technology infrastructure costs, and improve project accounting. The company also appreciated Acumatica's customer-focused innovation and ability to integrate with AI and machine learning. The Acumatica system allowed employees to work remotely and efficiently with no downtime, and the company was able to save time by analyzing data instead of inputting it.[8]
2. **ePROMIS**   
     
   Customer : Engineering Contracting Company(ECC)  
   Industry : Construction , Contracting , Real Estate , Interior Design  
   Employee# : 5000  
     
   ECC is a renowned engineering company in the UAE, offering integrated contracting services that merge engineering and art to deliver cost-effective and innovative solutions while prioritizing quality and deadlines. The company has a diverse portfolio of projects, including premium residential and commercial buildings in sectors such as education, healthcare, hospitality, and retail. ECC was established in 1975 and has a successful track record, led by Mr. Hatem Farah and Mr. Khodr Aldah, both with over 40 years of experience in providing exceptional engineering solutions in the Middle East. Recently, ECC made a place in the Guinness World Records as the contractor for the largest 3D printed project in the world.[9]  
     
   Challenges Faced By ECC  
     
   Managing a wide variety of projects from multiple industries presented a challenge for the ECC team to monitor their advancement. Despite wanting to give equal attention to all projects, it was challenging to gain real-time insight into the status and issues of each project. This caused confusion and resulted in delays, as well as excessive daily paperwork that took up time, resources, and money.[9]  
     
   How ePROMIS Came To The Rescue?  
     
   ePROMIS recognized ECC's struggles and developed a tailored project management solution that provided a unified overview of each project and its daily progress. This helped pinpoint issues, eliminate inefficiencies, and monitor progress through its user-friendly interface, streamlining project management for ECC. The projects can now be easily accessed through various filters and quickly assigned to teams using technology.[9]

Key Results Achieved  
  
With ePROMIS, ECC saw significant improvement in their project management processes and productivity. Manual errors were reduced, and deadlines were met consistently. The following benefits were achieved through ePROMIS technology solutions:[9]

● Improved efficiency in handling projects for ECC.

● Higher customer satisfaction due to better project management.

● Increased accuracy through enhanced control and visibility.

● Quick identification and resolution of inefficiencies and challenges.

● Electronic project allocation and delegation, reducing manual paperwork.

# implementing ERP solutions and information

Assessment and planning: This is the first step in the ERP implementation process, and it involves assessing the current processes, systems, and needs of the organization. This step helps to identify gaps and areas for improvement, and to establish a clear plan and timeline for the implementation.[10]

System selection: After assessing the organization's needs, the next step is to select an appropriate ERP system. This typically involves evaluating different systems and vendors, and determining which system best meets the organization's specific requirements.[10]

Configuration and customization: Once the ERP system is selected, the next step is to configure and customize the system to meet the organization's specific needs. This typically involves mapping the organization's existing processes to the new system, and making any necessary adjustments or modifications.[10]

Testing and training: Before the ERP system can be deployed, it needs to be tested to ensure that it is working correctly and that all processes are running smoothly. This step also involves training employees on how to use the new system, which will be critical to its success.[10]

Deployment and go-live: After the system is tested and employees are trained, it is ready to be deployed and go live. This step involves migrating data from existing systems to the new ERP system, and making the system available to employees and other users.[10]

Post-implementation support: The final step in the ERP implementation process is post-implementation support. This step involves providing ongoing support and maintenance to the system, as well as monitoring its performance and making any necessary adjustments.

The lifecycle of module implementation is the process of adding new functionality to the ERP system over time.[10]

Identification: This step involves identifying the need for new functionality and determining which module(s) will be needed to meet the organization's requirements.

Analysis: This step involves analyzing the existing system and determining how the new module(s) will integrate with the existing system. This step also involves gathering requirements for the new module(s) and determining the necessary customization.[10]

Design: This step involves designing the new module(s) and determining the best way to implement them. This step also involves creating any necessary customizations and developing any necessary integration points.[10]

Development: This step involves developing the new module(s) and customizations. This step also involves testing the new module(s) and customizations to ensure that they are working correctly.[10]

Deployment: This step involves deploying the new module(s) and customizations to the production environment.[10]

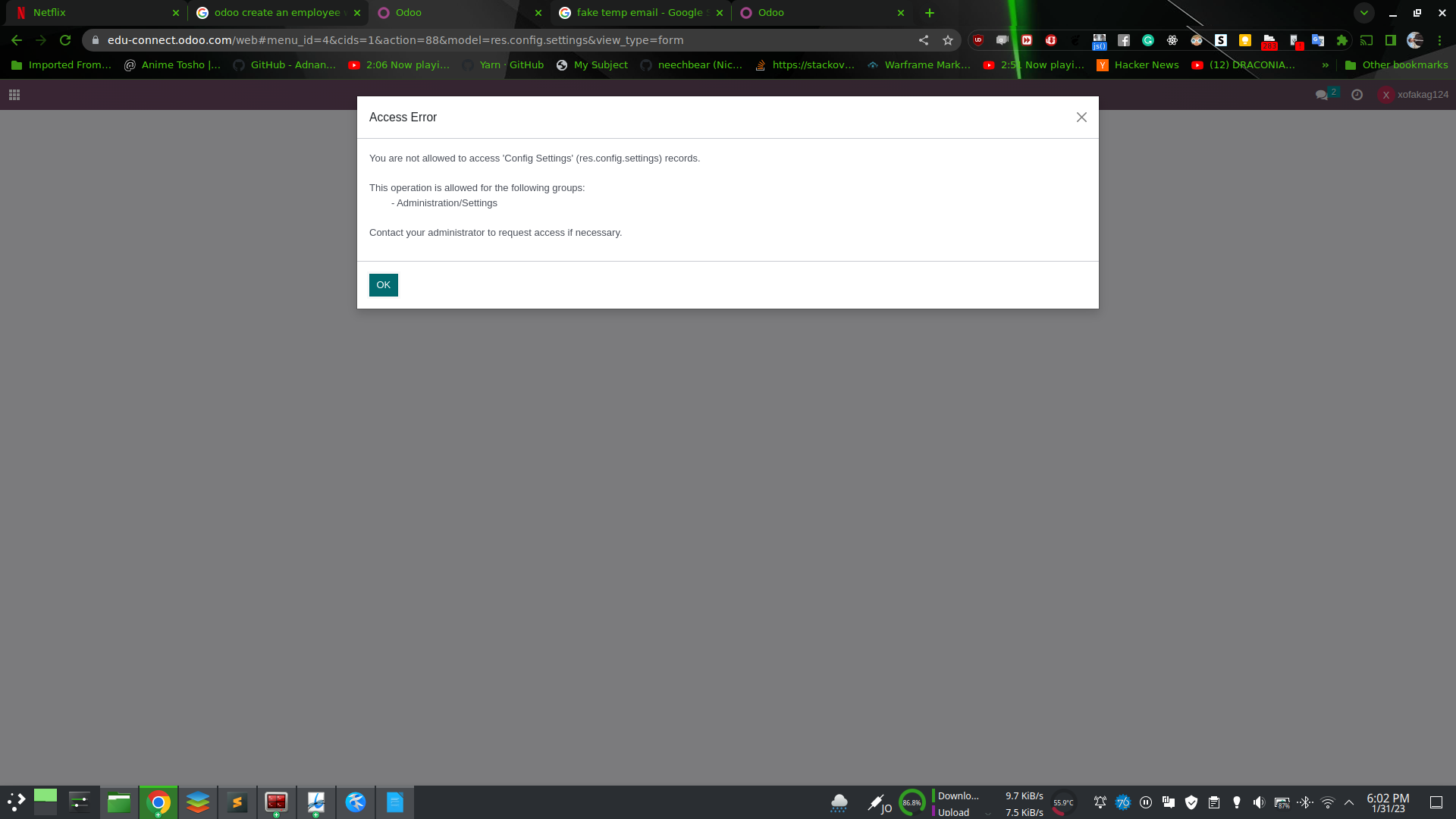
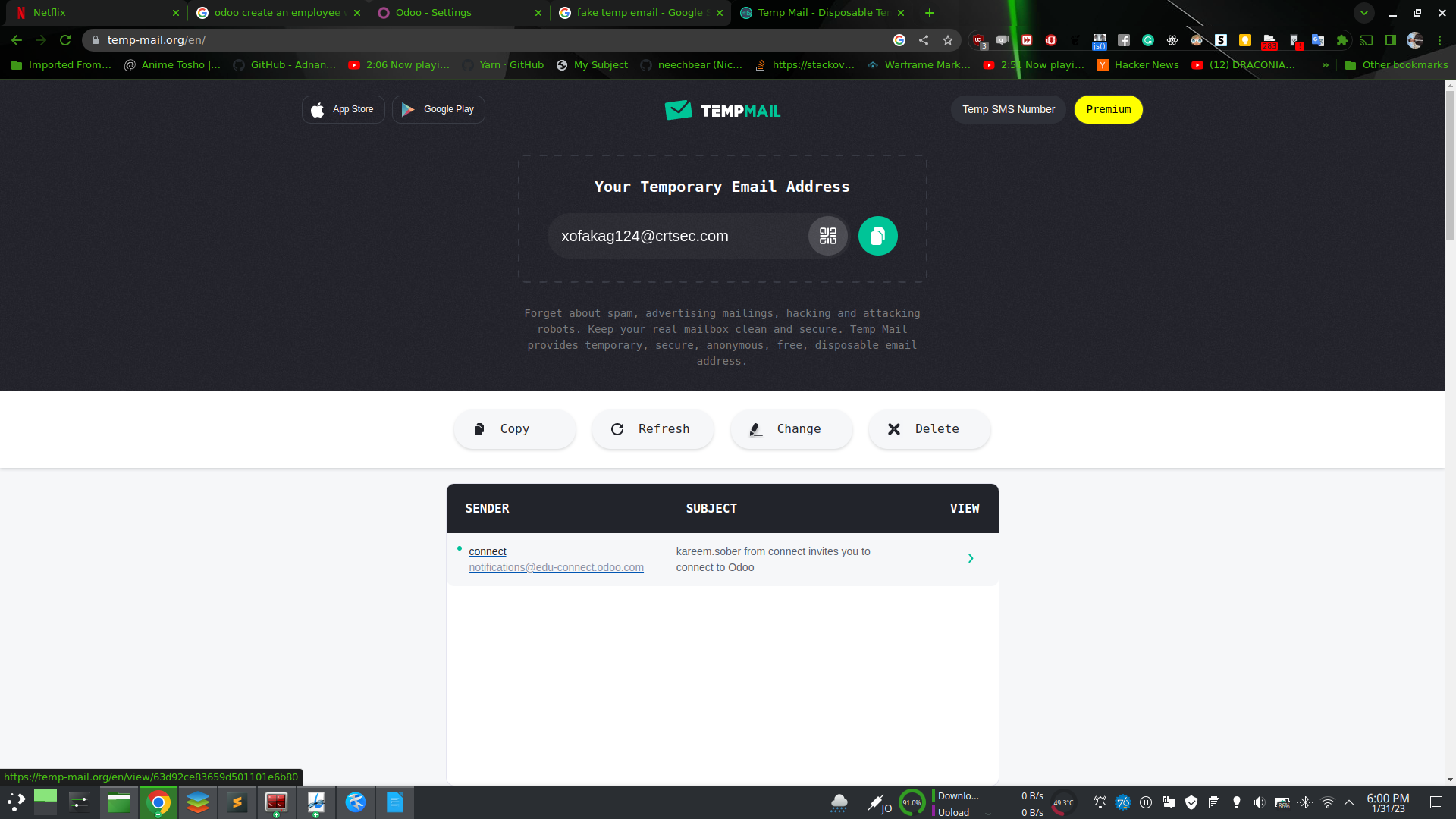
# ERP Implementation Best Practices

A successful ERP implementation is not solely dependent on creating a phased approach. Equally important is following best practices within each phase to ensure a successful outcome. Key best practices include:

1. Thorough planning: Avoid rushing into design and development before completing the initial planning and discovery phase. This phase should lay a solid foundation for the entire implementation project by securing high-level support, creating a clear plan, and allocating adequate budget and personnel.[11]
2. Adequate support and training: Some project team members may overlook post-deployment support and training. However, this is crucial for the success of the project as the users will require technical support, issue resolution, and updates. Adequate resources should be allocated for this, and end-user training should be a priority to ensure comfort and familiarity with the system.[11]
3. Careful data migration: It's crucial to carefully plan and rationalize data migration as migrating all historical data may not be necessary. This is an opportunity to clean up and streamline data, eliminating obsolete or irrelevant information.[11]
4. Effective communication: Communication is essential throughout all phases of the implementation. Regular communication should be maintained to keep everyone in the organization informed about the reasons, goals, and benefits of the ERP implementation and what to expect during each phase. Two-way communication is vital, with the project team listening to user issues before and after deployment.[11]

Remember, an ERP implementation is a significant investment in terms of time, money, and resources. It is essential to develop a solid plan, optimize business processes after the initial go-live date, and gradually add features and functionalities for long-term success.

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