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10 WAYS TO DRIVE ERP ADOPTION

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TABLE OF CONTENTS

10 WAYS TO DRIVE ERP ADOPTION.....	3
INCREASING ERP ADOPTION HELPS DRIVE REVENUE GROWTH.....	4
INCREASING ERP ADOPTION DRIVES HIGHER PRODUCTIVITY.....	6
BENCHMARKING YOUR COMPANY'S ERP ADOPTION.....	7
10 STRATEGIES FOR INCREASING ERP ADOPTION.....	8

10 WAYS TO DRIVE ERP ADOPTION

- ERP adoption increases by an average of 25% when there's a solid business case defined and bought into by teams and employees.
- 56% of best-in-class organizations enable access to ERP on mobile devices for employees, in comparison to 24% of all others. Organizations with mobile ERP apps and systems are seeing a 17% improvement in the cycle times of key business processes over their first year of adoption according to Aberdeen.
- With 92% of manufacturers saying product quality defines their success in the eyes of their customers, the need for more real-time quality tracking and reporting enabling by broader mobile ERP adoption is becoming a competitive differentiator.
- 46% of manufacturers agree that implementing and using business intelligence (BI), and data analytics are necessary to stay competitive and grow their businesses according to a recent Honeywell survey, Data's Big Impact on Manufacturing: A Study of Executive Opinions. Manufacturers can get more value from their BI and data analytics investments by increasing ERP adoption.
- High adoption of mobile ERP apps and systems are proving to increase productivity, organizational efficiency and reduce response times to customers and suppliers according to recent Aberdeen and Gartner studies.
- Increasing ERP adoption from the shop floor to the top floor is the first step in keeping manufacturing in step with customer's expectations and future needs, strengthening customer satisfaction and assuring higher Lifetime Customer Value (LCV).
- Excelling at manufacturing execution starts with an ERP system capable of scaling company-wide, providing real-time updates to every team in real-time, across all platform, anytime.

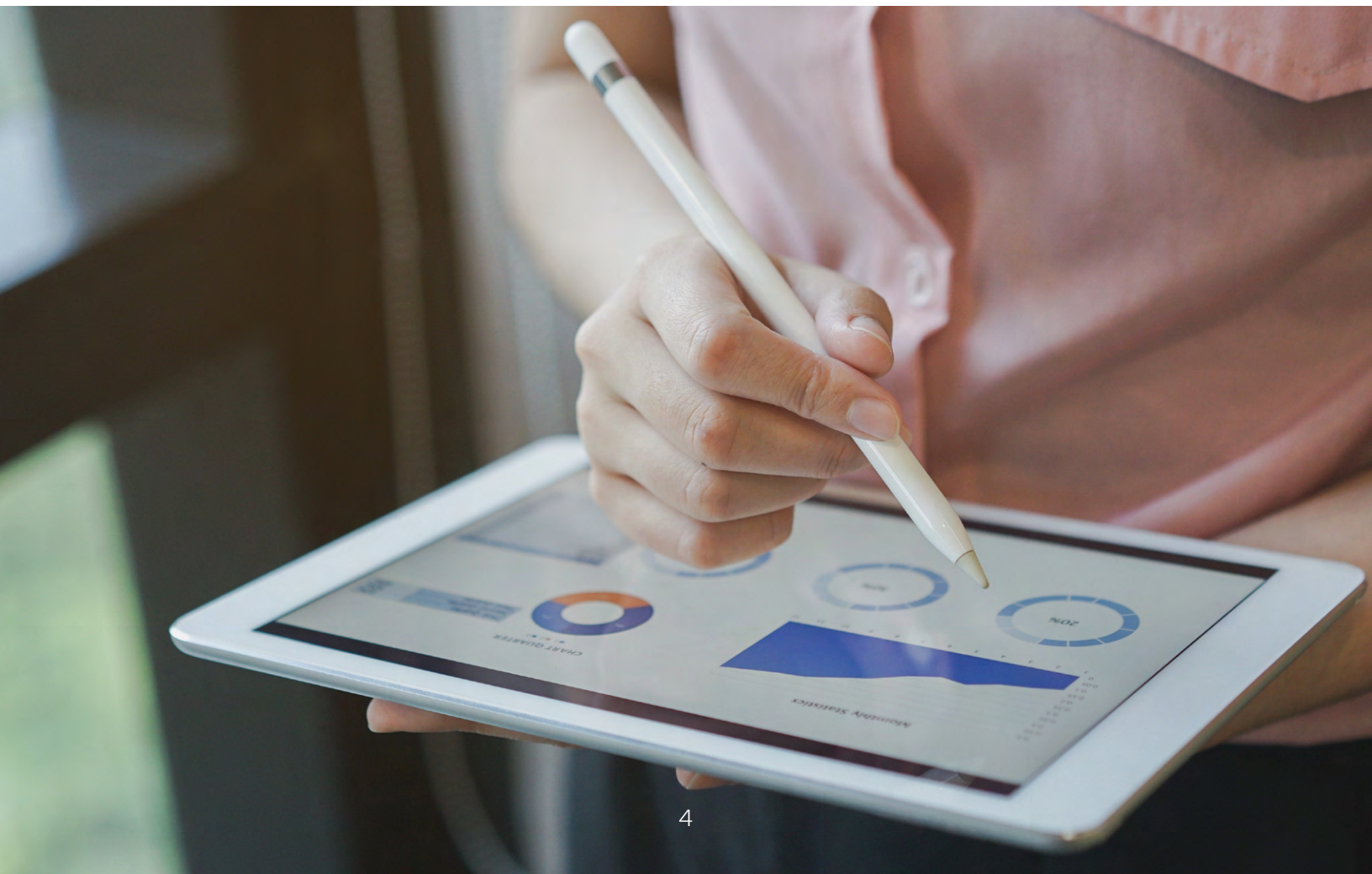


INCREASING ERP ADOPTION HELPS DRIVE REVENUE GROWTH

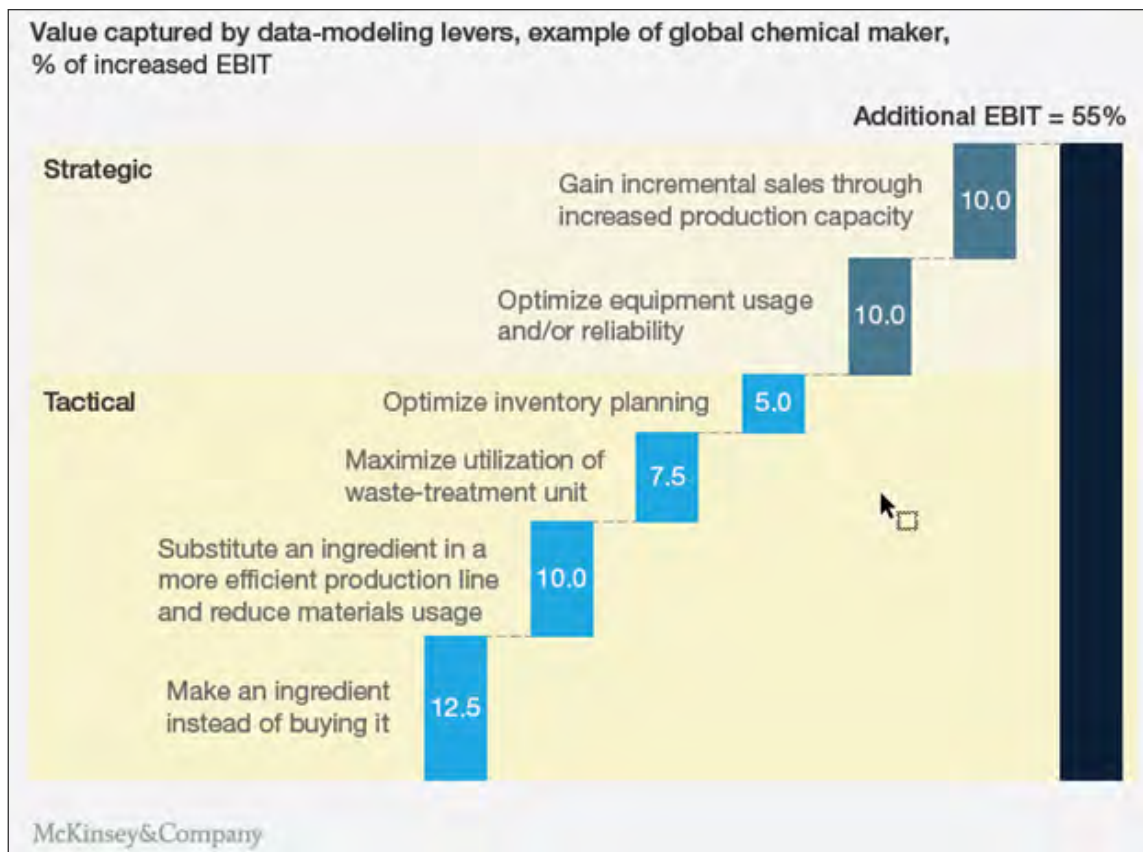
One of the smartest ways any manufacturer can be more competitive and win more sales is to increase the accuracy, speed, and scale of how they provide data and insights across their operations. Exceptional companies excel at translating data and information into competitive insights they quickly take action on. Becoming competitively smarter and stronger takes a constant focus on providing every department, team, an employee with the data they need to excel. That's why setting goals for attaining and growing ERP adoption levels is so important.

ERP data, insights, and intelligence are the lifeblood that keeps any manufacturer alive and growing. Getting the right data to the right teams at the right time, and having them act on it can mean the difference between meeting a customers' delivery schedules and quality standards. When the most valuable data is available from the shop floor to the top floor, higher quality decisions happen faster. Fewer order entry errors, less order rework on existing orders, improved customer satisfaction and a drop in Days Sales Outstanding (DSO) all happen when everyone is using the same source of data. McKinsey & Company's August 2017 article, Manufacturing: Analytics Unleashes Productivity And Profitability found that manufacturers can quickly turn the data ERP systems produce into greater gross and net revenue margin opportunities and lower costs. By increasing ERP adoption and improving the quality of data provided in its analytics and BI systems, one of the manufacturers mentioned in the article was able to:

- **By having broad adoption of their ERP system, production and operations managers were able to increase output between 18 to 30% which represented a net contribution increase of around \$6.1M.** Defining the optimal group of teams who need to adopt ERP systems to gain access to its valuable data which also have expertise in analytics and BI is essential. Taking this extra step delivers increased output and net contribution gains in the millions when implemented well.
- **ERP and BI systems' higher levels of adoption provided valuable data on how the manufacturer could improve EBITDA (earnings before interest, taxes, depreciation, and amortization) margins by 4 to 10%.** Every manufacturer struggles with translating shop floor data into financial outcomes, yet with increased ERP adoption, there is a greater base of insights to capitalize on. And it's not just for consuming data; greater ERP adoption fuels higher quality inbound data that provides insights, catalyzing greater outcomes as well.



- **The company expects to improve total production by 30% without a substantial increase in operating costs by using condition monitoring and predictive maintenance.** Defining the best possible teams to increase ERP adoption delivers results in areas not initially considered in a roll-out plan. Combining the data ERP systems provide with these teams' core strengths including process controls and automated material tracking, one of the manufacturers mentioned in the McKinsey & Company article was able to improve total production by a third.
- **One manufacturer was able to increase earnings 55% by applying insights gained from data mined from ERP systems using advanced analytics and data modeling.** Getting the right teams using the best possible ERP, analytics, Business Intelligence (BI) and data modeling apps and data drive results. A chemical manufacturer McKinsey cites in their research was able to increase Earnings Before Interest & Taxes (EBIT) by 55%. The most significant contributors to greater EBIT growth for the chemical manufacturer include having the data to know if making an ingredient instead of buying it is best (12.5%). Additional factors include mining ERP data to find greater opportunities for gaining incremental sales through increased production capacity (10%), optimizing equipment usage and reliability (10%), and whether to substitute an ingredient in a more efficient production line and reduce materials usage (10%), and whether to substitute an ingredient in a more efficient production line and reduce materials usage (10%).



Source: McKinsey & Company's August 2017 article, [Manufacturing: Analytics Unleashes Productivity And Profitability](#)



INCREASING ERP ADOPTION DRIVES HIGHER PRODUCTIVITY

From improving daily productivity to translating shop floor data into financial insights, teams work better when they are all relying on a common source of information. That's why increasing how many people and teams are actively using an ERP system matter. McKinsey & Company's research shows how manufacturers are getting smarter and stronger competitively by increasing their adoption of ERP systems combined with gaining real-time insights from BI systems.

Every manufacturing business is by nature complex, requiring extensive coordination to stay synchronized across each phase of production. Taking on the challenges of staying more coordinated across each area of a manufacturing business delivers competitive strengths that are unique to each manufacturer. Proliferating ERP systems throughout multiplant enterprises set the platform or foundation for higher productivity as a result. The following are just a few of the many improvements greater ERP adoption can bring to any manufacturing business:

- Gain greater visibility across all production operations, encompassing financial, quality, production, fulfillment, service and support departments.
- Improve configure-price-quote (CPQ) and quote-to-cash (QTC) accuracy, speed, and scale, enabling quicker sales cycles and greater revenue growth.
- Improve product quality by measuring production performance at the machine level and also inspecting finished products before they leave the production center.
- Track and report on company-wide accounting and financial performance.
- Improve the efficiency of company-wide operations by enabling greater collaboration and information sharing across diverse departments.
- Streamline and simplify complex manual processes by enabling better interprocess integration throughout all of the production operations.
- Manage multiplant locations more effectively than before, gaining visibility into every plant location and its relative level of efficiency and quality levels.
- Rank suppliers of quality and create supplier quality management programs that concentrate on continuous improvement goals.
- Use real-time monitoring to measure machine-by-machine manufacturing performance and find new ways to improve overall production performance.

- Increase the percentage of orders delivered on time and meeting customer specifications the first time, delivering perfect order performance.
- Gain new insights into customer behavior including purchasing, pricing, and product preferences, all providing a more complete, 360-degree view of the customer.
- Increase sales cycle velocity and quoting accuracy by having customer data from previous orders available for analysis by integrating CRM and ERP systems together.
- Improve supplier on-time performance and manage supply chains more efficiently, alleviating the factors that cause out-of-stock and order backlogs.
- Increase Inventory Turns by improving production planning and on-time order delivery performance.
- Reduce and eliminate duplicate production processes that waste time and money, and keep manufacturers from reaching their goals.



BENCHMARKING YOUR COMPANY'S ERP ADOPTION

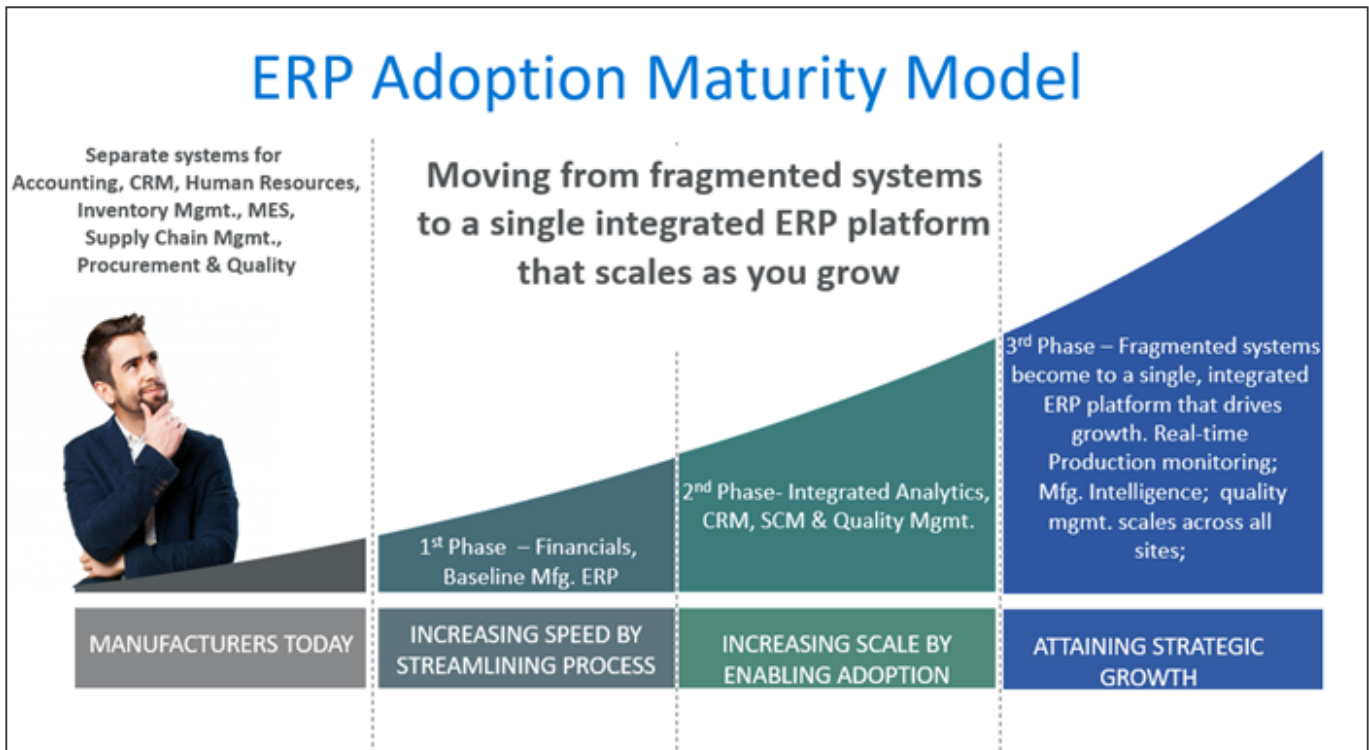
Based on our work with thousands of manufacturers globally, two truths emerge:

- The faster any manufacturer increases ERP adoption, the greater the number of growth opportunities they find by enabling customer-facing teams to excel.
- The more integrated diverse, previously isolated systems are, the faster manufacturers can respond to quotes, close deals and sell more products.

Choosing to pursue an integrated ERP platform strategy instead of relying on applications that can't share data helps revenue and enables everyone to excel in their work. *One of the most valuable takeaways we've seen is that product quality increases in direct proportion to how well-integrated an ERP platform is. When manufacturers adopt a single integrated ERP platform strategy and either replace or integrate existing systems into a unified platform, product quality improves, forecast accuracy goes up and perfect order performance too.*

Manufacturers are also able to increase ERP system adoption while adding in real-time production monitoring, Manufacturing Intelligence and scaling quality and compliance across all production centers globally.

Based on our work with manufacturers and the results we're seeing on a single ERP platform driving greater growth, the ERP Adoption Maturity Model was created and is provided below:



10 STRATEGIES FOR INCREASING ERP ADOPTION

People and teams excel when they can see their progress towards goals daily. Increasing how many teams are using an ERP system can increase the ownership everyone has for accomplishing team and company goals. And best of all, each person can see how they are making an impact on the company by having access to an ERP system. The wider the adoption of an ERP system the greater potential for teams to get real-time feedback on how they are doing and course-correct if needed.

The following are the top 10 ways to drive ERP adoption:

1. Be clear about the business goals the ERP system and apps are helping to accomplish, freely sharing performance analytics with teams. Providing access to real-time dashboards that report back production, quality, on-time deliveries, and returns help production teams to see how an ERP systems and its related apps help orchestrate higher production performance. One VP of Manufacturing for an aerospace parts manufacturer has a monthly company-wide meeting to explain production accuracy, performance, and quality goals. When a new app or module is being added to their ERP system, he provides insights into how the decision to add more software will help their business. Adoption rates for ERP and related systems are over 90% in his company.
2. Give each team an opportunity to customize the parts of an ERP system they use the most. Instead of forcing teams to change how they work based on an ERP systems' constraints, give production teams the freedom to define how the screens they use will work and interact with other parts of the system. This step alone can deliver significant gains in adoption, as each production team will have greater ownership of how they interact with the system.
3. Look for ways to equate ERP adoption with greater accomplishment. One company went as far as to hand out ERP Champion award plaques now hanging in production offices across their fifteen different production centers. Team members get recognized for finding new ways to make the data generated by their ERP systems more customer-centric and valuable.
4. Look for opportunities to replace intensive spreadsheet work with automated reporting, freeing employees up for more interesting work. ERP systems were built to do this. Getting employees out of the rut of having to do hours of spreadsheet work when an ERP system can do it in a fraction of the time is a great way to increase system adoption.
5. Make your ERP system more mobile, providing access from any Internet-capable device with a browser. Too often ERP systems have low adoption because they force people to stay at their desks all day when they need to be on the shop floor. Add in mobility support to provide production teams the freedom to work where and how they need to. The latest ERP systems provide for greater control over the mobile user experience which makes communicating and collaborating in real-time possible from anywhere at any time. Organizations with mobile ERP saw a 17% improvement in the cycle time of key business processes in 12 months according to the Aberdeen study, Mobile ERP: Taking ERP ROI Into Your Own Hands.



6. Keeping an ERP system up to date alleviates production team frustrations and removes roadblocks to greater adoption. By having the most relevant, recent release of an ERP system installed, production teams have the best available applications and tools to do their work. Allowing ERP versions to lapse for years often leads to low adoption and the resulting series of communication and collaboration gaps.
7. Invest heavily in training programs. Companies who excel in every aspect of manufacturing make training a core strength. Combining training and other strategies mentioned will make a positive impact on ERP adoption that lasts because it's based on knowledge. Being able to provide opportunities for every member of production teams to attain greater mastery of their specific areas leads to higher production performance.
8. Define an ERP roadmap showing everyone using the system what future enhancements are planned. Taking the time to define an ERP roadmap for your company helps explain why and when modules are being added in response to the need to keep growing. Better serve customers and improve quality. Best of all, sharing the ERP Roadmap builds trust in the ERP strategy direction and greater ownership over its success.
9. Improve the usability of supplier-facing apps and analytics to increase adoption. Supplier-facing apps and tools are often the most overlooked area when manufacturers seek to increase ERP adoption. The same holds true for distribution channel partners. Designing an ERP system, so it scales beyond the four walls of a manufacturing plant and provides a feature-rich set of apps to streamline purchasing, procurement, and channel management is essential. Providing suppliers with useful onboarding, forecasting, and ordering tools help increase ERP adoption company-wide.
10. Use analytics to tell a compelling story of production performance. Selecting metrics and KPIs that provide an accurate view of production performance, then sharing them on dashboards and scorecards with production teams is essential for driving up adoption. The goal is to provide production teams with insights on how their efforts are making a difference.

BOTTOM LINE

Every manufacturer's future is being defined today by how well they are getting insights from their ERP systems to drive greater production efficiency and serve customers better than competitors.

For more information, please visit www.iqms.com or call 1.866.367.3772

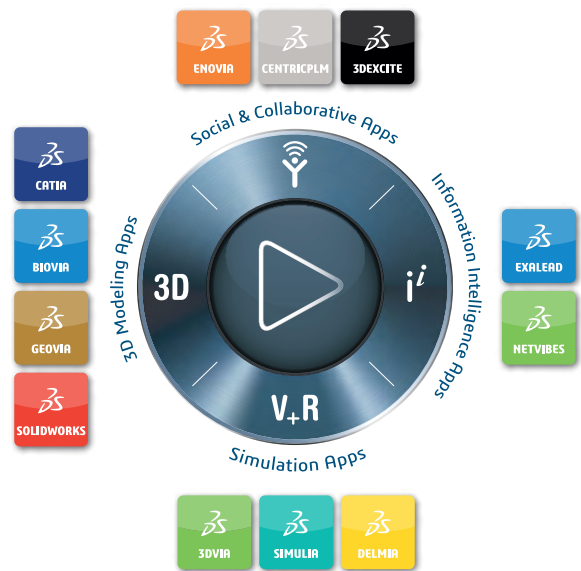


REFERENCES

- Buonanno, G., Faverio, P., Pigni, F., Ravarini, A., Sciuto, D., & Tagliavini, M. (2005). Factors affecting ERP system adoption: A comparative analysis between SMEs and large companies. *Journal of Enterprise Information Management*, 18(4), 384-426.
- Chang, S. I., Hung, S. Y., Yen, D., & Lee, P. J. (2011). Critical factors of ERP adoption for small and medium-sized enterprises: An empirical study. *International Comparisons of Information Communication Technologies: Advancing Applications: Advancing Applications*, 205.
- Ibrahim, S. H., Duraisamy, S., & Sridevi, U. K. (2018). Flexible and reliable ERP project customization framework to improve user satisfaction level. *Cluster Computing*, 1-7.
- Kanchana, V. (2018). Investigation and Study of Vital Factors in Selection, Implementation and Satisfaction of ERP in Small and Medium Scale Industries. *International Journal of Electrical and Computer Engineering (IJECE)*, 8(2).
- Laukkanen, S., Sarpola, S., & Hallikainen, P. (2007). Enterprise size matters: objectives and constraints of ERP adoption. *Journal of enterprise information management*, 20(3), 319-334.
- Markus, M. L., Tanis, C., & van Fenema, P. C. (2000). Multisite ERP Implementations. *Communications Of The ACM*, 43(4), 42-46.
- Raymond, L., & Uwizeyemungu, S. (2007). A profile of ERP adoption in manufacturing SMEs. *Journal of Enterprise Information Management*, 20(4), 487-502.

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