



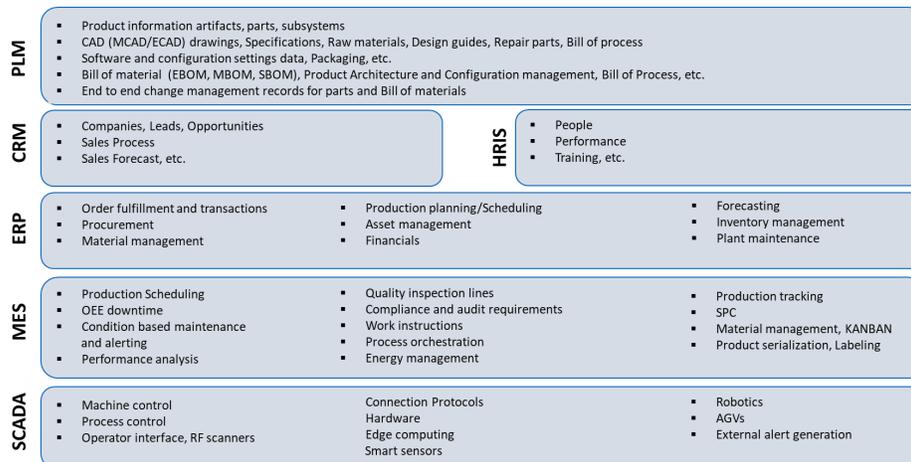
## Building an efficient and integrated Data and Enterprise System Architecture

The lifeline for all companies is information. This information come in the form of data they create, data that they transact and information they share, both internally and externally. This information is divided typically into four categories:

- Human Resource Data — People related data (E.g. Name, Address, etc.)
- Project Information — Planning and execution (E.g. Product Portfolio, Project Plan, Product Roadmap, etc.)
- Product Data — Bill of Material and associated information (E.g. Part and process, etc.)
- Transactional information— Financial and/or Order transaction (E.g. Sales order, Invoice, payment, etc.)

One of the biggest challenges for companies is two-fold, one to ensure that this information is located in one system and controlled, in terms of “creation/changes/deletion” and the visibility or sharing of this information to the right audiences at the right time. Based on this challenge, the concept of “Enterprise System Architecture” becomes a point that all organizations need to take seriously and develop the right architecture for your organization. Imagine a company that has “Human Resource” data in multiple locations with no tracking of creation/modification/deletion—how could you actually manage this information for the benefit of your company and employees? Our assessment is that you can’t.

From our experience and expertise, we’ve come up with the need to rationalize your company’s data into the following system hubs:



The key is to ensure that each of these enterprise systems house the “Single” location for that particular type of data. It is also imperative that within each of these systems, the idea of change management and configuration is key to making sure the information is in the correct context. For example, Current Data context, Pre-production data Context, etc.

In tandem with this challenge, comes the need to address “how do I share this information with the other systems in an efficient and controlled manner? This makes the concept of developing an “Integration strategy” essential to the long-term sustainability of the company’s data sharing capabilities. The idea of creating a “Hub and Spoke” model is key to efficient development, management and sharing of information, both internally and externally. The use of this model allows for one source to manage a specific attribute or piece of information and then have the ability to be share this with other systems. If this data changes in its source location, the change gets propagated automatically to all other systems. This eliminates allof the “point to point” integrations that need to be updated if a data element changes. Enterprise integration tools such as Microsoft BizTalk, Informatica and Tibco to name a few,

If you would like to talk to us about these concepts, please reach out to us via email or give us a call.

## Next Month: The future of Augmented Reality on the Shop Floor

