

The Need for a Systems Integration Strategy / Tactical Plan

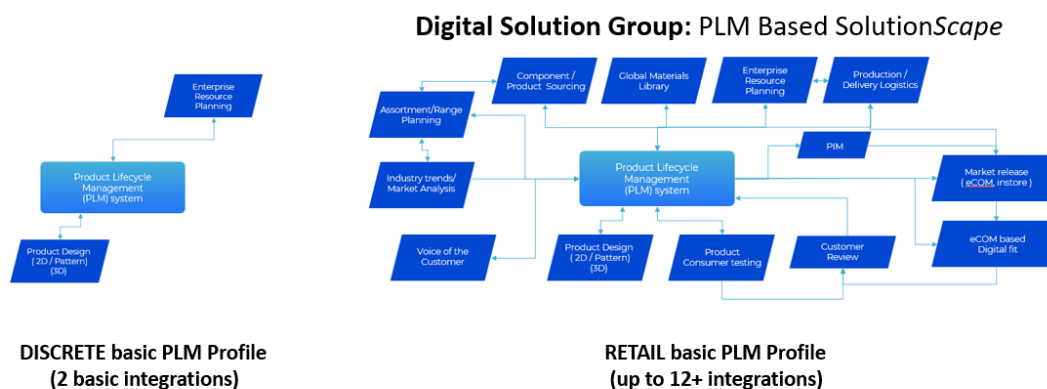
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Product Lifecycle Management (**PLM**) systems in support of the Retail Market has always been targeted to provide centralized organization of all product data and basic product development in one system. I know this because I led the effort in developing / delivering the retail market's first enterprise PLM system. This followed years of experience as I led the birth and penetrated use of PDM/PLM in the Aerospace, Automotive, High Tech (**Discrete**) industries where CAD "vaulting" / management, parts / bill of materials (BOM) management, and configuration management were the basic operations supported.

In those more matured Discrete industries, use of PLM remained (at a minimum) the ability for these systems to share data with Enterprise Resource Planning (**ERP**) systems to enable these, often complex, BOM structures to be accurately delivered to shield against costly incorrect parts ordering or manufacturing mayhem that took days or weeks and hundreds (\$) to tens of thousands (\$\$\$\$) of dollars to resolve per occurrence.

Retail PLM is used to manage a much more expanded "common set" of product data that supports a much more expanded set of "basic operations" of Assortment / Range Planning, Line Planning, CAD "vaulting" / management, materials / color management, BOM based technical specification development, supplier / factory management, and product quality / sampling / testing management.

The Retail PLM functional profile is much broader than Discrete PLM, **and therefore** there exists a **proportionally broader** number of "other" systems that are required to send data to or receive data from the Retail PLM.



Business Cost of NOT integrating essential business systems

- Product Data accuracy issues due to manual reentry
- Operational delay due to lag in cross system data reentry
- IT support costs performing export/import operations and troubleshooting issues

In both markets, common data is housed within its PLM to perform the product development process / functional operations, and each extends its data with other systems and therefore this data exchange is **equally NOT** an option. It is either done manually, semi-automated (export/import) or systemically (direct data exchange).

When systems are “manually or operationally integrated” a business will suffer operational issues or IT support costs with examples being:

... **data is inaccurately reentered in upstream / downstream systems:** an example being the *inaccurate entry of a Product’s characteristic or pricing that causes **operational distress** when the data is trusted to be correct;*

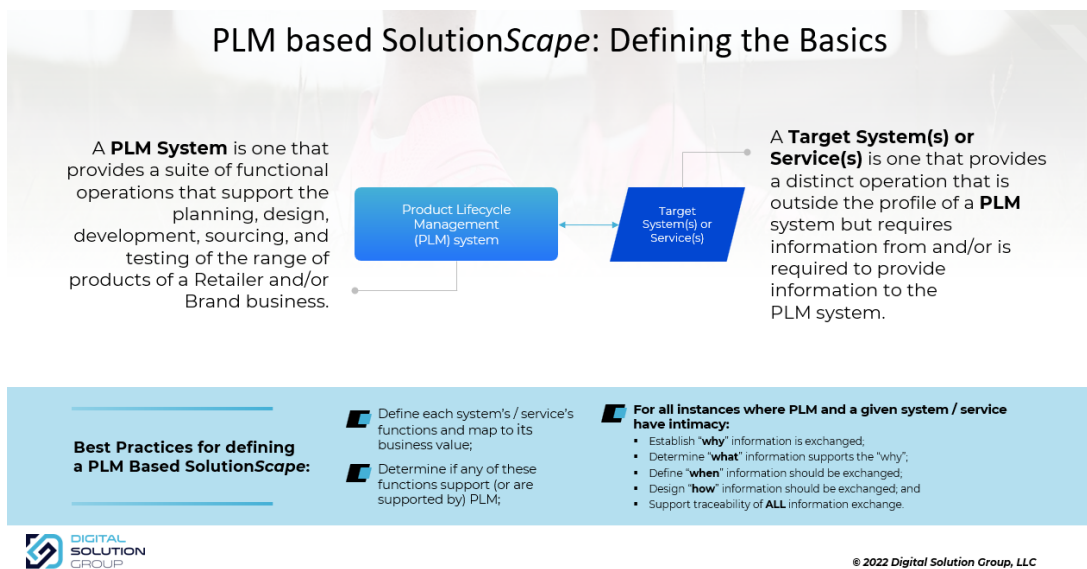
... OR ... **operational delays** due to the lag that occurs when data needs to be manually reentered in upstream / downstream systems; an example when *Product characteristics and pricing have to be reentered in ecommerce site causing **lost product sales** where days equal dollars;*

... OR ... **when scarce IT resources are allocated** to export, validation / transformation, and import data into upstream / downstream systems that results in **the loss of opportunities to utilize IT resources on more critical activities.**

Financial losses or misallocations of funding can range from hundreds of thousands to millions of dollars per year with **no means of establishing progressive improvements** in seasonal business operations.

What is lost is lost. To resolve these issues requires the **focusing of business and IT organizations** on taking action to **transform** this *distressed configuration* of systems into a **PLM Based SolutionScope** that creates **digital fluidity** throughout the systems supporting seasonal business operations.

Digital Solution Group (DSG) provides brands and vertical retailers a service focused on establishing a **Strategic / Tactical plan** that produces that digital transformation. We begin by going back to the basics of defining the integrated **SolutionScope**. This means assessing each “manually connected” system and identifying the value to the business of creating a systemic integration.



As denoted in the image above, the value of each system integration with PLM requires that we profile “**WHY**” each system should be integrated. This operational efficiency is established by defining the *digital fluidity* of “**WHAT**” data serves as the basis for that efficiency. DSG then works with the business to define “**WHEN**” that data is to be exchanged, such as the status change of a *Product* or a *Material* or a *BOM* or a *Technical Specification*.

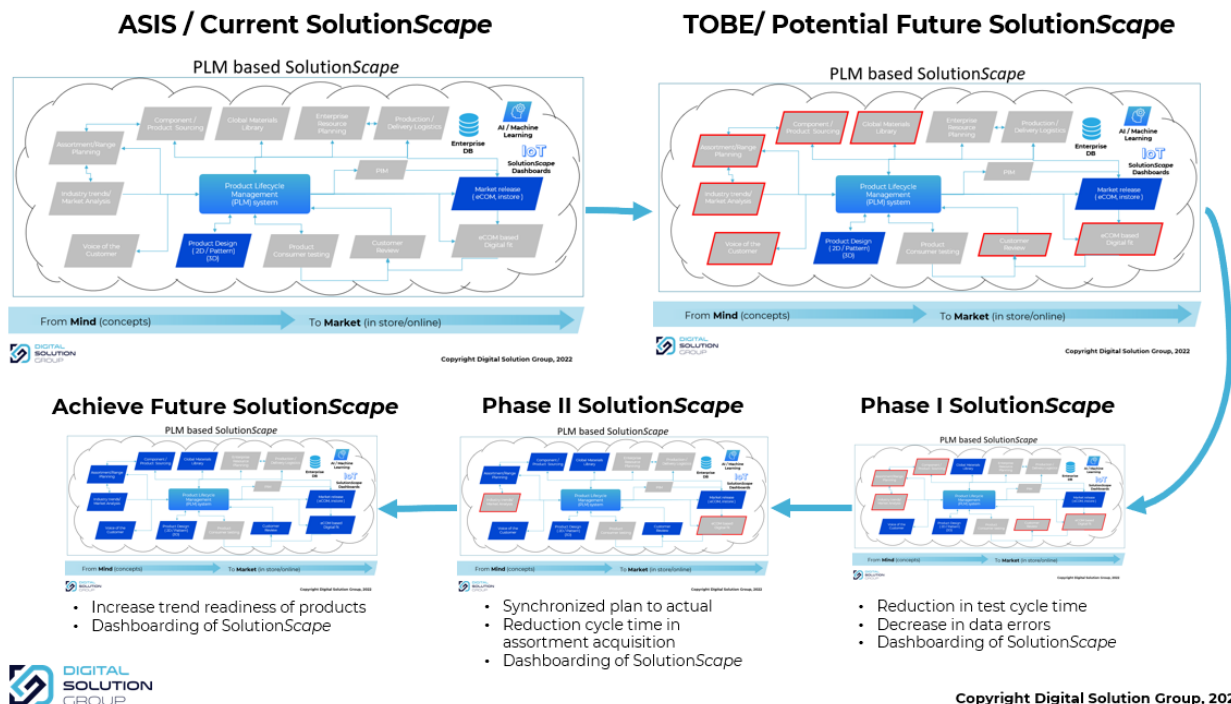
DSG concludes by working with the IT organization to define “**HOW**” the data is to be interchanged; whether it is through a common middleware facility or point-to-point integration; each leveraging system APIs after ensuring “data conformity” with the receiving system.

DSG is then able to offer the **unique service** of monitoring all system integration transactions that ensure instant visibility of success or issues in transmission. This results in the **highest level of real-time support** in the 24x7 world of business support operations. This also enables DSG to provide a wealth of *technical, business, and executive level reports and dashboards* that detail the **value metrics** of the *digital fluidity* throughout the evolving **PLM Based SolutionScope**.

The development of the WHY, WHAT, WHEN and HOW PLM should be integrated with other critical / key business systems is the basis of both the **Strategic** and **Tactical Plan**. *Strategic planning* defines the business value of integrating; while *Tactical planning* establishes the sequentiality of the system(s) integration.

NOTE: Though *Strategic planning* defines the business value of each integration, which will directly influence the *Tactical sequencing*, the *Tactical sequencing* is also influenced by *technical feasibility and the ability for the business to “digest” or support the phasing of execution*.

Digital Solution Group is *uniquely skilled* in working with the business and IT organization to define the Strategic and Tactical Plan for developing what is often referred to as the **ASIS (Current State)** to **TOBE (Future State)** digital transformation; an example of which is represented in the image below.



As noted previously DSG works with the business / IT organization to define the **TOBE** profile (noted by the systems outlined in red) or the **Strategic future state**. DSG then works in a similar manner to formulate the **Tactical** plan of execution. Each system set / integration will have **business value profiles** that are then used to **justify the cost** of each integration AND is later used to validate the business value achieved by each integration over the cost recovery (or **ROI**) period.

Nothing has changed from the way in which PLM is operationally integrated with other critical systems by the **Discrete** industries that have become mature adopters of this technology. The only difference in the **Retail** industry is that it has **four to six** times more critical systems that should be integrated to ensure the *digital fluidity* of **extending the value of PLM** is achieved.

Each system set must be assessed based on the business value of its integration to formulate the **Strategic** and **Tactical** plan of what DSG refers to as a **PLM Based SolutionScape**. **Digital Solution Group** has the experience and expertise in not only providing this vital service, but it is also equipped with the resources skilled in its **execution, monitoring, and support**.

Contact Digital Solution Group by clicking on the link below.

In all things ... stay safe.

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