Multi-Generational Product Plans Vs. Product Line Strategies and Roadmaps

I am often asked, “What is the difference between Multi-generational Product Planning (MGPP) and Product Line Strategizing and Roadmapping (PLSR)?” The answer requires a short discussion. To those involved in product development or product management, exploring the difference and commonalities can be very insightful.

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There are several differences between Multi-Generational Product Plans (MGPP) and Product Line Strategies and Roadmaps (PLSR). But MGPP and PLSR are also closely related. To understand, let’s first look at each, and then explore how they relate. More notably we need to explore how, when employed appropriately, MGPP may add significant value by being embedded into PLSR.

Both MGPP and PLSR are about laying out a timeline sequence of key activities related to a product line. MGPP does this from a project management and design engineering perspective while PLSR does it from a product line strategy perspective. PLSR applies to all product lines whereas MGPP applies to certain types of product lines. In good practices, all that goes on with MGPP should also go one with PLSR. PLSR, however, offers a broader and deeper perspective on the product line than does MGPP.

![Multi-Generational Product Planning](image)

**Figure 1** Multi-Generational Product Planning divides platforms or products in multiple generations from generation X to Generation X+n.

Preventing Scope Creep

MGPP is a general approach toward dividing a product offering into logical “generations.” This is helpful for a few critical reasons. First and foremost, it aids product development through the control or management of scope-creep. By freezing specification, development teams may push new features or potential attributes of an offering into a “next-generation” development project. Adding the dynamic of future generations into project planning helps to lower the uncertainty or risks of a development project while enabling greater specificity to planning and collaboration across functions. No doubt, MGPP can be beneficial both to carrying out an organization’s day-to-day operations of and to achieving its long-term objectives. Yet while MGPP will suggest sensitivity to strategy market and technology issues, at its core, it is very much about freezing the specification of the new offering and thereby helping project management and engineering design.

Furthermore, MGPP suggests the purposeful retirement of older products. Indeed, with multi-generational plans, organizations will look to retire products coming from old platforms when they launch the next generation platform. The timing of the retirement(s) may be delayed somewhat from the new platform’s launch, but their retirement is a foregone conclusion. At some point in time, the company will no longer produce or service products related to the old platform. Such continuous renewal can be very healthy for the product line. The only caveat is that new offerings must continue to match the customer’s need while also maintaining or gaining a degree of competitiveness.

For the most part, new platforms with products that target the same market as those of older platforms often have the advantage of being aligned with the structure of the organization and the specifics of how organization interfaces with the market. This greatly reduces commercial challenges and speeds diffusion of the new offering into the market. For this reason, MGPP sequencing of platforms and products helps to
mitigate project and market risks while maximizing returns.

MGPP does not need to be carried out at the platform level of a product line. It may also be performed relative to products coming off of a platform. But this is not usual. That is because most often the platform would still be able to produce the old product, regardless of whether a new generation of the product is made available. Because of the economics related to sunk cost, keeping the old product in the product line may be more favorable than retiring it. This is particularly true in business-to-business markets and repeat-purchase consumable goods.

### A Strategy Focus

PLSR, on the other hand, focuses on the advancement of the strategy of a line of products. Plus, PLSR helps to communicate the actions needed to execute the strategy. The work and thought processes involved in this approach probe deeply and mindfully into all topic areas that may impinge upon the product line strategy, including the topic area of MGPP. PLSR does not solely focus on project management or engineering design. Yet in many instances, teams conducting PLSR would logically seek to carry out MGPP within PLSR, particularly with respect to crafting and rationalizing the product line roadmap that will coordinate across multiple generations of products and platforms.

Those involved in product line strategies should recognize that the notion of a “Strategy Essence,” a central component of PLSR, is absent from MGPP. This means that the core of the product line’s strategy (the platform-fulcrum combinations, chain-link strategy alignment, and strategy options) is not addressed in MGPP. Yet, these strategy contributors are fundamental to and will greatly affect the outcome of product line strategy moves, particularly those such as releasing new generations of a product line.

For some product line teams, recognizing the progression of platforms as multi-generational, i.e., generation X followed by generation X+1, is quite natural. For others, though, it makes no sense. This is because MGPP, with its lean engineering and project management orientation, most often finds utility specific to product lines with design platforms. It does not always fit other platform types such as intangible service platforms, production asset platforms or modular platforms.

When we hear of a new generation of a product being launched, it is more likely to be an entirely new design platform than an advancement to another type of platform. Consider, for example, products in the smartphone market. From its origin up to the present, Apple’s design platforms were the iPhone, the iPhone 3, then 4, 5, 6, and SE. Each platform spawned only a few variant products. Similarly, Samsung had its own multi-generational platforms in the same category: Galaxy S, II, III, 4, 5, 6, and 7. When planning product lines with design platforms, MGPP makes perfect sense.

### Not all Product Lines, Not all Platforms

Not all product lines teams can relate to the use of MGPP. This is because the nature of underlying platforms for some product lines is simply not conducive to MGPP thinking. MGPP may not make as much sense for other platform types such as product asset platforms or service platforms. Consider production asset platforms like chemical reactors, papermaking machines, or food production lines. Coming up with a new generation product asset platform is not easy. Plus, the life cycle of product asset platforms can be quite long. But yes, there can be new production asset platforms. More likely, though, advancements will be the sequencing of incremental improvements to a production asset platform, not a sequencing of multiple generations of completely new platforms. This is especially true over normal planning time horizon.

Indeed, for all platform types, when the lifecycle of the underlying platform is longer than an organization’s planning and development time horizon, the notion of MGPP may fall flat. Why lay out a new generation of a platform when you cannot address it within your planning horizon? It would only be speculative, not strategic. Without strategic intent, plans tend to be
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weak. In practice for non-design type platforms, this is the major shortcoming of MGPP.

There is no concerted strategy orientation in MGPP other than the suggestion that those individuals conducting MGPP be sensitive to and aware of strategy issues, market influences, and technology advancements. PLSR, conversely, is very much orientated toward strategy formulation. Plus, depending on the platform type and situation, PLSR will include rigorous MGPP as an important “Strategy Lens” to contribute to the creation and rationalization of the strategy execution roadmap. In other words, the engineering and project management orientation of MGPP may embed within PLSR. Indeed, this may take place regardless of whether the underlying product lines that incorporate design platforms or any other type of platform. The degree to which MGPP influences the outcome of PLSR, then, is specific to the product line, its platform and the strategy.

For those who think only in terms of MGPP, the notion of embedding it into PLSR may seem wasteful or problematic. But this is definitely not the case. Instead, PLSR enables MGPP in the greater context of a smart product line strategy and more inclusive product line roadmap than just the multi-generational plan.

Like MGPP, the PLSR process helps teams lay out the advancement of platforms and products. But PLSR also helps advance and optimize product line strategies. PLSR does this by exploring, analyzing and selecting

market moves, whether into adjacent or new white space segments. PLSR also addresses technology building block advancements plus proactive and reactive competitive actions. Moreover, PLSR addresses all product line types not just those with design platforms. And unlike MGPP, the PLSR process is not a stand alone practice. Rather, it integrates with an organization’s portfolio management, front end concept generation and overall business strategy practices.

While MGPP is quite helpful for product lines with design platforms, it is not sufficient, by itself, to drive the advancement of all product lines. To truly understand and become capable of gaining the benefits of smart product line strategies and their roadmaps (inclusive of multi-generational product line plans), please consider learning some new management concepts and approaches.

Learn more about \textit{PLSR HERE}

\footnotetext[1]{PLSR Product Line Strategizing and Roadmapping is the process of exploring and deconstructing both a product line strategy and its execution roadmap.}

\footnotetext[2]{Product Line Strategy Essence is the very core of a product line strategy. It is comprised of three components: At least one platform with a corresponding organizational fulcrum; the “Chain-link” business strategy alignment and synergy; Product line strategy option (price, variety, performance, speed)}

\footnotetext[3]{Design platforms – one of several types of product line platforms from which a product line achieves leverage. A design platform is a common component or component set that is used across products.}

\footnotetext[4]{Platform Types – product lines may gain leverage from different platform types. These include production asset platforms, design platforms, modular platforms, service platforms, software/algorithm platforms, combined platforms, and matrixed platforms}

\footnotetext[5]{Strategy Lenses are work elements within the PLSR process. Teams may use a few to several dozen strategy lenses to explore, analyze and make judgments and decisions regarding product line strategies. MGPP may be considered a strategy lens.}