Product development

In the second of a series of six articles on integrated business management, John Schorr explains the importance of including product development in the sales and operations planning process.

In the first article of this series on sales and operations planning (S&OP), we defined S&OP as an integrated business management process through which the executive/leadership team continually achieves focus, alignment, and synchronization among all the functions of the organization. This includes sales and marketing, operations, supply chain management, finance and product development.

What I often find when performing an assessment of an existing S&OP process is that it is limited only to supply and demand balancing. New product development and finance typically are not considered as part of the S&OP process (figure 1).

This results in two problems. First, by omitting the new product requirements, revenue and capacity requirements are normally understated. Second, without the financial assessment of the plan, the discussion becomes a tactical middle management discussion rather than a senior management strategic business discussion. Product development will be the focus of this article while finance will be featured later in the series.

Sales and operations planning is a five step process (figure 2); the first step of which is the product management review. It describes and details the future direction of the product portfolio, and includes new products, additions to the product lines, product improvements, repositioning of current products, and end-of-life rationalization of older products.

A company must plan sufficient new products to replace older products and fuel business growth. In addition, management needs to know whether they are just churning new products (i.e., replacing old with new with no volume growth) or truly growing revenue in the future. This is critical as studies have suggested that for every 23 new product ideas generated, only eight of them move into development, and only two or three of them eventually become commercial.

With that drop-out rate it is
been established to verify that
the new products are meeting the
requirements at each gate and
they are on schedule, a series of
progressive milestones are then
developed to manage progress
between the decision checkpoints.

Once the business filters, the stage
gate process, and milestones are in
place, we can now use the information
to develop a resource management
program. With this information we
should be able to identify the key
resources needed and any constraints
that require attention.

Using a rough cut capacity
planning process, we can
identify each of the skill sets and
competencies needed across all the
new products and the timing of when
those resources will be needed. This
enables us to evaluate the feasibility
of the total plan and to identify and
locate the potential gaps that may
hinder our ability to successfully
execute the new product plan. The
gaps must be identified as part of the
product management review step of
the sales and operations planning
process. Further, to be effective,
recommendations must be provided
to senior management as to how
those gaps will be resolved.

The product management review
step in the sales and operations planning
process includes inputs such as the
brand/product strategy, the stage
gate plan for each new product, the
status of each new product against
its milestones, the rough cut resource
requirements, and any marketing
initiatives or promotions supporting the
new product initiatives (figure 3). These
inputs are essential for the new product
review meeting which is attended by
representatives from research and
development, product development; as
well as appropriate product managers
and business unit managers.

The product management review
step is owned by either the head of product development or the head of marketing. It is facilitated by a new product coordinator who has the accountability to pull all the inputs together prior to the meeting and facilitate the new product meeting.

In this meeting, the milestone schedules are reviewed on all new products. Where new products have fallen behind schedule, action plans are established to get them back on schedule. Changes to schedules are approved and all new products entering the process are then checked against the appropriate business filters. Performance to plan in terms of schedules (launches/gates, milestones on-time) also are measured and used as inputs to the total resources required to accomplish the new product plan.

The outputs of this new product review meeting are the new family plans (figure 4), the dashboard (figure 5), and issues arising out of the new product plans that need to be resolved, along with all the assumptions and risks documented. The new family plans are graphical presentations of the demand plan, supply plan, and the resultant inventory plan for all the new products. This provides senior management the visibility into the aggregate amount of new products, and helps them to determine whether there is enough “new” coming along to support the business plan.

The dashboard typically is a traffic-light color-coded graphical view of all the new products in terms of schedule and resource requirements. Green indicates the product is on or ahead of schedule, and the resources needed for development are available. Yellow represents a potential problem with either the schedule or the resources needed in the future. Red warns that the schedule is in jeopardy, the resources are not available to support this project, and/or that the launch date will not be met.

The outputs from the new product review meeting provide the inputs for other steps in the S&OP process. For example, one set of the output is used in the demand meeting for inclusion in the demand plan. The demand plan is a statement of the total demand on the company for all products, both existing and new.

A second use is for the senior management sales and operations planning meeting (called the management business review) where
the data and information is either approved, or if there are issues with the schedule or the required resources, action plans are defined to resolve the potential conflicts.

The product management review meeting of the sales and operations planning process establishes a valid achievable product development plan across all products that is balanced to available resources and where the exceptions are recognized and managed.

The third article in this series will address the demand meeting where a valid demand plan for both existing and new products is developed.

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