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PHILIPS ORAL HEALTHCARE (C): THE SUNSHINE PROJECT IN 2001

Professor Ron Sanchez prepared this case as a basis for class discussion rather than to illustrate either effective or ineffective handling of a business situation.

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Outcomes of the Sunshine Project

By April 2001, twenty-three months after the launch of the Sunshine Project, it became apparent that the Sunshine Project team had achieved the very ambitious strategic business objectives for their project.

Largely due to the disciplined use of standard common components, to the adoption of several industry standard components as common components, and to a clear strategic approach to the mixed use of automated equipment, semi-automated processes, and manual assembly, the Sunshine team succeeded in *reducing product costs by an average of 53% across all product models.* In the critical low-priced model category, product costs were reduced almost 50% from their previous average, thereby allowing the Basic product model positioned at a 35 Euro retail price in 2001 to be sold profitably, even in large volume special deals for large retailers.

The number of significant product variations (models and versions) that can readily be configured from the new Sunshine product and process architectures has increased to more than 300, compared to slightly more than 100 product variations available before the Sunshine Project. Moreover, this expanded product diversity is now available with much shorter lead times. Supply chain performance in responding to new orders has been reduced from two weeks to one week, and appears on track to reach the new target of less than five days in the near future. Even new product models requiring new designs for differentiating components like housings and containers are now developed more quickly, largely because the design of differentiating components is now carried out within standardized component interfaces that eliminate the need for making design changes in other components.

In addition to this improvement in product mix flexibility, volume flexibility has also been improved. Lead times for large orders for special promotions ("special deals") have been reduced to two to four weeks, largely because of expanded use of high-speed automated production methods for standard components. As shown in ***Exhibit 1***, high-volume automated production and assembly of common components used in all models takes place in a stable production environment, while fluctuations in product volumes and mix are managed through human and semi-automated additions of differentiating components at the last step in the manufacturing process.

Supply chain reliability has also improved significantly. The supply chain performance parameter of "orders accepted and shipped complete as ordered" (also know as "RLIP") has increased from about 80% to more than 95% of orders received.

At the same time, material, parts, and component stocks required to support this level of supply chain performance have diminished considerably, owing to the expanded use of standard common components and more controlled use of non-standard differentiating components.

Current Challenges

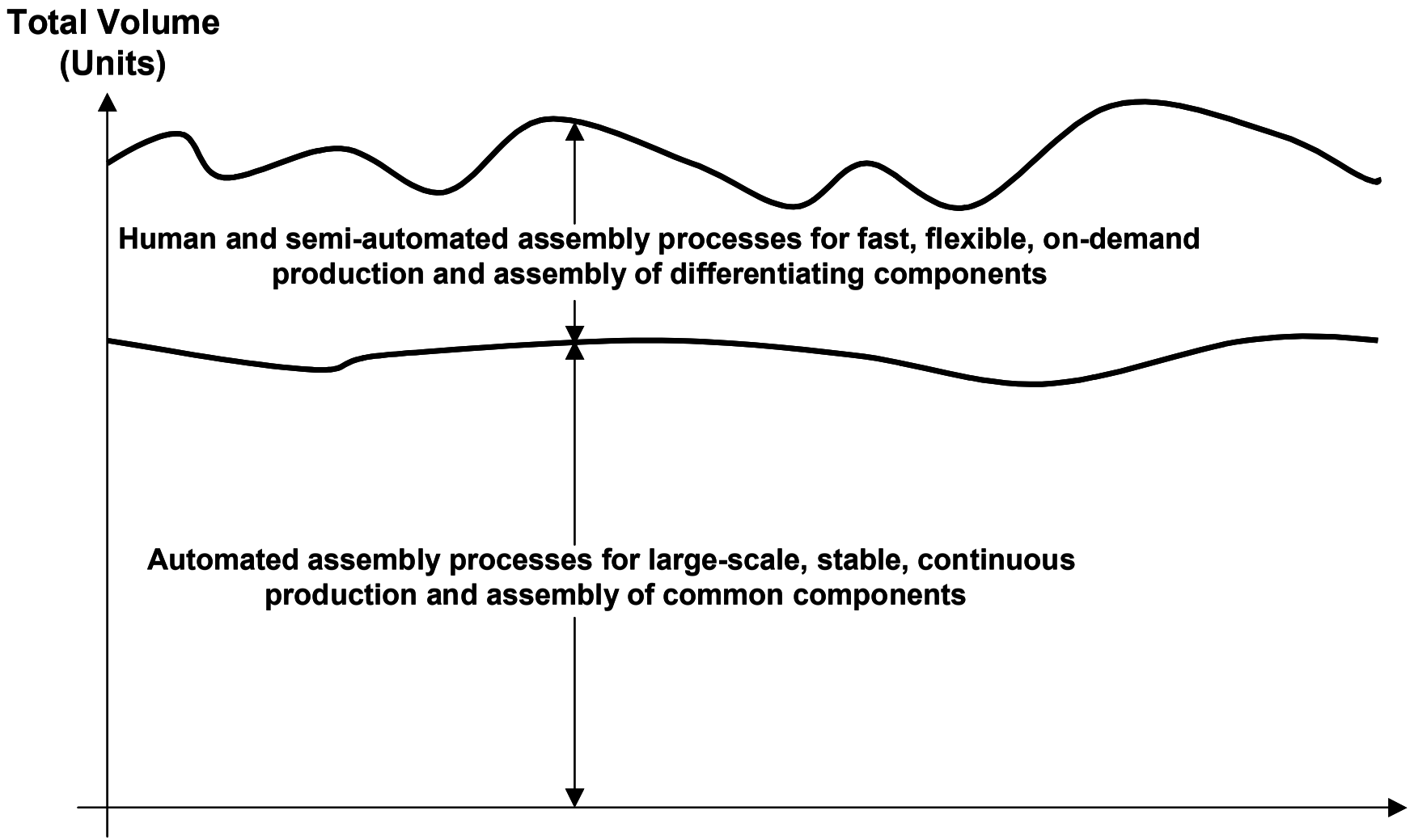
The current challenge for Philips Oral Healthcare is to use these new capabilities effectively in building up market share and installed base while improving overall profitability. To this end, the Sunshine Project team has instituted a systematic approach to managing the proliferation of product diversity--in effect, an approach for using the configurability of the Sunshine product architecture in the most cost efficient and commercially effective way.

The need for a systematic approach to managing product proliferation results from the fact that although leveraging product variations from the Sunshine platform is intentionally fast, easy, and low-cost exercise in a purely technical sense, there are several sources of costs that are inherent in generating product diversity that must be considered in addition to the purely technical costs of development. For example, making a seemingly simple decision to change the color of the printing and flexible switch cover on the handle unit can imply significant time and costs. First, a supplier has to be selected for the new pigment and plastic molding material, and the moldability, durability, and other performance characteristics of the new color material have to be tested. A new material inventory has to be brought into the production process, and this may add to material inventory costs. Further costs of work-in-process or final product inventories can arise if plastic housings or even full handle sets are made with the new color and kept in stock too. In addition to these cost issues to be evaluated, there is also the critical question as to whether creating the new product variant is actually leading to new sales or is simply cannibalizing sales of existing products.

With further assistance from Philips CFT, the Sunshine Project team has recently developed a model for "derivative management." This model analyzes the net contribution to profits of additions to product diversity, and the managers of the Sunshine product line now use this model to manage the leveraging of product diversity from the Sunshine platform.

The Sunshine team also recognized that the product variations that are truly profit-generating and approved for configuring from the Sunshine architecture should be communicated to Philips Oral Healthcare's sales and marketing staff, so that the range of approved product variations can be used to full effect in Oral Healthcare's marketing to various channels. To this end, DAP Oral Healthcare has begun work on a product recommendation software that lets sales staff know which new product variations are available from the Sunshine product architecture and which should be promoted to various kinds of channels.

Exhibit 1
Separation of Common Component Assembly and Final Product Assembly Processes in Sunshine Supply Chain Architecture



Source: Company information