Merchandise Classification Strategy
Table of Contents

1 Executive Summary 1
2 The Challenge: Why Merchandise Classification Strategy? 2
3 The Concept: How Does It Work? 3
   3.1 Merchandise Hierarchy 4
   3.2 Product Definition 4
   3.3 Alternate Hierarchies 5
   3.4 Merchandise Classification Example 6
4 The Approach: What Can Be Done 8
5 Capgemini Qualifications 9

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Date:
December 2008
1 Executive Summary

Experience shows that merchandise hierarchies and the way companies classify their products can differ significantly across different brands and divisions of the same organization. This usually results in difficulty in forming a holistic view across the company and product types. The concept of Merchandise Classification Strategy (MCS) across the enterprise brings new benefits to such an organization and is a foundational element driving future state change.

Merchandise Classification Strategy means standardizing hierarchies and product data across the enterprise by way of developing common definitions, terminology and structures. This facilitates alignment with what other companies and the industry are doing, addresses the needs of both enterprise and brands, as well as integration with supply chain partners. These are just a few examples of the many benefits of a standardized merchandise classification approach.
2 The Challenge: Why Merchandise Classification Strategy?

Traditionally, companies take very different approaches to classifying their products across divisions, channels or brands. These divisions, channels and brands (or other entities within a given organization) usually have different hierarchical definitions, and even when the same values are used by different entities, these values often have very different meanings from one division to another. There is also often a varying number of levels within different hierarchies. All of these factors lead to significant difficulties in forming a holistic view of various product types across the enterprise. The solution? A standardized enterprise-wide Merchandise Classification Strategy.

As companies expand, maintaining a comprehensive view of the business becomes ever more important to ensure the efficiency and success of their operations. Hierarchical classification of products allows companies to customize their data analysis and evaluation, and to address specific needs of individual businesses or the enterprise overall.

An organization with well-structured merchandise classification has a fuller view of its products across multiple sectors and is able to drill down, roll up and bucket data to analyze it in a variety of ways suitable to its business needs. A standardized merchandise classification allows similar items across different businesses to be grouped logically. This allows a retailer to view, evaluate and report on data at different aggregate levels and with higher accuracy not only within an individual business, but across multiple business lines at an overall enterprise level.

The benefits of such an approach include better performance visibility, understanding of consumer demand, and more effective merchandise and sales planning. The benefits continue down the supply chain and are reflected in better integration with supply chain partners, and improved coordination between retail planning and production, which in turn leads to a reduction in production costs and inventory requirements. Standardization enforces data integrity, allowing data governance to be addressed at an enterprise level. Finally, it supports continuous business growth and accommodates moving into other product lines and other industries as the business expands.

Through development of common definitions, terminology, nomenclature and structures, an enterprise-wide standardization approach to merchandise classification becomes a key element in driving successful planning, analytical and execution capabilities at a retailer.
3 The Concept: How Does It Work?

So what is a standardized Merchandise Classification Strategy and how does it work? The overall concept can be broken down into three elements, namely the merchandise hierarchy, product definition, and alternate hierarchies, where an enterprise-wide merchandise hierarchy serves as the primary product hierarchy with attributes providing product definition and enabling creation of alternate hierarchies that accommodate additional channel or function needs (Figure 1).

In this section we look at each of these elements and their individual role within the classification concept. We then look at how merchandise hierarchy, in conjunction with attributes and alternate hierarchies work together to create a comprehensive view enabling customized analysis and multi-dimensional reporting and planning across the organization.
3.1 Merchandise Hierarchy

The function of the merchandise hierarchy is to categorize products and is NOT intended to describe product or classify organizational, production or design elements. Merchandise hierarchy is multi-level with the highest level providing an overall enterprise view and then narrowing down to families or classes of products, with the total number of levels being determined based on specific business requirements and is the same throughout the enterprise (Figure 2). It provides a common language and consistent codes at each hierarchical level and ensures that merchandise systemically resides in one place and is grouped based on similar form and format and common purpose and use.

Figure 2: Merchandise Hierarchy

3.2 Product Definition

Merchandise hierarchy categorizes product while style, SKU and attributes are used to define product. Style represents a logical grouping of like SKUs based on similar business determined attributes. When a style is created it must be assigned to the corresponding lowest level of the hierarchy. SKUs are product variations, each variation is an individual SKU attached to a style. This means each Style will usually have more then one SKU assigned to it, but not the other way around. Attributes are data elements assigned to a product variation (SKU). They are used to describe/define particular aspects of the SKU, such as physical or non-physical characteristics of the item and can be used to cluster together similar products for planning and reporting purposes (Figure 3).
For example, a “V-neck T-shirt” can be a style, meaning that all V-neck T-shirts are grouped under one style. This can be further drilled down to a “Women’s White V-neck T-shirt Size XL,” which represents an SKU.

One of the main benefits of attributes is that they provide flexibility in the ways an organization or its different sectors/brands can look at their business without changing the core hierarchy. Using the above example, “V-neck T-shirt” style can be combined with gender attribute “women’s” and a report can be produced showing sales or other information for all women’s V-neck T-shirts. Within the organization, attributes can be further grouped by different types depending on the need of the business. For example, a company that has multiple lines of business can develop groups of attributes for each of its lines as well as a group that would apply across all lines of business (enterprise attributes). For example, in the business that deals with apparel and personal care lines, “fragrance” can be an attribute that is only applicable to its personal care line, while ‘gender’ can be an enterprise wide attribute.

Additionally, multiple organizational functions will require different attributes for their specific needs (i.e., production information, including fabric types or logistics requiring information on lead times or product dimensions). To make it easier for these functions to view and maintain their relevant attributes, enterprise and business line-specific attributes can be also grouped by function, e.g., production planning or merchandise planning groups. Combining the hierarchy levels with additional attributes enables viewing, analysis and planning of a subset of data and for the creation of customized reports.

Finally, a GTIN attribute (such as an EAN-8 or EAN-13 number printed on the bar code) is the worldwide product numbering standard, which provides a common representation of each SKU both inside and outside the organization. This structure enables a company to incorporate global standards around attributes, achieving consistent data standards.

### 3.3 Alternate Hierarchies

Similar to defining function or sector specific attributes, different departments or business functions may also require their own hierarchies in order to maintain flexibility or achieve a higher level of granularity within their specific functions. These might differ slightly from those of the enterprise. This is particularly true in a scenario where a department is using an application other than the system of record. In this case, alternate hierarchies are essentially user-specified structured “views” of...
product data that mimic the core hierarchy of the application rather than the system of record. This is accomplished by combining merchandise hierarchy and the business determined set of attributes (Figure 4). For example, if “Tops” is a core hierarchy value in the system of record, but the planning system requires a hierarchy level to view “Knit Tops,” “Knits” could be an attribute in the system of record, but presented as value in a Planning hierarchy level. Similar to merchandise hierarchy, alternate hierarchies must have their own rules determined by the business and the values within each merchandise classification level must remain consistent for each function.

Figure 4: Alternate Hierarchies

3.4 Merchandise Classification Example
As the merchandise classification takes shape, companies must make decisions about the extent and complexity of the design, taking into consideration the data governance effort that will be required. A set of rules should be established that will dictate the number and types of levels within the hierarchy and alternate hierarchies, the number and types of attributes and the data governance definitions. Examples of these high level rules could include:

- Hierarchical elements/values must only appear once across the product hierarchy.
- Hierarchy values must be mutually exclusive at each level.
- A style will be assigned to the lowest level of the hierarchy ONCE.
- Alternate hierarchies will be accomplished through the use of attributes.
- The Global Product Classification (GPC) standard hierarchy will exist as an alternate hierarchy.
- Changes to the enterprise product hierarchy will be accomplished through a centralized governance model.
Consensus must be gained from all functions in order to change the enterprise hierarchy.

Figure 5 represents an example of what merchandise classification might look like for a multi-segment business.

Figure 5: Merchandise Classification Example

<table>
<thead>
<tr>
<th>Segment</th>
<th>Apparel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>Tops</td>
</tr>
<tr>
<td>Class</td>
<td>T-Shirts</td>
</tr>
<tr>
<td>Style</td>
<td>V-Neck T-shirts</td>
</tr>
<tr>
<td>SKU</td>
<td>V-neck T-Shirts White Size XL</td>
</tr>
</tbody>
</table>

In this basic example, the merchandise hierarchy categorizes the product by business defined levels across the enterprise, the alternate hierarchy allows for attribute-based planning on a finer level. The addition of attributes enables finer granularity of planning and analysis. Here also the number, placement, and meaning of levels should be consistent across the enterprise, while values within a given level should be consistent within a segment.
The Approach: What Can Be Done?

The key to any Merchandise Classification Strategy activity is to begin early and to understand the full scope of the project. It is also important to understand future state application capabilities and their limitations from the beginning to develop a suitable solution. Finally, one of the most important aspects of Merchandise Classification Strategy is organizational support, including communication to the organization at the earliest stages of the process to create awareness of what is coming and gaining leadership support, which is fundamental to adoption and success of the future state process.

An effective approach to developing and implementing Merchandise Classification Strategy focuses on three major elements of the process – current state analysis, conceptual design and detailed design. A general guideline for the current state analysis is to first gain an understanding of the current state by conducting scripted interviews with key personnel to become familiar with existing enterprise and channel hierarchies, systems analysis and any existing initiatives. During the conceptual design stage, industry research is carried out to gain insight into the leading practices and the development of definitions, governance policies and some detailed values for MCS. The third stage, detailed design, is used to further develop values, refine business rules and definitions. As part of the Capgemini Collaborative Business Experience, we work closely with companies utilizing a number of Capgemini methodologies to drive toward a comprehensive, enterprise-wide Merchandise Classification Strategy that is designed to address specific organization needs and serve as a platform for a streamlined, efficient organization.
5 Capgemini Qualifications

Capgemini’s global retail industry practice is aligned with skilled professionals from around the world. We work with leading retailers and consumer products companies to create sustainable value measured by improved profitability, revenue growth, customer satisfaction and ultimately shareholder value.

Capgemini combines significant transformational capabilities with leadership in architecture and open standards and extensive industry experience. We are a recognized leader in retail and consumer products and have successfully assisted hundreds of clients in transforming their IT and business process capabilities and operations. Capgemini currently works with the world’s leading retailers and consumer products companies, helping them to optimize business operations, streamline expenses and generate profitable revenue growth. We work with 25 of the world’s 30 largest retailers and 27 of the world’s 30 largest consumer products companies. Some of our clients include Carrefour, Royal Ahold, Lowe’s, Meijer, Tesco, The Coca-Cola Company, Philips Electronics, Heineken and Kimberly-Clark.

Our experience further includes being named a leading service provider for retail by AMR Research, being named a leading consultant for the consumer products industry by Consumer Goods Technology magazine’s annual reader survey, and authoring pre-eminent thought leadership on key consumer products and retail practices such as the Future Supply Chain, Radio Frequency Identification (RFID), Consumer-Driven Replenishment and Global Data Synchronization.
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