Product Taxonomy: A Key Tool for Understanding Risk–Return Within the Banking Framework

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This Chapter Covers

An introduction to products and taxonomy, product taxonomies for financial institutions, and the structure of a taxonomy.
Applications of product taxonomies in a financial setting and the objectives in using them.
Regulatory developments after the credit crunch.
A guide to developing and implementing a product taxonomy for financial institutions.
A practical approach to taxonomy for financial institutions.
Principles for the development of a product taxonomy.

Introduction: Products and Taxonomy

What does a callable, daily, dual-currency range accrual with quanto features have in common with a sugar-free, hazelnut-flavored, soya milk decaf cappuccino? The answer is that both are products.

Dealing with “products” (whether coffee or financial) requires an understanding of:
what their features are;
how to determine or measure their value;
the type of customers who would be interested in buying them.

It is also important to understand and manage the risks related to the products and to have the capability to drill down into their underlying components (in the case of the coffee, for example, to find out if the hazelnut-flavored syrup contains nuts).

If you are working with coffee it is relatively easy to drill down into underlying components and present the information to the customer. This is achieved by having a menu showing available products (cappuccinos, espressos, lattes, frescatos, etc.) together with product-specific features (semi-skimmed or soya milk, sugar-free, fair-trade, flavored, etc.), and trade-specific features (drink in or takeaway, short, tall, grande, venti, etc.).

But what about the capital markets? How do you classify a certain interest rate product that has an observable asset class, product class, underlying(s), optionality, call features, different coupon types, is inflation-linked, and has a high degree of market volatility? What are the risks of originating or trading such a financial instrument, how much capital does your firm need to put aside to manage it, and how will you need to report to your shareholders and to the regulator? What do you call it?

How can firms classify financial products in a meaningful way and tick most of the information requirement boxes of the consumers of such information—i.e. front office, middle office, quants, model certification, legal and compliance, finance and accounting, regulatory reporting, product control, risk management, and asset and liability management? The answer is simple: by having an appropriate product taxonomy in place that can support all those functions.

This chapter aims to provoke thought on this topic and to equip you with some pragmatic pointers about how to establish such a taxonomy.

Product Taxonomies for Financial Institutions

Taxonomies are not only used as part of scientific methodologies, they also play a hugely important role for many, if not all, corporations. For instance, think of a grocery store and how they manage their product inventory. Their taxonomy becomes obvious and easily visible when one shops for groceries online; you, as a consumer, can follow the supermarket’s taxonomy by clicking through the products on its website and you
may be able to recognize an imposed, path-dependent tree structure that is representative of the grocery store’s product taxonomy.

Similarly, we can ask what financial institutions are dealing with. Of course, with financial instruments—i.e. products. The added complexity in the case of most of these instruments is that, unlike a shopping basket full of groceries, they cannot be visibly “seen” and hence are not that easily recognizable (apart from the legal documentation or piece of paper that represents the product, such as a banknote, mortgage documentation, or a bond term sheet).

Given that on a global scale there are probably many hundreds of different financial products that are being dealt with on a daily basis, you may think that many, if not all, financial institutions have a well-developed and clearly articulated methodology that enables them to properly manage these products. And as financial institutions’ bread and butter is dealing with financial products that represent both assets and liabilities, one may think that a product taxonomy plays an important, if not a central, part in firms’ asset and liability management (ALM) function.

Surprising as it may sound, many financial institutions have only relatively recently discovered the need for a firmwide product taxonomy and, even more concerning, many firms currently do not even have one.

The Structure of a Taxonomy

The word “taxonomy” originates from two ancient Greek words:

ταξις, taxis, meaning “order” or “arrangement;” and
νομος, nomos, meaning “law,” “science,” or “method.”

More generally speaking, taxonomy can be understood as a classification system based on a controlled vocabulary. Each term in the vocabulary carries an embedded hierarchy, and taxonomic terms are closely related to each other.

The taxonomy’s embedded hierarchy is based on broader and narrower terms. These terms themselves contain equivalent or synonymous relationships, and the intrinsic relationships of the taxonomic components impose a naturally occurring topical tree structure.

The tree structure of the taxonomy consists, quite literally, of the taxonomic “root,” branches or “nodes,” and “leaves.” Most importantly, these taxonomic components are connected and interlinked via a unique path.

Similar to the leaves of a tree that are connected via (smaller and larger) branches to the tree’s stem and roots, each taxonomic “leaf” is connected to the taxonomic root via a path-dependent structure that connects it through the nodes of the taxonomy (Figure 1).

Figure 1. Generic root–node–leaf structure and unique path-dependent sequence of a taxonomy

Applications of Taxonomy

Taxonomies are frequently used as classification systems in scientific frameworks. One of the better-known taxonomies is probably the classification of biological organisms, also known as “alpha taxonomy.”

Product Taxonomy—A Key Tool

Generally, firms dealing with financial instruments—no matter how simple or complex—are required, by law and for the sake of their stakeholders, to handle these products properly. More specifically, this means that banks and other financial institutions must capture, book, price, value, report, govern, risk manage, bookkeep, and account for the instruments they buy, hold, and sell—or, in some unfortunate cases, make provision for losses resulting from dealing with such products. In simple terms, firms need to manage their
assets and liabilities appropriately and have robust functions and methodologies in place that can support their ALM function.

None of these activities, however, can be easily, or indeed at all, addressed without having an adequate and firmwide product taxonomy. This has been one of the particularly painful realizations following the credit crisis (for more on this see the case study in the next section). Consequently, many financial institutions have realized the need to establish a solid product taxonomy as a key tool for identifying asset-liability mismatches as well as understanding and managing their day-to-day operations and the risk–return profile of individual trades as well as of whole (product) portfolios.

While the case study is an extreme example, similar misclassifications based purely on the name of a traded product and subsequent misrepresentation of the trade as part of the risk management, financial accounting, and regulatory reporting happened regularly at many firms prior to and during the credit crunch—and not once or twice, but quite frequently—often on a systemic level. More worryingly, misinterpretation of trades, with a potentially detrimental impact on firms’ ALM efforts, is likely to continue until firms adopt and implement robust, firmwide product taxonomies.

Case Study

Understanding Risk–Return

Take a typical fixed-income trader: as he or she is trading nonlinear structured rates instruments, he or she captures the trade. However, in the absence of a firm wide product taxonomy the trading system that handles these instruments offers the trader maximum flexibility in describing the particular trade. There will be certain observable trade facts, such as the notional amount, the maturity, the underlying asset or index, and call options, etc., that are features of the particular deal, expressed maybe in a term sheet and not leaving much room for interpretation.

Next, there is the “product name,” which is a free text field. Hence, the trader enters what he or she thinks is most appropriate for the particular deal’s product name. In our example, let us say that the trader enters “vanilla swap.”

The deal is priced as a “vanilla swap” and passed through from the trade capture via trade booking systems to the firm’s analytics platform. The risk of this so-called vanilla swap is modeled and valued by the firm’s finance department. If we assume that this was a sizable transaction totaling $250 million with an AA-rated counterparty, the trader’s account now shows a nice healthy profit contribution of $15 million for the deal.

There’s just one minor problem: the lack of any product taxonomy, with the whole risk assessment and valuation process based on the product name itself—in this example what appeared to be a vanilla swap with an AA-rated counterparty. However, if it takes a closer look at the particular transaction, ignores the product name that was assigned to the deal by the trader, and instead investigates the observable facts or attributes of the actual trade, the firm may be unpleasantly surprised.

It turns out that the trade in question is in fact not a “vanilla swap” at all, but the purchase of an AA-rated collateral debt obligation of asset-backed securities (or a CDO of ABS), whereby the underlying is in fact 85% residential mortgage-backed securities (RMBS) comprising mainly US subprime loans. Oops!

A CDO of ABS is hardly a standard product, and the risk–return profile of such an instrument is fundamentally different from that of an actual vanilla swap of, say, a three-month Libor to six-month US dollar with an AA-rated counterparty.

Taxonomy in the Banking Framework

So what are the typical problems in a banking framework, and how can a clearly articulated, robust and firmwide product taxonomy address and help to overcome these issues?

The first summary list below provides an overview of common problems experienced by firms as a result of the lack of a clear product classification. It shows how key gaps in a financial institution’s product control and
governance framework and related processes may result in financial losses and increased regulatory and reputational risks.

Key Control Gaps

**Model usage and performance.** Inability to map pricing, risk measurement, and valuation models to products. There is a significant risk of models incorrectly calculating risk or valuation numbers, particularly for those models that rely partially on unobservable input parameters or introduce nonstandard risk.

**Product mandate compliance.** Inability to confirm systematically that front-office trading desks/risk classes are compliant with product mandates—i.e. front-office traders are only dealing instruments within their mandated brief.

**Business product ownership.** Inability to confirm systematically that all products, as booked within the underlying risk systems, have unique business owners of the risks related to trading in such products.

**Client entitlements.** Inability to monitor client entitlements at a sufficient level of granularity, specifically in relation to client type/product mix and complex trade approvals.

**Risk analysis and reporting of specific trade types.** Nonstandard product-naming conventions across risk systems, and inability to report systematically on specific product features.

**Management information.** Impaired decision-making, risk transparency, and risk measurement/management.

The Beneficial Impact from Both Having a Product Taxonomy for a Range of Business Operations

Optimization of risk-weighted assets (RWA), improved financial resource allocation, and greater ALM accuracy:

**Market risk.** The mapping of position to value-at-risk (VAR) time series is compromised by the lack of consistent and granular product typing, resulting in erroneous trade capture.

**Credit risk.** The quality of product definition at trade capture has a direct bearing on the quality of the RWA calculations that drive the financial institution’s capital.

**ALM.** Clearer product definitions and robust classification increase understanding and measurement of how good (or bad) potential asset vs. liability mismatches actually are, enabling firms to employ more targeted remedial actions if necessary.

Operational risk and operational efficiency:

**Right first time and read only.** Better data quality whenever correct product identification is required at the entry point of the trade (i.e. right first time) and keeping manual intervention to an absolute minimum (read only of trade information).

**Finance/risk-integrated reporting.** The lack of a product standard limits return on investment in a firm’s end-of-day risk aggregation. Integrated profit and loss and risk reporting streams all require a consistent treatment of identical product types.

**Single product master.** If multiple product listings are used across the organization, each needs to be maintained and mapped/reconciled to other product lists to support cross-functional control and reporting requirements (i.e. risk and finance reconciliation, etc.).

A product taxonomy gives a competitive edge and enables the speedy delivery of new product-related initiatives by:

**Reducing the time needed to market new products.** Supports a product being defined once as part of an on-boarding and new product approval process and being linked centrally to the required reporting hierarchies.

**Facilitating validation and quality assurance.** Results in cheaper delivery of control system initiatives.

**Providing a shareable corporate resource.** Helps to identify which new or enhanced systems or processes can be utilized going forward.

These lists are by no means exhaustive, but even so they constitute a strong business case for the adoption of product taxonomies at banks and other financial institutions.
Overview

Following the credit crunch, regulators united and discussed globally how the articulation of risk appetite, the management of risk, and prudence in the valuation of financial firms can be considerably improved.

Apart from increased transparency and investor due diligence, more stringent regulatory capital requirements, and ongoing stress-testing of banks, some regulatory voices have recently been much more centered around product control, model risk, and prudent valuation.

All these areas, however, are very closely related to the availability of an appropriate product taxonomy. How else can firms understand and control the products they are dealing with? And how can firms make sure that they use the appropriate models to manage the risks posed by certain products? Models will never be a true reflection of reality and consequently will always constitute a simulated environment. However, this is not being helped by the use of inadequate models altogether because there is no clear understanding of the particular financial instrument whose risk is being modeled.

Coming back to the coffee example, what’s the point of modeling the risk of coffee connoisseurs burning themselves when pouring iced latte over their hands? Or, in financial terms, of using an interest rate model that uses three-month US dollar interest rate curves to model the risk of a single-range accrual that is based on Swiss francs? The answer is simple: firms can only model and value products robustly if they know what the financial instruments they are dealing with are. While this seems fairly obvious, during and after the credit crunch regulators have grown increasingly suspicious of firms that do not come across as capable of determining their own products.

The next section provides a brief overview of current global regulatory initiatives in the product taxonomy space—and we can expect more of these in the next few years.

Bank for International Settlements (BIS): Financial Stability Board

In December 2010 the BIS Financial Stability Board’s senior supervisors group published a white paper entitled “Observations on developments in risk appetite frameworks and IT infrastructure.” It stated the following: “Significantly, firms with a single firm-wide data taxonomy, as described above, can facilitate the integration of disparate systems and platforms with the firm’s existing architecture. Thus, development of this taxonomy will directly improve firms’ ability to address the otherwise difficult task of integrating legacy systems.” (BIS, 2010).

The white paper is well worth closer examination. It would appear that the senior supervisors’ approach tabled in the white paper has further triggered national regulators’ individual responses, some of which are briefly discussed in the following paragraphs.

The UK Financial Services Authority’s Stance on Model Risk and Prudent Valuation

Here in the United Kingdom, the Financial Services Authority (FSA) is currently working on several initiatives around model risk, prudent valuation, and product taxonomy that are worth mentioning, and we can expect to see more in 2012/13. Its initiatives in this space date back to August 2008, when the FSA sent a “Dear CEO” letter entitled “Valuation and product control” to financial institutions in the United Kingdom (Sants, 2008). The letter outlines concerns about control failings that had led to several mismarking incidents as well as drawing attention to valuation uncertainty and regulatory prudent valuation.

It also stated that “The complexity of firms’ trading operations has been continually increasing over the last ten years. …firms must be prepared to take extra steps to deal with the incremental risks associated with less liquid, complex and/or modelled products. The increased valuation uncertainty that can be associated with these products is likely to precipitate the need for increased focus on the regulatory principles on prudent valuation, which are an important component of the overall regulatory capital framework for the Trading Book. Adjustments to Tier One capital are required where prudent value is assessed as being materially below fair value…” (emphasis in last sentence mine) and furthermore that “by developing better frameworks for the measurement of residual valuation and model risks after the application of IPV, model...
validation and other processes, firms would be better placed…to deliver a control framework consistent with the prudent valuation principles."

In other words, with this letter the FSA demonstrates that it is actively contemplating adding further regulatory charges to the tier one capital for firms that fall behind in terms of prudent valuation and, intrinsically, model risk and product classification. That’s one way to incentivize firms to clean up their act. Another, which the FSA has used and continues to use, is to establish temporary trading restrictions on specific products. Although not widely publicized, this has been done on several occasions, and some of the remedial actions that have been employed by firms to lift these regulator-imposed restrictions are to put robust product taxonomies in place and subsequently to provide assurance to the FSA that they are now capable of robustly assigning models to related products and hence are modeling risks appropriately.

Furthermore, the FSA has implemented a new assessment framework for prudent valuation to promote a more systematic approach to the assessment of valuation uncertainty and prudent valuation. Since 2011, on a quarterly basis, firms have been required to report initial prudent valuation adjustments along with policies and procedures defining the firms’ approach to and framework for valuation uncertainty. The FSA reviews and formally assesses each firm’s prudent valuation framework and methodologies through comprehensive reviews and meetings with individual firms. Most importantly, from the perspective of product taxonomy, the FSA assesses granular judgmental analysis by firms at product level.

US Commodity Futures Trading Commission and the International Swaps and Derivatives Association

In light of forthcoming regulatory changes around central counterparties (CCP) and centralized clearing houses (CCH), the US Commodity Futures Trading Commission (CFTC), together with other market associations and trade bodies such as the International Swaps and Derivatives Association (ISDA), have recently started initiatives around unique product identifiers (UPIs).

This is with a view to establishing a market infrastructure for standardized over-the-counter (OTC) derivative products enabling electronic execution and central clearing similar to other securities markets and ultimately aims at increasing post-trade transparency. A recently published white paper entitled “Product representation for standardized derivatives” (ISDA, 2011) examines how such a new infrastructure for OTC products can be achieved, considers the implementation of a centralized derivatives product registry, and discusses the benefits of a product registry and UPIs.

A Brief Guide to Developing and Implementing a Product Taxonomy for Financial Institutions

After defining the product taxonomy, discussing its benefits for understanding risk–return in the banking framework, and indeed simply realizing the need to have a product taxonomy in light of the further regulatory changes on the horizon, the big question for many financial institutions is Where do we go from here?

The next section provides some pointers and practical guidance. You may find the following two tools particularly useful, and I am hoping that you will find them equally valuable when planning to develop, or when actually developing, a bespoke product taxonomy for your institution.

The Taxonomy Development Process

Every project has several stages, and the development of a firmwide product taxonomy can easily amount to a major project. For instance, one US investment bank developed and adopted a robust, well thought-through product taxonomy—but altogether it took them close to seven years to complete it.

However, this hardly comes as a surprise if you know that a trade or product lifecycle stretches across the whole range of a bank’s functional areas, starting with trade capture and booking systems in the front office, through the traders’ pricing, valuation and risk systems, and last but not least the trade population in the firm’s end-of-day risk aggregation, finance, and regulatory accounting systems. Depending on the size of the financial institution and the nature of its business, you are potentially looking at anything between 50 and up to 250 systems—in some extreme cases, even more.
Hence, it’s important to come up with a generic schema for the development of a taxonomy, but bear in mind that any taxonomy is likely to be firm-specific and, therefore, somewhat bespoke. This means that although conceptually the development schema shown in Figure 2 may prove useful, you should not shy away from amending it to ensure that it is fit for your particular purpose.

Figure 2. Generic schema for development of a taxonomy. (Source: Adapted from Whittaker and Breininger, 2008)

Typically, the development and implementation of a taxonomy encompasses the following phases.

1. Determination of requirements

Scope: Which business division and functional areas are to be covered by the taxonomy?
Purpose: What is the key purpose of the taxonomy?
Type of content format: Is there a particular format, and are there sound industry practices that can serve as an example?
Target audience and users: Who is going to use the taxonomy and how?
Business objective: Why do we need a taxonomy?

Output and tools: Business case and requirements document; statement of scope; project plan; terms of reference; risks, assumptions, issues, and development (RAID) log; key project contacts list.

2. Identification of suitable taxonomic concepts

Where and what is the content and which products are to be classified by the taxonomy?
Perform product inventory analysis with the aim of producing a draft product list:
What exists already?
Where is it located?
How many source systems are involved?
How broad will the coverage be?
How much variety exists in the source systems?
Conduct user interviews

Output: Identify a current product list for each business function and system—and, equally important, how they are mapped to each other.

3. Development of a firm’s draft product taxonomy

General design consideration: What is an optimum level of nodes/hierarchies? A two-level structure seems to work well.
Start broad, not deep.
Approaches: Top-down and/or bottom-up approach.
Develop upper taxonomic levels (see next section for an explanation):
Major product features (i.e. mandatory nodes).
Develop lower taxonomic levels (see next section for an explanation):
Product-specific features (i.e. product-specific nodes).

Output: Common rules for format of taxonomic terms, taxonomic structure, and relationship between core nodes (mandatory and product-specific features), noncore nodes (instance-specific and function-specific nodes), and possible additional aggregation layers (i.e. wrapper to bundle certain products to generate strategy trades).

4. Review with subject matter experts and users

Identify appropriate subject matter experts to validate the proposed draft taxonomy.
Sound practice here suggests:
Avoid overthinking.
Avoid developing unnecessary sections.
Avoid overengineering the taxonomy.
Output: Sound validation of the proposed taxonomy that answers the following questions:

Does the structure of the taxonomy make sense?
Does the taxonomy go too deep?
Have all major products been included?
Are there any gaps that need to be addressed at this stage?

5. Refining the taxonomy

Refining of a product taxonomy is mainly an iterative process covering:
Analysis of the results of feasibility studies.
Incorporation of changes.
Addressing user feedback.
Taxonomies tend to be living/growing tools, i.e. they are never finished.
Refinement should stop when the taxonomy is “good enough,” i.e. fit for purpose.
Refinement of a taxonomy should always observe a balance of value vs. detail.

6. Application of the taxonomy to the business content

In the context of banks or financial institutions the application of taxonomy to content would mean products to cover certain divisions (for instance investment bank or retail banking).
Integrate with existing applications (i.e. trade capture, trade booking, valuation, risk in the front office and end-of-day risk aggregation, ALM tools, and finance valuation engines).
Associate taxonomy terms with products.
Address links to other firmwide concepts:
Trader mandates.
Model inventory and certifications.
Internal and external taxonomies.
Provide guidelines for use, application, and training for users.

7. Active taxonomy management and maintenance

Establish ownership of taxonomy.
Who owns and maintains taxonomy? Documentation.
Establish governance process.
Establish change control process.
Review, approval, and implementation of change; version control.
Periodic review to establish if the product still “fits” its purpose and objectives.

A Practical Approach to Taxonomy for Financial Institutions

This section provides a practical approach to taxonomy for financial institutions. Although largely a conceptual representation of a taxonomy, this concept has been applied and tested and is one of several approaches that have been proven to work. Again, it is, however, important to realize that any product taxonomy must be fit for purpose for the firm that builds, adopts, and uses it.

Coming back to the root–node–leaf-imposed tree structure discussed earlier, one possible way to implement a product taxonomy at a financial institution is by choosing a root–node-based map approach to product features that will apply to all products the firm is dealing with.

The major components of such a taxonomy are:
core nodes;
noncore nodes;
an aggregation layer or layers.

Mandatory Nodes

Core nodes may comprise mandatory nodes, which represent the root of the taxonomic classification and are relevant to all products and functions. The following lists a sample of such possible mandatory nodes and suitable valid values for each node.
**Product Taxonomy:** A Key Tool for Understanding Risk–Return Within the Banking Framework

**Asset:** Equities, rates, credit, foreign exchange, etc.
**Product:** Swap, option, forward, etc.
**Underlying:** Interest rate, single currency, currency pair, common stock, etc.
**Market:** Listed, OTC, exchange-traded, private placement, etc.
**Complexity:** Simple, exotic, complex, etc.

**Product-Specific Nodes**

In contrast, product-specific nodes capture attributes that define the specific product type, and hence will not necessarily apply to all products. Following is a list of examples of product-specific nodes and valid values for each of these.

- **Currency treatment:** Single currency, dual currency, quanto, etc.
- **Exercise feature:** Callable, puttable, etc.
- **Exercise type:** European, American, Bermudan, autocallable, etc.
- **Time operation:** Asian, min/max, lookback, lock-in, ladder, etc.
- **Underlying structure:** Single, basket, rainbow, etc.
- **Early exercise condition:** Target, barrier, elimination, memory touch, etc.
- **Performance type:** Cliquet, escalator, swing, etc.
- **Conditional payoff:** Kick-in, kick-out, etc.
- **Barrier features:** Up, down, continuous, discrete, etc.
- **Coupon types:** Fixed, floating, inflation-adjusted, zero-coupon, etc.
- **Funding status:** Cash, synthetic, etc.

**Noncore nodes** may comprise instance-specific nodes that capture attributes for the particular instance of that product type and they are complemented by function-specific nodes, which represent extensions of the taxonomy created for different functional areas (i.e. finance, risk, and regulatory reporting).

An aggregation layer (or layers) then further enhances this taxonomy by providing an aggregation logic which may be used to link and combine individual products in a holistic fashion—for example “Structured investment wrapper,” “Deals by combining several strategies,” “Strategies that combine several traded products,” and so on.

Figure 3 is a graphical representation of this root–node-based approach and the relationship of the different taxonomic levels or layers.

![Figure 3. Root–node-based approach, node relationships, and product aggregation](image)

**Other Considerations**

As part of a product taxonomy framework, the following specifics may apply.

**Product Identification**

Via a product taxonomy rule-based approach (through trade capture, valid values, and business rules). Content values for mandatory nodes must be defined for all products classified by the taxonomy. Optional specifiers for various product characteristics of product-specific nodes. Additional instance- and function-specific nodes can be populated on the basis of rules specific to the product type identified (i.e. via product-specific templates).

**Additional Features of a Taxonomy**

Links to trader mandates, model inventory, and model and/or product certifications. Product aggregation layers to manage the risks of complex instruments. Easily maintainable and extendable for new products.
Principles of Taxonomy Governance
Governed by a cross-functional working group (business and control).
Driven by control and reporting requirements.

Principles for the Development of a Product Taxonomy

When developing a firmwide product taxonomy, it is also worth keeping in mind the following principles.

The product taxonomy:
- is driven by control and reporting requirements that contain globally authorized business definitions, terms, and codes;
- will define the global data standard for global products, enabling consistent understanding;
- enables front-to-back product representation by applying consistent, cross-functional design principles;
- contains the product code, product name, and key product features;
- will link to other internal and external concepts, such as trader mandates, model inventory, and certifications and other hierarchies;
- overarches two key product concepts that support product control and reporting requirements, as set out in the next two lists.

Product classifications:
- consist of a set of product-classifying attributes that are used to classify but not to describe the product;
- are used to group products with similar features;
- are not data dictionaries of all product attributes but are restricted to attributes required for reporting purposes;
- need to be easily maintainable and extendable in order to cater for new products.

Product lists:
- are a single master list of products;
- contain a unique product code, name, and description;
- define the primary product key within the firm’s rule set;
- define the minimum product features needed for general control and reporting requirements;
- define products’ business owners and internal entitlements;
- need to be easily maintainable and extendable for new products.

Conclusion

Product taxonomy, and setting up such a taxonomy, is certainly not one of the easiest topics, and much more could be written on it. Hopefully, you will find this chapter to be a useful introduction into an often overlooked, yet fundamentally important and crucial area for financial institutions.

Additional information on feasibility studies and asset class definition, particularly in the structured finance space, can be found in Krebsz, 2011.

More Info

Book:

Articles:
Product Taxonomy: A Key Tool for Understanding Risk–Return Within the Banking Framework


Website:
- Enterprise Data Management (EDM) Council’s “Semantics Repository”: www.edmcouncil.org/sec_semantics.aspx

See Also

Industry Profile
- Banking and Financial Services

Notes

1. For a coffee-related product taxonomy that illustrates the coffee examples further (and is to be taken with a pinch or two of salt), please refer to the following link: www.quicksilverweb.net/sbucks/sbcharts.htm

To see this article on-line, please visit