



# Adopting UNSPSC

From vision to reality

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# Better supply management with UNSPSC

UNSPSC, the global product and services classification standard, has been revolutionizing purchasing and supply management across the world.

Leading companies like GE have adopted UNSPSC across the enterprise.

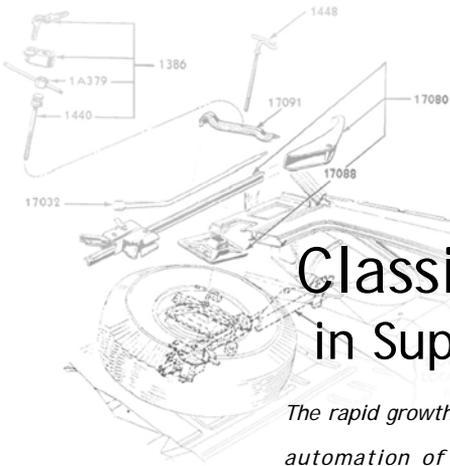
“There are other codes available, but the United Nations Standard Products and Services Code is the one we rely on to support our strategic sourcing process,” says *Gary Reiner, Senior VP and CIO of General Electric*. “The UNSPSC effectively gives us the means to capture a uniform, enterprise-wide view of our spending,” he adds.

Whether you are deliberating on the need for a common product and classification standard for your company, or are an advanced UNSPSC adopter, we hope that “UNSPSC for better Spend Analysis” will answer some of your questions and perhaps help you in some way to improve your purchasing and supply management processes.

## UNSPSC for better Spend Analysis

# What's Inside

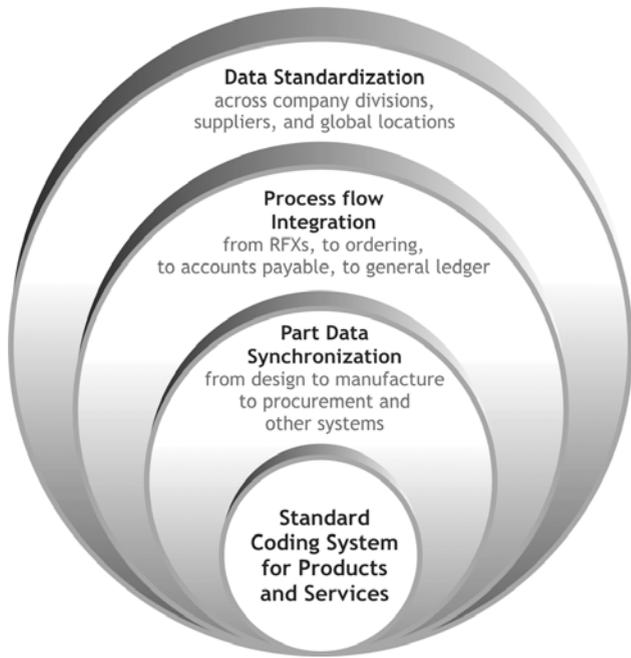
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# Classification edge in Supply Management

*The rapid growth of e-business has led to the widescale automation of transactions. But, the content of these transactions (descriptions and names of products/services) has largely remained unstandardized. To facilitate the smooth conduction of business, the coding of products and services according to a standardized classification convention is essential. According to a recent study, more than half of companies surveyed were already using codes to classify products and services, with some of them having several complex codes of 10 or more categories. However, adopting a uniform coding system for classifying products and services with standard descriptive nomenclature has its unique advantages. It allows organizations to manage their purchasing and supply processes with increased efficiency and effectiveness, while reducing the cost of creating and maintaining a proprietary code and lowering the cost of doing business for its partners and suppliers.*

## The benefits of standard products and services classification system



### **Enables superior spend analysis and better strategic sourcing**

By classifying every purchase transaction, companies are able to get visibility into spend across the enterprise. Using codes (acting as "meta tags") that are part of a hierarchical taxonomy, individual purchases can be rolled up into contractible groups (and vice versa). This allows supply management to rationalize the supplier base and leverage enterprise demand to negotiate better prices.

### **Enables Spend Control and Uniformity across**

### the company

A uniform, standard code acts as a glue which flows throughout the organization and its supply chain. It ties together all departments and divisions, including business functions such as purchasing and settlement, and links the organization with its suppliers and partners, thus ensuring that everybody is speaking the same language when it comes to products and services information. It can be used in enterprise applications like ERP, e-procurement and PLM systems, and can also be integrated

## Classifying Products and Services leads to better Purchasing and Supply

### Management

- ▶ Enables buyers and employee requisitioners to find all suppliers of a given category
- ▶ Enables purchasing managers to analyze expenditures and perform strategic sourcing
- ▶ Consistent coding across company divisions, suppliers, and information systems gives uniform picture of company expenditures.
- ▶ Integrates procurement card statement categories with all purchase transactional data.
- ▶ One numbering system integrates entire processing flow - from RFPs, to ordering, to accounts payable, to general ledger.
- ▶ Facilitates control over and compliance to spending limits and authorized commodities by individuals and departments.
- ▶ A standardized, already devised code is easy to implement and saves the company time and expense in developing its own.

*Adopted from "Product Classification Using The UNSPSC" by Granada Research*

[http://www.unspsc.org/AdminFolder/Documents/UNSPSC\\_White\\_Paper.doc](http://www.unspsc.org/AdminFolder/Documents/UNSPSC_White_Paper.doc)

with procurement card programs. It becomes the essential component for streamlined control of the list of authorized items and vendors, approval workflows, and allocated budgets. It also sets the stage for standardization and simplification initiatives.

**Enables better product / services search and discovery**

A common naming convention allows search engines and repositories to automatically list similar products under a single category. When a person is searching for the category, he or she finds precisely the things being discovered and nothing else. Simply using text string searches on such document collections leads to a great number of irrelevant hits. It paves the way for parametric searching - where once the parameters for a particular category are defined, the user can select appropriate parameter values to find precisely what he or she needs.

There have been several attempts at creating a uniform classification, the most notable being United States' SIC (Standard Industrial Classification) superceded by the North American Industry Classification System (pronounced 'nakes') in 2000. However, it is the **United Nations Standard Products and Services Code (UNSPSC)**, a global classification standard created by the United Nations in association with Dun & Bradstreet, that has emerged as the most appropriate and popular classification standard for purchasing and supply management across the world.





# What is UNSPSC?

*UNSPSC (United Nations Standard Products and Services Code) is an open, global electronic commerce standard that provides a logical framework for classifying goods and services. It allows commodities and products to be properly and uniquely classified, so that companies can track purchasing patterns more efficiently, ensure contract compliance, and pave the way for superior catalog search. The hierarchical structure of UNSPSC allows drilling down and rolling up, which is integral for tactical and strategic spend analysis. It is a global standard and is freely available to the public with no copyright protection issues - which has led to its widespread adoption all around the world.*

# UNSPSC at a glance

Characteristics	Based on a four tiered hierarchy of product groupings defined as: segment, family, class, commodity.
Classification Philosophy	Commodities are classified with other commodities that serve or support a common function, purpose or task.
Maintenance /Management	UNSPSC derived from a merger by Dunn and Bradstreet and the United Nations Development Program United Nations Common Coding System in 1998. As of Nov'02 D&B and ECCMA code merged
Licensing requirement	UNSPSC is available free, for use and printing, to the public with no copyright restrictions.
Function - product searching & selection	Common naming conventions allow computer systems to automatically list similar products under a single category to promote browse-style searching.
Function - spend analysis	Well-structured hierarchical system facilitates purchasing /spend analysis.

# UNSPSC-A Brief History

The result of the merger of the United Nations' Common Coding system (UNCCS) and Dun & Bradstreet's Standard Products and Services Code (SPSC), UNSPSC was developed in 1998 through the efforts of a team of analysts and researchers from both D&B and the Inter-Agency Procurement Services Organization (IAPSO) of the UNDP (United Nation Development Program).

The code was originally managed by the Electronic Commerce Code Management Association (ECCMA), but in February 2001, due to the need to submit the services for the management, maintenance and update of UNSPSC through a competitive selection process in accordance with its Financial Regulations and Rules, UNDP took a copy of the UNSPSC V 5.0 from the ECCMA website and declared it as frozen. After an 11-month search for an organization that would manage the code, the UNDP appointed Dun & Bradstreet as the interim manager in January 2002 for an initial period of three months, which was extended till end of 2002. However, despite the developments, ECCMA and its members remained committed to developing and maintaining UNSPSC as an open standard, and subsequently released Version 10.0 of the code.

In October 2002, The United Nations Development Programme (UNDP) and the Electronic Commerce Code Management Association (ECCMA) announced that they have amicably resolved their differences with regard to their respective versions of the coding system for classification of goods and services.

The amicable resolution included that:

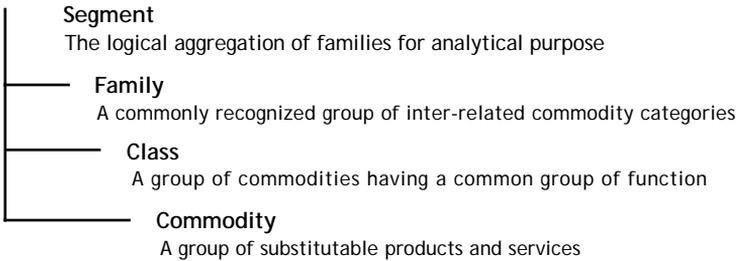
- 1 There will be only one version of the code, which will exist under the name of the United Nations Standard Products and Services Code (UNSPSC), and will be owned by UNDP.
- 2 The two currently existing versions of the UNSPSC will be unified into the single code, with discrepancies reconciled. Pending implementation of this unified code, both organizations will “freeze” their codes effective immediately. At the completion of the unification process, UNDP will submit the unification proposal to the voting members of the ECCMA Code and the UNDP Code, and the voting will occur on a segment-by-segment basis.
- 3 A new independent and non-profit code management organization will be appointed to replace D&B, the current interim management organization for UNDP.



UN/SPSC comprises more than 18000 categories for products and services description. It is a commodity classification schema, not a product identification schema; it includes only the primary attributes used to differentiate one commodity from another. Normally attributes such as brand or physical characteristics are excluded. Suppliers add the UNSPSC in their catalogs and their invoices to the descriptions of their products and services. Adding the UNSPSC makes it easier for buyers to find products and to analyze what they have bought across multiple suppliers. ....

# UNSPSC Design

Each Level contains a two character numerical value and a textual description as follows



## Example

 23 Industrial Manufacturing and Processing Machinery and Accessories	23
  13 Lapidary machinery and equipment	2313
  15 Grinding and sanding and polishing equipment and supplies	231315
  03 Grinding wheels	23131503

### A. HYDRAULIC PUMP E-A4VS0180DR22R-PPB13N00

Segment	Distribution and Conditioning Systems and Equipment and Components	40
Family	Industrial pumps and compressors	15
Class	Pumps	15
Commodity	Hydraulic pumps	33

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### B. CENTRIFUGAL PUMP FMPO

Segment	Distribution and Conditioning Systems and Equipment and Components	40
Family	Industrial pumps and compressors	15
Class	Pumps	15
Commodity	Centrifugal pumps	03

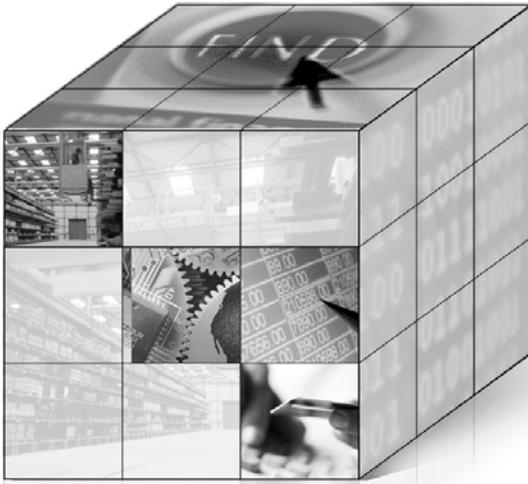
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### C. PUMP TYPE 3L1-VACUUM DEGASSING

Segment	Distribution and Conditioning Systems and Equipment and Components	40
Family	Industrial pumps and compressors	15
Class	Pumps	15
Commodity	Vacuum pumps	02



The UNSPSC can be further extended by adding a ninth and tenth digit after the commodity number. These numbers can indicate business relationships to the supplier or original equipment manufacturer (OEM). Alternatively, the numbers can be used to explode the 4th level UNSPSC commodity codes into further categories or item.



## Why UNSPSC?

According to Granada Research a useful product classification scheme must be hierarchical, so that individual commodities represent unique instances of larger classes and families. Hierarchical organization allows a given company to focus on a level of specificity that best suit its purposes and situation.

By classifying products and services with a common coding scheme commerce between buyers and sellers and is becoming mandatory in the new era of electronic commerce. Large companies are beginning to code purchases in order to analyze their spending.

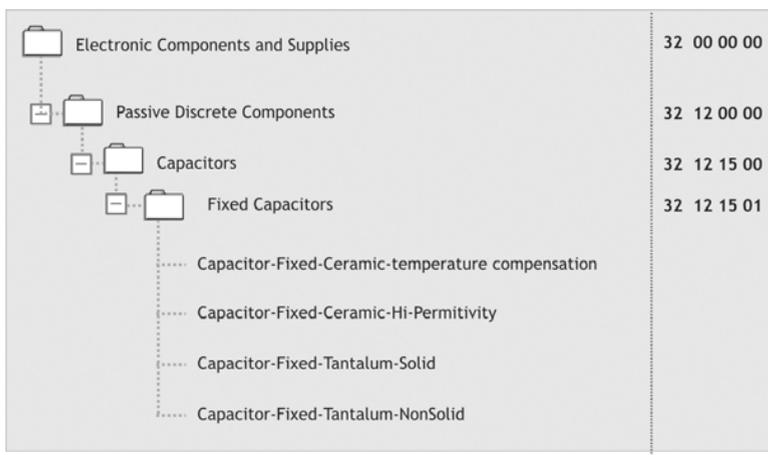
Although there exist multiple systems for classifying purchasing data there are obvious advantages that UN/SPSC enjoys over other classification systems like SIC, NIGP, and vertical ones like eCI@ss.

# Advantages of UNSPSC

## 1. UNSPSC's hierarchical taxonomy allows "Drill Down" and "Roll Up" analysis

The hierarchical organization of UNSPSC allows an organization (or a user) to focus on a level of specificity that best suits its purpose and situation. For example, it allows searchers to drill down among a large group of products and services to precisely find what they need,

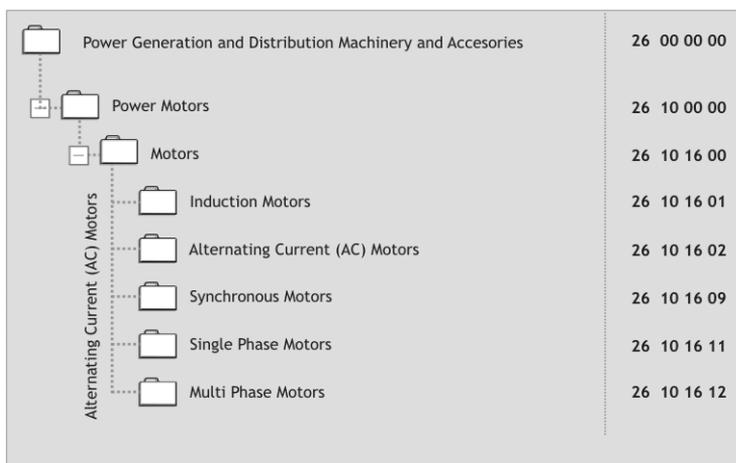
### Example (Drill Down)



and also enables sourcing strategists to get a bird's eye view of enterprise spend by 'rolling up' a vast group of purchase records into broader, appropriate

buckets of transaction.

Because the coding system is hierarchical, the company can organize an entire group of purchase transactions into relevant UNSPSC categories which in turn can be mapped to the organization's commodity structure (and contractible groups) - leading to effective spend visibility, optimization, and control.



## 2. UNSPSC supports multi-language uses

In UNSPSC, each specific name of the classification has a unique number associated with it - and it has a unique code for each item. This ensures that no ambiguity will exist as to what product or service the name refers to. This is especially important for multinational companies where UNSPSC can serve as the reference code for multi-language translations of product and services information.

### 3. UNSPSC supports schema modifications to suit organization specific needs

Organizations can customize UNSPSC to suit their unique needs - whether to map into their internal classification system or to get customized views of the data. UNSPSC allows users to move items around within the same classification taxonomy and not lose its identification power.

### 4. UNSPSC schema is consistent and complete

In UNSPSC, a single item is identified in once place only - thus enabling similar products to be rolled up into logical higher groupings. The comprehensive coverage of UNSPSC also allows it to represent all relevant

You can leverage the power of UNSPSC without having to give up your proprietary schema and its associated advantages.

#### Example

Commodity : Keyboards or Keypads

Language	Translated word	UNSPSC code
English	Keyboard or Keypads	43 17 22 04
German	Tastatur	43 17 22 04
French	Claviers et pavés numériques	43 17 22 04
Spanish	Teclados o teclados numéricos	43 17 22 04
Italian	tastiere o tastierini numerici	43 17 22 04
Swedish	Tangentbord eller knappsatser	43 17 22 04

categories - more than 18,000 commodities. It also ensures that all suppliers are covered by the classification schema, thus enabling effective supplier rationalization and demand aggregation. While the UNSPSC schema is getting enhanced on a continuous basis, classifying an increasing number of commodities into granular detail, an organization can also split the 4th level UNSPSC commodity into further detail, if it suits their purpose.

#### **5. UNSPSC is responsive to the marketplace**

UNSPSC is continuously getting enhanced as per demands of the market. Individual organizations or industry groups can play an active role in management of UNSPSC schema, by suggesting and lobbying for schema modifications and enhancement

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Enterprises can organize an entire group of purchase transactions into relevant UNSPSC categories which in turn can be mapped to the enterprise's commodity structure (and contractible groups) - leading to effective spend visibility, optimization, and control.

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#### **6. UNSPSC is an open standard, which comes and free of charge for use**

UNSPSC is free for use for everybody in a supply (and demand) chain, and not proprietary to any particular company - leading to absence of implementation barriers. It has gained significant adoption by dominant e-commerce platform vendors (e.g. Ariba) across all industries. ("Don't reinvent the wheel.")

#### **7. UNSPSC has a clear advantage over other popular codes**

Over the years, there have been several attempts to create a uniform classification code such as the Uniform Code Council's (UCC) bar codes, the European Article Number (EAN) retail bar codes and the United States'

Standard Industrial Classification (SIC) code now known as NAICS (North American Industry Classification System). Before adopting a corporate taxonomy, organizations usually evaluate other codes like eCl@ss, NIGP, NATO, vertical specific, and their own proprietary codes.). However, these codes have been designed for purposes other than product/service awareness, discovery and spend analysis. They do have most of the characteristics of a good naming convention needed to perform spend analysis, data and supplier normalization and rationalization. Some have hierarchies, but then again they do not provide for granular classification the way UNSPSC does. NAICS, for example, is too broad based. eCl@ss is yet to gain popularity and adoption beyond Germany, while NIGP is a proprietary code, ensuring fee based usage, and NATO is usually suitable for a few specific verticals (and doesn't permit easy spend analysis). ■

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## UNSPSC v/s other classification standards

Standard	Chief Characteristics	Hierarchy	Unique Nos. For Items	New Code assigning time	Classification or Identification	Consistency or Completeness
UNSPSC	Global standard Identifies product and service by category High specificity Multiple hierarchies allow aggregation/drill-down to any relevant level of analysis	Y	Y	Days	Classification	Consistent & Complete
Internal/ Proprietary	Proprietary codes suffer from adoption problems - only useful to a single company. Expensive to require trading partners to use same code. Not maintained. Limited or non-existent hierarchy	Y	N	Usually fixed	Classification	No
SIC/NAICS	Identifies broad industry, product, and service categories Not detailed enough for effective spend analysis (too high level)- Unable to drill down to contractible groups. Product identification code, not classification code.	Y	Y	Years	Classification	Consistent & Complete
UCC/EAN	Identifies branded merchandise by manufacturer No item hierarchy; strictly used for identification	N	Y	Varies according to the company	Identification	No
NIGP	Used by local government purchasing agencies Maintains hierarchy Proprietary code (fee-based usage)	Y	Y	Years	Classification	Only Consistency
Eclass	Used by German Industry Low Specificity in some areas and high specificity in others.	Y (4 level only)	Y	Months	Classification	Consistent & Complete
NATO	Generally used by suppliers of US Defence . Broad Level of Classification. No services classification	Y (2 level only)	Y	Months	Classification	Only Consistency



## Addressing UNSPSC related concerns

*"Adopting UNSPSC seems like a great idea, but..."*

*...I am worried about the conflict between ECCMA and D&B/UNDP over the management of UNSPSC. Would this lead to proliferation of different UNSPSC standards? I would like to adopt UNSPSC but am waiting till a clearer picture emerges"*

Good news - in October 2002, ECCMA and UNDP decided to resolve their differences amicably and join hands to unify their UNSPSC coding standards. So there will not be proliferations of different UNSPSC standards - though an organization can decide to go for any of the existing UNSPSC versions, or wait for the joint version to come out (expected soon this year).

*AMICABLE RESOLUTION OF DIFFERENCES between UNDP and ECCMA  
regarding Ownership and Management of the UNSPSC*

The United Nations Development Programme (UNDP) and the Electronic Commerce Code Management Association (ECCMA) are pleased to announce today that they have amicably resolved their differences with regard to their respective versions of the coding system for classification of goods and services . The amicable resolution includes, inter alia, the following:

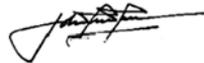
1. There will be only one version of the code, which will exist under the name of the United Nations Standard Products and Services Code (UNSPSC), and will be owned by UNDP.
2. In recognition of the valuable contributions of code users, the two currently existing versions of the UNSPSC will be unified into the single code, with discrepancies reconciled. Pending implementation of this unified code, both organizations will "freeze" their codes effective immediately. At the completion of the unification process, UNDP will submit the unification proposal to the voting members of the ECCMA Code and the UNDP Code, and the voting will occur on a segment-by-segment basis.
3. A new independent and non-profit code management organization will be appointed to replace D&B, the current interim management organization for UNDP. ECCMA will thus no longer be responsible for the maintenance and further development of the UNSPSC, but ECCMA members will have the same access to the UNSPSC as other UNSPSC members and ECCMA will continue with its other activities unrelated to the management, maintenance and update of the UNSPSC.

Further information with regard to the practical arrangements for the unification of the two versions of the UNSPSC, and the selection of the new code management organization will be made available in the near future.

October 2, 2002.



**Jan Mattsson**  
*Assistant Administrator and Director  
Bureau of Management  
UNDP*



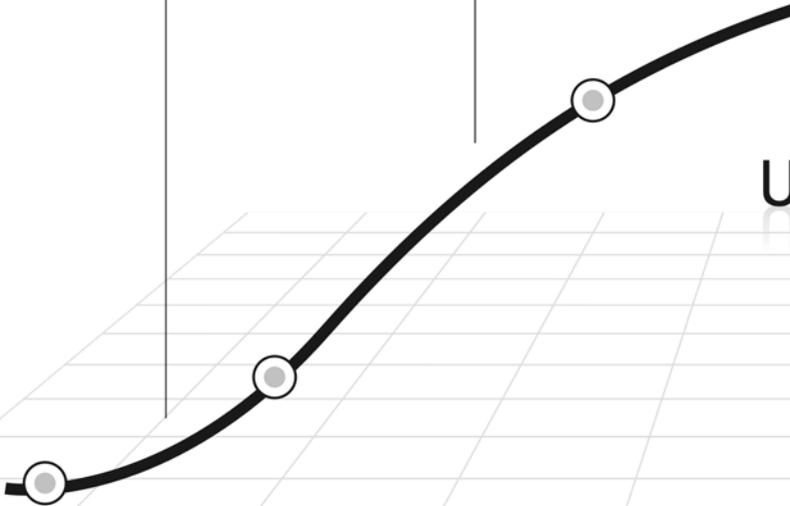
**John Svendsen**  
*Chairman  
ECCMA*

Source: [http://www.unspsc.com/AdminFolder/documents/Joint\\_ann\\_signed.rtf](http://www.unspsc.com/AdminFolder/documents/Joint_ann_signed.rtf)

Sta		
1. Knowledge	2. Persuasion	3. Decision
What h		
Potential adopters learn about UNSPSC through different communication channels	They must be persuaded of the value of the standard, and in turn persuade top management or steering committee	The organization decides to adopt UNSPSC.
Exam		
Through industry events, by talking to peers, or by reading about adoption cases.	Evaluate whether UNSPSC fits your needs better than NAICS or NIGP. Evaluate the pros and cons of your existing schema.	A pilot spend classification project is done. involving a few divisions. On ROI demonstration, the decision is made.
Tip		
<ul style="list-style-type: none"> <li>&gt; Ask yourself how your company (and your supply chain) could benefit by adopting a global products and services classification standard</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Evaluate UNSPSC against other standards.</li> <li>&gt; Evaluate internal processes and systems to build a business case for UNSPSC</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Ensure top management backing.</li> <li>&gt;Ttest the waters' first.</li> </ul>

Low

UNSPSC A



Stage		
4. Implementation	5. Adaptation	6. Creative Application
What happens		
The standard must be implemented	The organization gains increased internal buy-in for the standard and puts it to other uses.	The organization leverages the standard for creative uses (best practices)
Example		
Historical Spend Analysis followed by setting up processes and systems for UNSPSC driven ongoing spend analysis	Having started with classifying its indirect spend, a company decides to use UNSPSC for direct spend also. It also goes for classifying and rationalizing its Item Masters.	Spend control at source through real-time classification
Tips		
<ul style="list-style-type: none"> <li>&gt; Ensure that a proper schema audit is done to decide scope and waves of adoption</li> <li>&gt; Manage classification pain-points effectively.</li> <li>&gt; Set up systems for ROI calculation</li> <li>&gt; Factor-in 'schema migration' and change management issues.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Let people get familiar with UNSPSC.</li> <li>&gt; Figure out 'what more' you can do with UNSPSC - and whether there is a business case for going ahead.</li> <li>&gt; Go for automated classification solutions</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Leverage technology</li> <li>&gt; Learn from 'best practices' across industries</li> </ul>



# UNSPSC Adoption Curve



## How popular is UNSPSC as a global standard?

UNSPSC has emerged as the leading product and services classification standard across the world. Global 500 companies like GE, Motorola, Microsoft etc. have adopted UNSPSC, as have verticals like Healthcare (CheS has selected UNSPSC - after modifying it - as the product and services classification standard). While UNSPSC adoption is strongest in US, Asia and Australia, it is also gaining significant traction in Europe.

UNSPSC schema is available in multiple languages, leading to increases in widespread distribution and implementation throughout the world.

UNSPSC schema is available in multiple languages	
Chinese	Italian
Dutch	Japanese
English-UK	Korean
Finnish	Norwegian
French	Portuguese
French-Canadian	Spanish
German	Swedish
Hebrew	

Across industries/verticals, leading organizations have adopted UNSPSC

ABB	Power/ Automation
Abbott Laboratories	Healthcare
Air Liquide Welding	Industrial products
American Express	Financial
American Petroleum Institute	Industry Body / Petroleum
Aristomed	Healthcare solutions
Audio Graphic Systems	Electronics
Baxter International	Healthcare
Bosch Braking Systems	Automotive
BP Amoco	Oil & Gas/Petroleum
Chevron Corporation	Energy
Cisco Systems Inc.	Computer Hardware
CitiGroup	Financial
Commerce One, Inc.	Computer Software
CompuCom Systems, Inc.	Software
Conoco, Inc.	Oil & Gas/Petroleum
Covisint	Automotive/E-commerce exchange
DaimlerChrysler	Automotive
Dana Corporation	Industrial products
Dow Chemical Company	Industrial products
ExxonMobil Corporation	Energy
Fisher Scientific	Industrial products
General Electric Company	Industrial products
General Motors	Automotive
General Services Administration	USA Federal Government
Halliburton Energy Services	Energy
Healthcare EDI Coalition	Non profit Organization
HealthNexis	Healthcare
Kaiser Permanente	Healthcare
Lockheed Martin Corporation	Aerospace and Defence
Marsh Industries	Manufacturing
McGraw-Hill Children's Publishing	Print/Publishing
Microsoft	Computer Software
Motion Industries	Industrial products
Motorola, Inc.	Semiconductor / Telecom
National-Oilwell	Automation/Manufacturing
Neoforma.com, Inc.	Healthcare solutions
NSSEA	Education
Omniceil.com	Healthcare
Owen Healthcare, Inc.	Healthcare
PricewaterhouseCoopers	Consulting
Sabre Inc.	Travel/Tourism
Schlumberger, Limited	Software/Technology
SciQuest	Software
Tektronix, Inc.	Hi-Tech and Electronics
The Australian Procurement and Construction Council (APCC)	Government
THINQ Learning Solutions, Inc.	Education/Software
Washington Office of State Procurement	Government
Weatherford International, Inc.	Oil & Gas/Petroleum
WESCO Distribution Inc.	Electrical/MRO
Whirlpool Corporation	Consumer Electronics
WW Grainger, Inc.	Industrial products

Note: This is only a partial list

# Initiating the change

*“We have invested years in building our proprietary corporate classification code. Each of our business units have their own proprietary code. Though we feel we should migrate to a global standard like UNSPSC, how do we manage this? Our people are used to the corporate/ BU specific code - how do we get them to use UNSPSC?”*

## **Enterprise adoption needs push from top management**

Let's face it - enterprisewide adoption of any standard needs a clear mandate from the top management. In GE, for example, the CIO & SVP, Gary Reiner, was instrumental in ensuring UNSPSC rollout across the enterprise.

## **Enterprisewide adoption vs. Partial adoption**

While the maximum benefits of UNSPSC are realized through enterprisewide adoption across business units and functional areas, you can also consider using UNSPSC for specific purposes - and adopting it in a phased manner. You may start with using UNSPSC for analyzing your spend, or for that matter, for coding and analyzing your indirect spend (and continuing to use your proprietary code for direct materials procurement)

## **Continuing to use proprietary codes while reaping the benefits from UNSPSC**

A global rollout will require some change management effort. But you can minimize this by adopting UNSPSC in a phased manner, and making the process easy for your people. One of

the ways to do this is to use, real time classification tools to automate the UNSPSC code assignment process. Your people (requisitioners/buyers) can continue to use the existing codes - but your ERP/e-Procurement systems, as well as purchasing analysts, can reap the benefits associated with using UNSPSC. For example, a requisitioner can use the existing corporate code (which he has memorized), but a spend analyst can use UNSPSC to get strategic and tactical insight into spend. If you just want to start with UNSPSC based historical spend analysis, consider going for automated classification solutions to take care of the data bottleneck. You will not have to initiate change management unless your organization is ready for it, or you can get top management buy-in.

### UNSPSC change management tips

- ➔ Start with a schema audit - first find out where UNSPSC will be useful, and how. Get expert help if required.
- ➔ Keep in mind that best practices companies like GE have adopted UNSPSC across the enterprise and are using real-time classification tools for spend visibility and control. But you might want to do this in a phased manner.
- ➔ Automate processes as far as possible- manual classification is time consuming, error prone, and a waste of productive employee time.
- ➔ Consider using pilots to build a business case and get top management buy-in.

# Benefits of Adopting UNSPSC

As mentioned earlier, UNSPSC is designed to serve three primary functions:

- **Spend analysis**

Its coding system brings a single, uniform detailed view of all spend across the enterprise, thus allowing purchasing managers to analyze enterprise expenditures.

- **Finding and purchasing**

The product and services coding convention allows for the easy identification of relevant suppliers of a certain product or service.

- **Product awareness and discovery**

The uniform codes allow computer systems to automatically list similar products and services under a single category, thus ensuring precise searches.

**Using UNSPSC codes an organization can:**

→ Get detailed, comprehensive insight into its spend landscape, thus paving the way for effective strategic sourcing. Analyze purchasing data available in multiple languages and nomenclature, and optimize spend across geographies and across business units.

→ Increase control and uniformity across the organization. By using UNSPSC as a glue cum fluid which ties and links together business units, divisions, departments, as well as business functions like purchasing and settlement, companies can gain increased visibility and control of authorized items and vendors, approval workflows, and

budget. UNSPSC can also be integrated with purchasing card (P-Card) programs.

- ① Integrate the entire procurement process flow - from RFXs, to requisition and ordering, to invoice and receipt, to accounts payable, to general ledger. UNSPSC can be used in multiple enterprise application systems e.g. ERP, e-Procurement, e-Sourcing etc. UNSPSC can also help to close the loop between product design and sourcing.
- ② Align its supply chain and increase value chain efficiency. Using UNSPSC through the value chain ensures greater accuracy and productivity in communications and transactions with channel partners. Typical benefits that can be accrued are minimized returns, better inventory management and forecasting, and collection of market share information.
- ③ Increase e-Procurement efficiency and effectiveness by using controllable search engines and catalogs, and directing employees to make purchases from preferred suppliers automatically. Enable buyers and employee-requisitioners to find all suppliers of a given category. Avoid the expense of maintaining a proprietary classification code, and reduce the cost for all other players in the supply chain.
- ④ Communicate about its products by leveraging the global interconnected electronic infrastructure (through EDI, Internet, Web, using XML, web services etc.). Compete globally by marketing its products and services more efficiently. Send precoded catalog files to meet customer needs. Increase sales through desktop procurement applications. Capture clean, consistent data from sales channels.

# Managing the classification bottleneck

There are three main methods to classify your products and services data to UNSPSC:

## 1 **Populate your IT systems with UNSPSC codes - for increased efficiency and control.**

Typical example would be assigning UNSPSC codes to your consolidated item master, or to your electronic catalogs. This is practical when you have standardized on your processes and your enterprise applications.

This is typically a big one time effort followed by periodic updates - but not so painful as classifying your historical spend in detail, which can involve classifying millions of records.

This requires high classification accuracy - so while manual classification could suffice if the volumes are low, automated classification along with quality assurance checks, is the best way to handle high classification volumes. Check with your classification vendors if they guarantee 95% or 98% classification accuracy, and whether you have some control over the entire process.

## 2 **Do 'ex post facto' classification - usually for historical spend analysis, or rationalizing your item master.**

Classifying millions of transaction records is a daunting task. Effective spend analysis is one of the most important components of a successful strategic sourcing initiative, but is typically plagued by many problems like fragmented data originating from multiple legacy systems and from multiple sources (like

Accounts Payable, General Ledger, Invoices, P-Cards etc.), and slow, expensive semi-manual spend data classification methods existing today which are difficult to scale up and repeat. Also, to maximize the returns from strategic sourcing, companies need to do spend analysis on an ongoing basis. But if a company spends months in consolidating spend data from disparate systems across the enterprise - which typically involves aggregating, cleaning up and then coding data to supplier and product code standards, then the entire process gets delayed - and companies lose out on millions of dollars of potential savings before they can even start optimizing their spend.

An automated UNSPSC classification solution is the best way of dealing with thousands of suppliers and millions of records, which is the typical case for Fortune 1000 companies. Automated UNSPSC classification solutions accelerate the savings opportunity discovery process and ensure that spend analysis is not a one time effort, but an integral, ongoing part of the spend rationalization process.

### **Real-time UNSPSC classification**

3

This is a best practices approach (adopted by companies like GE) which ensures spend visibility and control at source. Example - by automatically classifying purchase requisitions at source, you can remove the burden of assigning UNSPSC codes from the requisitioners, while also ensuring data integrity at source. You can also enforce real-time control by setting up approval workflows and ensuring that people buy preferred items and from preferred suppliers. This is especially useful if you have implemented e-procurement throughout the organization, but are struggling with large volumes of free text requisitions and continuing maverick purchases.

## CASE STUDY: Healthcare Industry adopts UNSPSC

The Coalition for Healthcare e-Standards (CHeS) is comprised of some of the largest group purchasing organizations in health care industry, which have joined forces to adopt and promote uniform industry data standards for supply chain transactions over the Internet. Leading members include Premier, Novation, Neoforma, Medibuy, Global Healthcare Exchange (GHX), Consorta, AmeriNet, MedCenterDirect etc, who together make more than \$ 80 billion worth of contract purchases for the nation's healthcare providers.

According to the Efficient Healthcare Consumer Response industry report, billions of dollars are wasted each year in the health care supply chain due to the fact that data standards are either lacking entirely or are not as widely used or well developed as in various other industries.

**Some common industry problems they were facing before adopting UNSPSC were:-**

- 1 Identifying and utilizing those information components that have already been declared standards (e.g. HIN and UPN), that have become standards through common practice and usage.
- 2 Data inconsistency i.e. it was difficult to ensure that data the parties pass to distributors, suppliers and providers is in a consistent format.
- 3 To reduce overall cost across the entire supply chain.

- 4 The efficiencies and benefits were not fully achieved without the data standardization obstacles by healthcare providers.
- 5 There was a real need to spread the adoption of open and common standards with industry wide support and active participation.

CHeS chose to endorse the UNSPSC after evaluating several other options.

“Industry adoption of UNSPSC is going to be absolutely critical to helping e-commerce deliver supply chain efficiencies,”

*CHeS Chairperson Joe Pleasant.*

“A global taxonomy is a critical step to helping hospitals and suppliers manage their supply chains. Today, the wide differences in product description by multiple forms are the reason which causes substantial inefficiencies and costs for all healthcare constituents. UNSPSC creates a framework for standardization identification which fixes that problem and reduces costs as a result,”

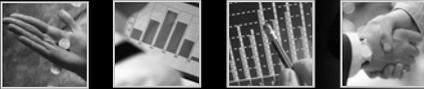
*Mark McDougall, executive director of CHeS.*

CHeS has contributed to the development of certain healthcare segments in UNSPSC through a year long effort. The UNSPSC is the first product taxonomy available to the healthcare industry that is not a part of a proprietary, commercial product or service. It is available free of charge to anyone who wants to use it.

*(Adopted from CHeS' press release on UNSPSC adoption)*

# UNSPSC driven Spend Analysis

See your Spend like never before!



*In today's precarious economy, spend analysis is gaining increasing respect as a potent weapon in the battle to squeeze new savings out of corporate procurement processes. Companies that are implementing strategic sourcing programs – as over 90% of Fortune 100 companies are – use spend analysis to determine precisely what they pay for materials, products and services, when, and with whom. Islands of spending data must be extracted and aggregated from multiple enterprise systems, then used to generate a single uniform view of enterprise-wide expenditures that can identify cost-cutting opportunities as well as reveal critical differences among suppliers.*

*Some organizations that have adopted spend management initiatives are reaping impressive savings. One consumer products company has reported slashing certain bids by as much as 90% after consolidating and analyzing over \$30 billion worth of purchases from 50 different A/P systems. Manufacturer of cutting tools saved over \$1 million on \$800 million in "quick hit" negotiations by applying the lessons learned after merging A/P, PO and PCard data. A cabinetry manufacturer lowered the costs of purchased materials, with a projected year-over-year savings of 2% to 4%, by consolidating spend data across five divisions.*

## The Importance of Classification

The success of a spend analysis effort will be closely tied to the classification scheme employed. Granular, hierarchical classification of data is essential, not only to ensure successful standardization across the procurement environment but also to aid search precision and permit aggregation and drill-down to any level of analysis.

With a common set of product identifiers that are part of a hierarchical taxonomy, individual purchases can be identified by highly specific descriptors (“safety glasses”) or rolled up into more generic categories (“shop supplies” or “industrial supplies”). This allows users to evaluate expenditures at exactly the level most useful to their business or their purpose – including the identification of families of products that can be combined into contractible groups to negotiate a single source of supply and volume discounts.

UNSPSC has emerged as the de-facto standard for spend classification. The UNSPSC system arranges the entire universe of products and services into more than 18,000 hierarchical categories according to a five-level numbering system. This hierarchical structure and depth of detail make it possible to achieve the level of specificity required to effectively pinpoint a given product set as well as to create meaningful product groupings.

Under the antenna category, for example, the UNSPSC assigns unique codes to communications, radio, automotive, satellite, aircraft, broadcast, microwave, television and radar antennae, enabling users to zero in on the precise product of interest. All antenna types share the same segment, family and class codes,

facilitating search analysis and roll-up. The fifth level of the UNSPSC coding system allows for customi-zation within the organization, tailoring the categorization hierarchy to user requirements.

Another advantage of the UNSPSC's numbering system is that it allows for unambiguous translation of a particular item's description into any language. This is a key benefit for multinational companies that want to analyze spending on a worldwide basis. While a given commodity will have different names in different languages, the UNSPSC system unites them all under a single unique number. Other coding systems lack this ability as well as UNSPSC's hierarchical organization and granular categorization.

Some custom reports on the pages ahead will illustrate the advantages of UNSPSC for powering effective spend analysis

#### Consolidated category spend break-up

Generic Product Name	UNSPSC Class/Commodity	UNSPSC Code	Total Category Spend	Number Suppliers/Actual	Pct of Spend
Appraisal Services	Real estate appraisal services	80131802	\$57495860.28	7/3	18%
Leader In Specialised Administrative Personnel	Staff recruiting services	80111701	\$37460625.31	12/12	11%
Marketing And Public Relations	Sales and business promotion activities	80141600	\$22164146.08	5/3	7%
Printing	Industrial printing services	73151900	\$21613291.65	8/7	6%
Consulting	Information technology consultation services	80101507	\$5631286.27	7/4	4%
Water Services	Spring or mineral water	50202310	\$4825125.86	11/9	3%

## Consolidated commodity spend break-up

Commodity	UNSPSC	Total spend (USD)	Total Suppliers	Transaction #s	Supplier	Transaction #s	Total Spend	% Spend
Photocopiers	44101501	159765	64	603	COPYFAX LIMITED	62	25197	15.77
					ACCURE PLC	2	15960	9.02
					YORKER PURCHASING ORGANISATION	1	48	0.03
Ink cartridge	44103105	48274	59	625	PREMIER OFFICE SUPPLIES LTD	182	15465	32.04
					JAVELIN COMPUTERS LTD	30	4258	8.82
					COPYFAX LIMITED	17	2739	5.67
Manufacture of plastics	95151603	22896	2	7	TITAN PLASTECH	5	20958	91.54
					GLASDON UK LTD	2	1938	8.46
Standard envelopes	44121506	17040	27	464	PREMIER OFFICE SUPPLIES LTD	226	5732	33.64
					LOMAS OFFICE FURNITURE & STATIONERY	87	4096	24.04
					PICKWICK COMPUTER SERVICES LTD	2	1730	10.15
Filing cabinet	56101702	13242	17	73	TKC	2	3758	28.38
					PREMIER OFFICE SUPPLIES LTD	24	3582	27.05
					LOMAS OFFICE FURNITURE & STATIONERY	19	2596	19.6
Paper pads or notebooks	14111514	12411	34	529	PREMIER OFFICE SUPPLIES LTD	199	2488	20.05
					CFS PROMOTIONAL PRODUCTS	1	1917	15.45
					LOMAS OFFICE FURNITURE & STATIONERY	83	1537	12.38

## Price / Product Name Anomaly Report

Product Description	UNSPSC	Price	Qty	Supplier
02-0895-MUC-Laptop: T23 / Stock 02 05.08.02	43171801	1716.17	4	IB UNITED KINGDOM LTD.
02-1070-MUC-Laptop: T23 / Stock 04	43171801	1708.57	2	IB UNITED KINGDOM LTD.
SS-020210;CISCO 2651 Router	43172702	23615.60	1	GEC IT SOLUTIONS 105478
SS-021709;CISCO 2651 Routers	43172702	11559.80	1	GEC IT SOLUTIONS 105478
021810;Cisco 2651 Routers	43172702	10629.80	1	GEC IT SOLUTIONS 105478
CANON NP6030 COPIER	44101501	8498	1	F.H. BROW OFFICE TECHNOLOGIES
CANON NP6025 COPIER	44101501	7664	1	F.H. BROW OFFICE TECHNOLOGIES
CANON COPIER	44101501	7955	1	F.H. BROW OFFICE TECHNOLOGIES
PHOTOCOPIER CHARGE	44101501	3500	1	COPYFAX LIMITED
PHOTOCOPIES CHARGES	44101501	2800	1	SONIC BUSINESS SYSTEMS LTD

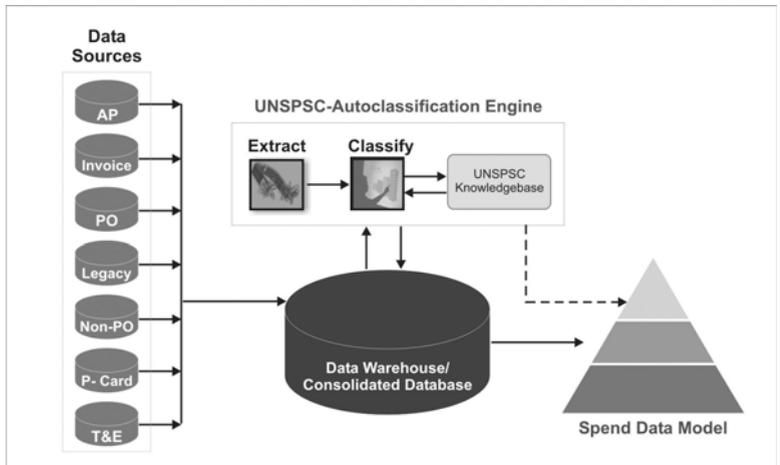
## Major Supplier Report

Supplier Name	Total Amount Spent	% of Total Spend	Applicable UNSPSC	No. of Transaction
ABBEYDALE HOME	10500000	2.1	3	750
CARE Total				
CABLE & WIRES	800000	1.9	1	10
COMMUNICATION				
A1 MINI BUSES & COACHES Total	2507869	1.6	2	74
APETITO LIMITED Total	430000	0.86	2	586
ABOUT TRANSCRIPTION & TYPING SERVICE Total	360000	0.72	1	96
BIFFA WASTE SERVICES LTD Total	345000	0.69	4	93
ARCTIC GLASS Total	320000	0.64	5	268
BADDEN & CLARK Total	295000	0.59	3	59
ASTLE BANK AND CONFERENCE CENTRE Total	285000	0.57	4	112
B&G SEARS CONTRACTORS Total	255000	0.51	5	12
A & W SHERWOOD Total	215000	0.43	2	34
ALTHAMS TRAVEL SERVICES LIMITED Total	185000	0.37	2	156
AUTOCLOCK SYSTEMS LTD Total	165000	0.33	1	13
ACCURE PLC Total	140000	0.28	3	7

**In a nutshell**

UNSPSC is not only the first truly hierarchical, global classification standard, but also is much more detailed than other schemas. It allows commodities and products to be properly and uniquely classified, so that companies can track purchasing patterns more efficiently. Its hierarchical structure enables upward roll-up and downward drilling, which is integral for tactical spend analysis which lead to strategic decision making. By providing optimum granular level classification, UNSPSC helps companies get a detailed view of their spend, which helps in better decision making. UNSPSC also allows rolling up, and/or mapping to higher, contractible groups.

# UNSPSC Best Practices in Supply Management



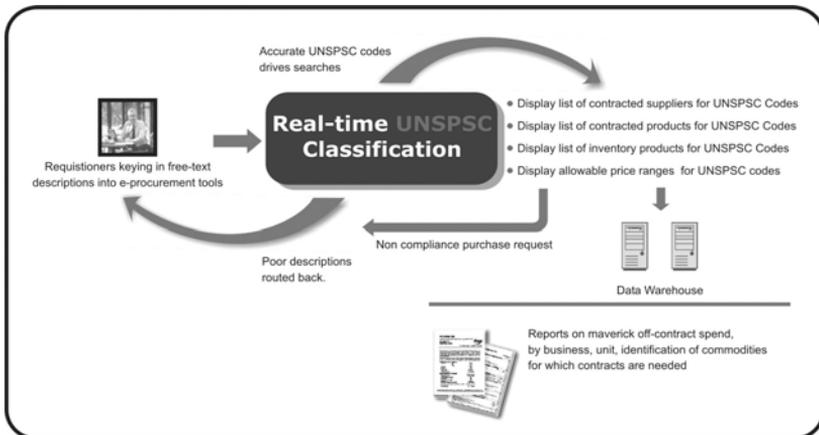
## **BENEFITS**

Removes spend classification bottleneck and saves time, cost and waste of resources

Makes spend analysis an ongoing process

Accelerates savings discovery when doing historical spend analysis involving huge transaction volumes

# Spend Control at source through real-time UNSPSC classification



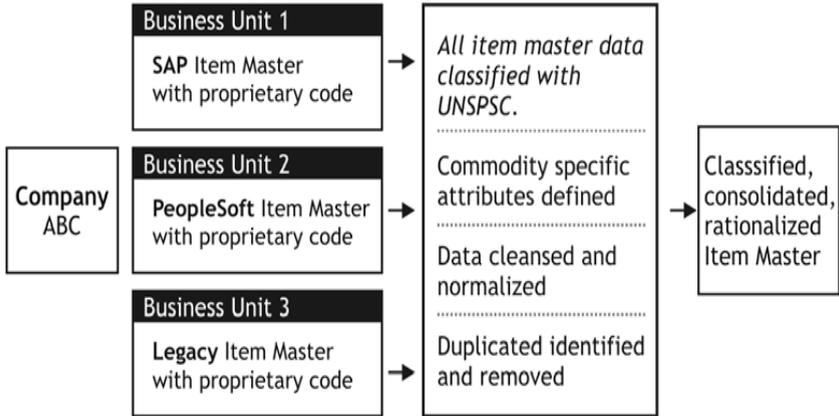
## **BENEFITS**

Data integrity at source - users don't need to know UNSPSC inside-out

Accurate spend classification

Spend control and compliance at source rather than 'ex post facto' control - reduces maverick spending

# Item Master Rationalization using UNSPSC



## **BENEFITS**

Increased usage of preferred parts and suppliers

Reduction in COGS

Global (enterprisewide) optimization instead of local (restricted to a business unit or plant) optimization

# UNSPSC driven Search

For e-Procurement Catalogs and ERP Material Masters

CAP SCREW,  
NOMINAL DIA 5/161N,  
1IN,  
UNC,  
CAP,  
FLAT HD



**Category1**  
Caps 53102516

**Category2**  
Cap screws 31161501  
(Right Classification)

**Category3**  
Screws 31161500

*Finetuning of search  
based on attributes  
Relevant attributes  
displayed for  
Category 2*



NOMINAL DIAMETER	5/16IN
SCREW LENGTH	1IN
THREAD TYPE	UNC
SCREW TYPE	CAP
SCREW HEAD TYPE	FLAT HD

*User selects attribute  
values to find precisely  
what he or she needs*

## **BENEFITS**

*UNSPSC driven catalog search for e-procurement*

Helps user find the right product/ services in a catalog, thus driving compliance and user buy-in for e-procurement.

Efficient and effective searching, leading to reduction in searching time

*UNSPSC driven Material Master Search*

Helps user find the right part/item/ product in an Item Master, leading to reduction in part number proliferation and increased use of preferred parts and suppliers

Helps designers reduce COGS, increase quality and cut-down on time to market by using pre-qualified (or standardized) parts and suppliers

Links design to sourcing

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## About Zycus

Zycus is the leading provider of Spend Data Management solutions. Zycus' UNSPSC based automated solutions combine cutting edge, patent pending artificial intelligence technology and domain expertise to discover, enrich and manage enterprise spend and master data for better visibility and greater compliance. Zycus increases e-Procurement, Strategic Sourcing and SRM effectiveness, and complements existing enterprise applications to deliver increased ROI.

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For more information on 'UNSPSC for better Spend Analysis'  
email us at : [information@zycus.com](mailto:information@zycus.com)  
[www.zycus.com](http://www.zycus.com)

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# product searching & selection

Product	Segment	Family	Class	Commodity
Product 1	Segment 1	Family 1	Class 1	Commodity 1
Product 2	Segment 2	Family 2	Class 2	Commodity 2
Product 3	Segment 3	Family 3	Class 3	Commodity 3
Product 4	Segment 4	Family 4	Class 4	Commodity 4
Product 5	Segment 5	Family 5	Class 5	Commodity 5
Product 6	Segment 6	Family 6	Class 6	Commodity 6
Product 7	Segment 7	Family 7	Class 7	Commodity 7
Product 8	Segment 8	Family 8	Class 8	Commodity 8
Product 9	Segment 9	Family 9	Class 9	Commodity 9
Product 10	Segment 10	Family 10	Class 10	Commodity 10

Segments  
Family  
Class  
Commodity



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