

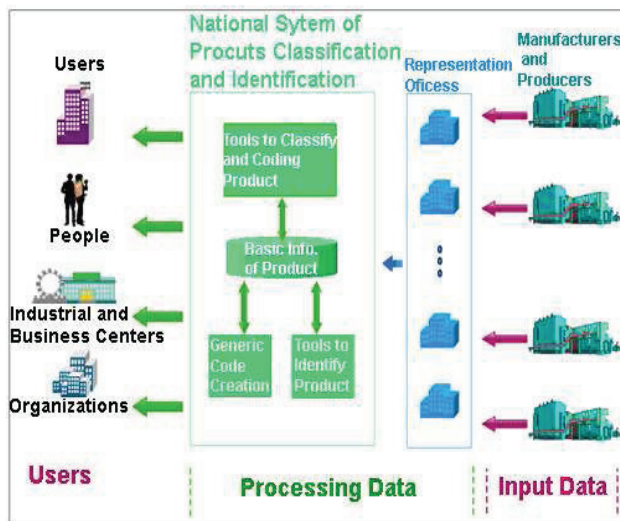
## EFFECTS OF INFORMATION TECHNOLOGY ON THE BUSINESS

Information Technology develops extremely fast and never stops moving because we need this important and strategic technology. The article is about effects of Information Technology on Business and help of IT to prevent products smuggling, and in this scientific article we tried to introduce big achievements which are ideal *prevention and security solutions* that IT delivered recently and it had a very big effect of Business World.

В современном мире, информатизация, как процесс, затрагивает все сферы деятельности государства как единой системы. Особо важно иметь весь срез данных при стратегическом планировании любого уровня, которое является одной из составляющих управленческой деятельности. В сфере большого, среднего и малого бизнеса информационные технологии переводят деятельность предприятий на качественно иной уровень. В статье рассматриваются вопросы, связанные с применением информационных технологий для предотвращения проникновения на рынок контрафактной продукции.

### Introduction

The National System of Product and Services Classification and Identification Services could be designed and to be developed identify, classify and codify their products and services.



**Figure 1. National System of Products Classification and Identification**

The information of the supplier resources, the base information and technical specifications and price of products, the correspondence with the international coding system, and the base information of items would be generally placed in this national infrastructure and database.

List of Products Can Be Used By National Coding System:

- Food products;
- Living creatures, raw products, animal products;
- Yarn, fibers, wood, paper, cardboard, skin, leather and related products;
- Chemical raw materials, minerals, fuels and oils;

- Road making machinery, construction materials, prefabricated spaces, installations, tapware and piping necessities;
- Furniture, stationery, textile, clothing and services necessities;
- Entertainment, game equipment;
- Cable and rail transportation equipment;
- Air transportation and navigation and airport equipment;
- Marine transporting vehicles and navigation and docks and platforms and pools equipment;
- Medicine, medical items, dental, veterinary, hygiene;
- Telecommunication, electric, electronic and mass media systems equipment parts;
- Road transportation and maintenance equipment;
- Publication products, educational and extra educational equipment;
- Tools;
- Fire fighting equipment;
- Measuring and monitoring and laboratory equipment;
- Agriculture, animal husbandry, horticulture and forestry industries necessities;
- Oil, gas, petrochemical and minerals industries necessities;
- Special Industries necessities;
- Industries general necessities;
- Vehicle Parts.

### Objective

The main objective of this system is to create the common language of product at the national level and developing the comprehensive informational base of companies and products,

hence, distributing information to different users at the national level.

Code is composed of 16 digits from right to left as follows is divided:

- The first four digits indicate the code counter product specifications technical fine products.
- Five-digit code indicates the membership provider is the product that the whole country is unique.
- Seven digits indicate the end product is the technical structure



**Figure 2. International Coding**

- The product platform in the National System of Product Classification (National Structure of Products);
- National Product Code;
- Information of Companies;
- Base information of Products;
- Technical specification information of Products;
- Images of the items;
- Product banding management services;
- Exclusive web pages for each member company;
- Electronic Catalogue of Product;
- Accessing to Products and Manufactures via different routes;
- Reporting based on various information of Products and Companies;
- Accessing to Products and Manufactures through other International Classification Systems;
- Placing the Products in the information basket of user (Product Consumer);
- Placing the Products and Companies in Electronic publications;
- Comparison of Products technical specifications and accessing them.

### Mechanism

Placing the country's manufactures and distributors in this centralized information base will secure many benefits for different elements such as cooperation, government, commercial and industrial centers, and consumers. Utilizing each of these required elements of information

can provide immense advantages and benefits for the country. This system has been developed at the Ministry of Commerce and plans to provide comprehensive infrastructure for various users by including the entire manufactured and distributed products in the country and recognizing their founders and proctors.[2,5]

This expert system using the classification and coding of goods, common language and common concepts established at the national level and all credit information such as references pen goods supplier, technical standards and national and international record and ... and will store.

Presenting the base information of a company and its products, hence receiving the National Code for each product, and placing in the stated information source, will collectively position the member company among others whom are in the virtual display of public users.

When an institution becomes a member of the system, in addition to the allocation of an accredited company membership code, the National Code, and the identification for each product, a dedicated web page would be set up for each institute as their Kiosk in the virtual exhibit.

The supplier will be able to present his complete data and product identification and catalogue in this Kiosk.

The project aimed at helping shape the market transparent, smooth and efficient, creating the possibility of direct supply of goods, providing maximum realization of the needs of domestic resources, to create transparency in economic, health and economic problem solving in smuggling runs.

The National Center of Products and Service Numbering as the administrator and proctor of the project implementation is honored to have made the initiative to facilitate the membership of manufactures and the distribution companies at the national level and to engage its capacities and resources in order to apply and accomplish this important task.[1]



**Figure 3. National System of Coding Products**

### Benefits

Benefits of having a national code:

- Create a common language to facilitate communication and product identification in enterprises and market;
- Reproduction costs, purchasing, transportation, warehousing, marketing, sales;
- Preparing the grounds for the creation of social memory and context information in order to consolidate elements of supply chain management of goods and services;
- The ground presence in the field of e-commerce;
- Introduction and identify sources of manufacturing and distributing goods;
- Creating feature with International Coding System;
- Wide distribution of the ground for producers and distributors;
- Reduce the cost of distribution, sales and operations;
- The ground for introducing and promoting the extensive regional and global goods Organizations to increase productivity;
- To prevent entry without quality goods and deal with smuggling, importers after receiving permission from the New Standards Organization;
- How to monitor implementation of the contract to produce national code;
- Policy, support, scientific and practical implementation of approved national code at the time specified.

Having discussed secure storage for sensitive data, one type of sensitive data deserves special mention. Internet users are paranoid about their credit card numbers. If you are going to store

them, you need to be very careful. You also need to ask yourself why you are doing it, and if it is really necessary.

What are you going to do with a card number? If you have a one-off transaction to process and real-time card processing, you will be better off accepting the card number from your customer and sending it straight to your transaction processing gateway without storing it at all. If you have periodic charges to make, such as the authority to charge a monthly fee to the same card for an ongoing subscription, this might not be an option. In this case, you should think about storing the numbers somewhere other than the Web server. If you are going to store large numbers of your customers' card details, make sure that you have a skilled and somewhat paranoid system administrator who has enough time to check up to-date sources of security information for the operating system and other products you use.[3,4]

### Conclusion

Information Technology has the potential to deliver widespread automatic identification of products and suppliers according to the information and technical specifications stored in the national center of products and service numbering database connected to our national coding identification network system. However, when considering whether the national system of product and services classification and identification services could add significant benefit over alternative strategies, the performance of the technology in the field, social and financial factors would need to be examined.

### References

1. Online Banking: What is online banking? 29 March 2004. [www.bankrate.com/brm/green/ob/obl.asp](http://www.bankrate.com/brm/green/ob/obl.asp).
2. W. F. Tichy, P. Lukowicz, L. Prechelt, & E. A. Heinz. "Experimental evaluation in computer science: A quantitative study." *Journal of Systems Software*, Vol.28, No. 1, 2005, pp. 9-18.
3. Louwers, T. & VanDenburgh, W. (2003). Data confidentiality in an electronic environment. *The CPA Journal*, 73 (3), 24-27.
4. Coppit, D. (2006). Implementing large projects in software engineering courses. *Computer Science Education*, 16(1), 53-73.
5. Louwers, T. & VanDenburgh, W. (2003). Data confidentiality in an electronic environment. *The CPA Journal*, 73 (3), 24-27.

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