Comparative analysis of knowledge management software applications at E&Y and Unilever Vietnam

Dr. Nguyen Hoang Tien[1], Do Thi Y Nhi[2]
[1] Saigon International University, Vietnam
[2] Thu Dau Mot University, Vietnam

Abstract
The paper examines the current situation of application of knowledge management software at E&Y and Unilever in Vietnam, comparative analysis of application of knowledge management software at E&Y and Unilever in Vietnam, making recommendations solutions to improve the application of knowledge management software in Vietnamese enterprises to find out the reality of application of knowledge management software at E&Y and Unilever in Vietnam has brought remarkable success in knowledge management in enterprises, knowledge management software in E&Y and Unilever companies have their own characteristics, different in purpose, success and time, measures to improve the application Using knowledge management software needs to be invested in a special way in the professional work associated with the development n of knowledge economy.

Keywords: CRM, dịch vụ khách hang, nền kinh tế tri thức, E&Y và Unilever

1. Introduction
The concept of knowledge management has been around for a long time but it is only 10 years ago to organize it into an applied science and practice. Many famous corporations in the world as well as Asian countries have applied knowledge management to business operations and achieved unexpected successes such as Coca-Cola, IBM, and Microsoft. According to a preliminary survey of the situation of the application of knowledge management in 12 Asian countries, they have clear knowledge-based economic policies, which clearly state the national strategy. In essence, it is possible to understand the knowledge management in enterprises is the process of converting information and intellectual capital into sustainable values for businesses and their employees. In the context of international integration and accelerating the industrialization and modernization of the country, the development of an intellectual team as a basis for shifting to a knowledge economy is an important and urgent task. Speaking of the success in applying knowledge management software, it is impossible not to mention Ernst & Young (Auditing and Consulting Company) and Unilever Vietnam (FMCG branch). The application of this software is to formalize knowledge management processes and practices as well as facilitate the creation and sharing of intellectual capital within the company on a global scale. Stemming from the above issues, we carried out the research article: "Comparative analysis of application of knowledge management at E&Y and Unilever in Vietnam" to study the status of successful application of management software. The treatment of knowledge has advantages and difficulties in order to have a more developed solution in Vietnamese enterprises.

2. Theoretical Framework
2.1. Knowledge management
Knowledge management is a systematic and effective control and structure of a mechanism that allows the right people to be used at the right job and at the right time, to share and use information in a smooth, oriented way. to achieve the organization's goals. Systematically here means step by step to select, learn, analyze, share and use information to create value. Managing knowledge is a job of collecting knowledge and converting knowledge about easy sharing. The most important part is the collection and transformation of implicit knowledge into explicit knowledge. Collecting knowledge embraces: building the best presentation and presentation materials repositories; develop online expert networks so employees can find professionals; create new knowledge by exploring patterns in company data. Intellectual storage embraces: the development of a planned intellectual storage system, encouraging the development of company-wide schemas. Popular knowledge is created from: portal, email, instant messaging, social business tools and search engine technology. Application of knowledge is aimed: to provide return on investment, organizational knowledge to become part of the management decision system and within decision support systems

2.2. Enterprise knowledge management system
Enterprise Content Management Systems
They are structured, semi-structured and unstructured knowledge management systems to capture, to store, to use and to distribute knowledge preservation to help companies improve their business processes and decisions. Most of

them allow users to access external sources of information. Providers of content management software in the industry are: Open Text Corporation, EMC (Documentum), IBM, Oracle Corporation. What these systems and softwares can do is to create a sorting mechanism to sort information into meaningful items so that it can be easily accessed; their ability to tag, communicate with the company's database and content repository, and create an enterprise knowledge portal that provides a single access point to information resources; store and manage unstructured digital data such as images, graphics, videos and audio content (digital asset management systems).

Knowledge Network Systems
It provides an online profile directory of experts, details of job experience, projects, publications and educational qualifications. I also help to find the right specialist and to support enterprise content management, social networking and collaboration between software products.

3. Research Results and Discussions
3.1. Current status of application of knowledge management software at E&Y and Unilever in Vietnam Treasury - FIS Front Arena
Treasury - FIS Front Arena là phần mềm cung cấp giải pháp tài chính nguồn vốn linh hoạt, hiện đại, hiệu quả, đáp ứng xuyên suốt các yêu cầu kinh doanh và quản trị rủi ro trong hoạt động kinh doanh tiền tệ.
Thực trạng ứng dụng các phần mềm quản trị tri thức tại Unilever tại Việt Nam.
Hệ thống tổ chức thông tin marketing toàn cầu
Việc tổ chức, thu thập, phân tích, đánh giá dữ liệu không hề đơn giản. Dữ liệu có thể đến từ những nguồn rời rạc, thô sơ và khác nhau. Kết hợp mật thiết với phòng IT, đội ngũ CMI của Unilever đã áp dụng một hệ thống tổ chức thông tin marketing toàn cầu, có thể được tiếp cận bởi toàn bộ marketer trong toàn tập đoàn, tích hợp dữ liệu và trình bày chúng theo một định dạng nhất quán. Điều này đảm bảo rằng tất cả những người dùng, cho dù họ ở bất kì đâu trong tập đoàn, cũng có thể nhìn thấy cùng một thông tin theo cùng một cách – CMI gọi đây là "một phiên bản duy nhất của sự thật". Tương tự, họ cũng sẽ nhìn thấy những bức tranh giống nhau khi nhìn vào dữ liệu thương hiệu, nhà bán lẻ hoặc số liệu khu vực.
Trong một chiến dịch khác, Bộ phận People Data Centre (Trung tâm dữ liệu con người) của CMI đã kết hợp giữa dữ liệu truyền thông, phân tích số liệu với thông tin từ khách hàng của Unilever và kênh digital marketing, tổng cộng họ phải phân tích hơn hàng triệu cuộc đối thoại mỗi ngày với hơn 40 ngôn ngữ. Bộ phận CMI có thể nhanh chóng chuyển đổi những dữ liệu "thô" này thành những insight có thể tác động đến kinh doanh.
Nhưng với việc sử dụng nền tảng trí tuệ nhân tạo (AI) trong tổ chức dữ liệu, bất cứ ai trong Unilever cũng có thể đào bới hơn 70,000 báo cáo nghiên cứu thị trường và thống kê mạng xã hội của tập đoàn, để tìm câu trả lời cho những vấn đề của mình bằng những câu hỏi rất tự nhiên.
Current status of application of knowledge management software at E&Y in Vietnam

Network KnowledgeWeb (KWeb)
Knowledge management has been implemented at Ernst & Young Auditing and Consulting Company quite early. In 1993, the Company established The Center for Business

Knowledge to formalize knowledge management processes and practices in Ernst & Young, as well as facilitate creation and sharing intellectual capital in the company on a global scale. So far, Ernst & Young has won the Global Most Admired Knowledge Enterprise Award (Global Most Admired Knowledge Enterprise) ten times for businesses to implement the best knowledge management in the world. Ernst & Young's knowledge management infrastructure is the KnowledgeWeb (KWeb) network, which includes more than 2,400 databases, web addresses and 1.2 million types of archives. KWeb facilitates company employees to access internal and external data sources, such as knowledge of business lines, companies, global news and information types, all all aim to serve customers faster and more efficiently.

Financial processing support tool (EY Blockchain Analyzer, Andy Crypto-Asset Account and Tax (AndyCAAT), EY Crypto-Asset Account and Tax (CAAT))
The auditing firm Ernst & Young (EY) has released two new Blockchain developments that enable analyzers to be accessible to EY groups and non-audit customers in the form of business applications. The Andy Crypto-Asset Account and Tax tool (AndyCAAT) automatically calculates capital gains and losses when a transaction helps support the tax calculation of electronic money assets. EY has launched a tool called EY Crypto-Asset Account and Tax (CAAT) designed to calculate and prepare taxes for Crypto electronic holdings. This product can receive information about Crypto electronic money transactions from "almost all" Wap's main exchanges, consolidate data from various sources and automatically generate reports, including Internal Revenue Service tax returns related to US Crypto electronic money.

Automation of Processes by Robot (RPA)
Robot Automation Process (RPA) is understood as computer software based on available programming, interacting with business applications, will mimic repetitive actions to take maximizing labor performance. For the insurance industry, RPA software is designed to allow trained operators to automate and control processes based on supported IT platforms. Using RPA brings great benefits to businesses, the largest of which is cost cutting. Costs will almost drop immediately for repetitive jobs - businesses can reduce the cost of manual work by 50 to 70% at high frequency. In addition, the work efficiency also increased markedly - when accuracy increased, it could immediately meet customer demand in real time and job management and quality were stricter.

Treasury - FIS Front Arena
Treasury - FIS Front Arena is software that provides flexible, modern, effective and financial capital solutions to meet business requirements and risk management in currency trading activities.
Current situation of application of knowledge management software at Unilever in Vietnam

Global marketing information system
Organizing, collecting, analyzing and evaluating data is not easy. Data can come from discrete, rudimentary and different sources. Closely associated with IT department, Unilever's CMI team has adopted a global marketing information organization system, which can be approached

by all marketers throughout the corporation, integrating data and presenting them according to a consistent format. This ensures that all users, even if they are anywhere in the corporation, can see the same information in the same way. CMI calls this a single version of the truth. Similarly, they will also see the same picture when looking at brand data, retailers or regional data. In another campaign, CMI's People Data Center combines media data, data analysis with information from Unilever customers and digital marketing channels, totaling them must analyze more than millions of conversations daily with more than 40 languages. The CMI department can quickly convert these raw data into insights that can impact business. But with the use of artificial intelligence platform (AI) in data organization, anyone in Unilever can dig up more than 70,000 market research reports and corporate social network statistics, to find answers to problems with very natural questions.

Growth Scout software

To help determine where the growth is? It ss a fundamental question to determine which direction to invest in new industries - existing, neighboring, or brand new, CMI uses one Software tools are temporarily called "Growth Scout", being able to exploit millions of Unilever data points collected, about consumer demand through demographics, geographic regions and national regions, to quantify the potential value of new industries when increasing penetration for brand. The result of this application could be a sizable statement as "need to increase the penetration of shower gel to 10% in the Thai market". This result will help Unilever decide where to take advantage of growth opportunities, which markets should invest more budget or allocate more resources to develop products. Or recently, CMI rooms have used the Growth Scout tool to identify new potential segments for Unilever's detergent industry, by identifying demographic segments with low penetration.

HiStaff HR management software

In 2005, Unilever Vietnam was equipped with foreign human resource management software. However, seeing the solution is difficult to use, it has switched to using HiStaff solution of Tinh Van Enterprise Management Consulting Joint Stock Company (Tinhvan Consulting). As a multinational corporation, Unilever Vietnam has a large workforce and always puts work efficiency on top, closely in terms of time. Therefore, the company made a requirement for HR management software to support job analysis for positions in the company to assign the right people and the right jobs. In addition, the software ensures that the work of planning and evaluating the performance of employees is accurate and objective, and manages the overview and details of all relevant personnel information. Unilever Vietnam has used HR management software in all business activities, including employee profile management,

timekeeping management, salary management and system administration. According to the HR department's staff, during the usage process, the software has met the requirements and stable operation.

Management software for distribution system: DMS eMobiz

Distribution system management software: FPT Software has successfully implemented DMS eMobiz system for Unileverr in Vietnam. This system includes the main modules: distribution (automation of sales process, operation control). distribute, maintain inventory at optimal levels, save time and improve market speed), manage sales teams (manage sales targets by employees and follow routes, manage brands results distributed by employees and by route, increasing performance, uptime and staff position and optimizing resource utilization. In 2003, FPT Software launched the DMS eMobiz solution market. During the past 11 years, eMobiz has been deployed in 9 countries in Southeast Asia with over 10,000 salespeople, 1,100 distribution companies, 10 leading companies in Vietnam in the field of consumer goods and pharmaceutical products, beverages, oil and gas, in which, there are big customers like Unilever, Pepsi, Ajinomoto, Hau Giang Pharmacy, Trung Nguyen, Kinh Do, BP Castrol. Along with leading experts DMS eMobiz not only meets the business operations of different industries but also constantly innovates to catch up with the new technology trends of the world. This solution of FPT Software can support many different mobile platforms: Window Phone, Android, iOS and easily compatible with other management application systems. DMS eMobiz helps manufacturing companies to bring into play their available potentials, improve the quality of distribution systems, and improve competitiveness. The biggest effect that eMobiz brings to companies is to eliminate intermediaries in the distribution system, to help end consumers benefit directly from the manufacturer. This is the only product rated 5 stars out of 70 software products and IT services awarded in the 12th Sao Khue season.

3.2. Comparative analysis of knowledge management software applications at E&Y and Unilever Vietnam

Along with the software supports the management of knowledge for businesses to help improve the efficiency of optimal management of databases, collection, storage and dissemination of information throughout the enterprise. Better knowledge management, helping to build the potential of technology, competence, thinking, creativity and ideas of individuals to help the company compete more effectively in the future. The goal of applying knowledge management software is to formalize knowledge management processes and practices as well as to facilitate the creation and sharing of intellectual capital in companies on a global scale.

Table 1: Time of the introduction of management software at E&Y and Unilever

E&Y	Time frame	UNILEVER	Time frame
KnowledgeWeb	7/7/2009	Global marketing system	4/2016
Financial processing support tool	16/4/2018	Growth Scout	29/11/2016
RPA	17/11/2017	HiStaff	Năm 2005
FIS Front Arena	22/5/2017	DMS eMobiz	Năm 2003

Table 2: The purpose of the management software at E&Y and Unilever

Công TY E&Y	Aimed at	Công Ty Unilever	Aimed at
KnowledgeWeb	Fast and efficient access to information and data sharing	Global marketing system	Capture the needs of consumers, help the company seize growth opportunities
Financial processing support tool	Facilitate the application of private and secure transactions; Automatically calculate losses and profits when making financial transactions	Growth Scout	Exploiting millions of data points collected by Unilever to quantify potential value
RPA	Building an integrated management system, creating utilities and improving labor productivity	HiStaff	Support job analysis for positions in the company to assign the right people, the right jobs.
FIS Front Arena	In order to improve the management capacity and competitiveness in monetary business activities	DMS eMobiz	Promote available resources, improve the distribution system, and improve competitiveness.

Table 3: Success of management software at E&Y and Unilever

E&y	Successes	Công ty unilever	Successes
KnowledgeWeb	Employees in the company have access to internal and external data sources, such as knowledge of business industries, companies, types of global news and information quickly and effectively.	Global marketing information system	Training skills to connect discrete data sources. Accessed by the entire marketer across the group, integrate data and present them in a consistent format.
Financial processing support tool	Managed to significantly reduce transaction processing costs by over 90%. Merge data from various sources and automatically generate reports	Growth Scout	Consistent throughout the planning process with the departments. Attracting more than 650 new technology ideas, testing more than 175 ideas and developing 37 ideas.
RPA	Maximize labor efficiency. Work productivity increases markedly - when accuracy increases, it can immediately respond to customer needs, and job management and quality are stricter.	HiStaff	Planning and evaluating employee performance is accurate and objective, while managing the overview and detail of all relevant and necessary personnel information.
FIS Front Arena	Promote solid financial foundation, develop and expand business operations in a safe and effective manner,	DMS eMobiz	Eliminating intermediaries in the distribution system, helping consumers end up benefiting directly from the manufacturer.

3.3. Improving the application of knowledge management software in Vietnamese enterprises

To improve the application of knowledge management software, Vietnamese enterprises need:

- Having appropriate systems and infrastructures: managing knowledge creation processes, conveying knowledge sources to users and allowing all employees in the enterprise to access and use, ie business industries must have data exchange and data storage systems;
- There is an expert in knowledge management: businesses need experts in this field to be able to support or support everyone - from top management to each employee.
- Developing a knowledge-based business development strategy, thereby buil-ding a corporate culture to create a creative and shared working environment
- Promoting professional training and regular sharing of experiences for employees in enterprises, especially internal training of experienced trainers for new people
- Strengthening research and improvement of product innovation technology to encourage self-awareness in creating and sharing knowledge within enterprises
- In order to encourage creative employees to acquire knowledge, enterprises need to respect employees who

have timely rewarding forms for employees when they contribute important initiatives to businesses.

Some important factors in knowledge management

- **Policies and processes:** Building a suitable management system, guidelines, processes and policies: avoiding unnecessary misunderstandings, easily discovering mistakes at any stage. In addition, there should be a contingency plan for unusual events and an assessment of possible loss of knowledge. Therefore, it is necessary to have a corporate governance policy as soon as possible.
- **Consistent documents:** There are plans to build a system of internal documents from the source in the organization or external reference, considering it as the foundation of the knowledge system. This person's knowledge is not easy to convey to others, so show that knowledge through the documentation system. Through exchange, the organization will improve the system of documents that are widely accepted.
- **Focus on training and knowledge transfer:** It is possible to train internally (because no one understands the needs of their organization than the organization's people) and cooperates with other organizations.

Culture sharing is essential in the training system. Experienced people should be encouraged to show themselves to be responsible for sharing and guiding less experienced people. Organizations can take advantage of the knowledge of other organizations if that knowledge is not used properly, but at the same time must know how to protect their own knowledge

- **Updating information, learning experiences:** The world is getting closer and closer, no organization can develop by itself without learning, sharing practical lessons with other organizations. Information itself exists independent of subjective thoughts. If you do not actively capture the latest information, you will hinder yourself.
- **Focus on human factors:** People create new knowledge and only humans can apply that knowledge to continue to create new knowledge. Organizations need to focus on human resources right from shaping through human resource framework, recruiting young manpower, having reasonable policies for retired people to devote and create conditions for experienced people to work with new people, with approp-riate remuneration. Always keep in mind that one's knowledge is more than what he has shown

4. Conclusions and Recommendations

Through the results of this article entitled "Comparative analysis of application of knowledge management software at E&Y and Unilever in Vietnam", we can make the following conclusions on current situation of application of knowledge management software at E&Y and Unilever in Vietnam has brought about remarkable success in knowledge management at enterprises, the knowledge management software at both E&Y and Unilever companies have their own different characteristics. in terms of purpose, success and time, measures to improve the application of know¬ledge management software need to be invested in the professional work associated with the development of the knowledge economy.

Appropriate systems and infrastructure are required, businesses must have data exchange and data storage systems; build a knowledge-based business development strategy, thereby building a corporate culture to create a creative and shared work environment; need to strengthen the training of professional training and regular sharing of experiences for employees in enterprises, especially internal training who have experience in training and instructing for new people. In order to encourage creative employees to acquire knowledge, businesses need to respect employees who have timely rewarding forms for employees when they contribute important initiatives to businesses.

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