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KNOWLEDGE AND INFORMATION SKILLS FOR THE WORKPLACE

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KNOWLEDGE AND INFORMATION MANAGEMENT OF AMAZON.COM

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EXECUTIVE SUMMARY

- *WHERE THEORY AND PRACTICE MEET*

"We see our customers as guests to a party, and we are the hosts. It's our job every day to make every important aspect of the customer experience a little bit better."

Jeff Bezos founder of Amazon

The article presents a simple description of the PBS computing cluster and the Amazon EC2 cloud, as well as interoperability between deployed infrastructures. Also, the work shows how to connect the competent use of knowledge management with the latest technologies. In addition, it illustrates three other popular knowledge management models that, when combined, can help a particular organisation like Amazon.com develop into a successful global business. The presented work does not shed light on these issues with an IT eye but rather analyses the utilization of knowledge management tools. Amazon.com, on the other hand, as a market leader, can illustrate greatly the effectiveness of the practical realisation of the theoretical parts. As with Amazon, the main body of research material is available on the subject matter of the current report, covering a small aspect of the topics listed above.

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1. INTRODUCTION

The purpose of this report is to show that the level of the company's profit is related to the application of knowledge management methods, knowledge transfer and the strategic application of knowledge management is the key to the company's success. The coronavirus epidemic has changed the lives of all people. The emerging economic downturn is already referred to in international articles as a "closure," such as the Great Recession of 2008 or the Great Depression of 1929. Covid-19 posed a primary and immediate threat to human health and, secondarily and indirectly, caused significant economic damage. The world's leading countries have almost invariably switched to online procedures (shopping, education, home office, etc.).

With the advancement of technology, the generalization of electronic devices, and the expansion of Internet access, the spread of online shopping seems unstoppable. Amazon.com is undoubtedly one of the biggest winners in the pandemic, as it has become the world market leader during this time. The epidemic has created ideal conditions for certain sectors, for example, several businesses (Netflix, Spotify) have written success stories. However, 2020 will not only show a boom in the digital economy but also technological advances will play a major role in the life cycle of information systems. The digital switchover took place years earlier, but the new type of coronavirus has given a huge boost to the switchover, and by 2020, this form of innovation has become essential for many businesses to survive.

Of course, the economic successes mentioned above cannot be fully attributed to the pandemic, as the success of management operations (Laudon and Laudon, 2014) is highly dependent on the information available and, in part, on the functions that make up the process. It is important that information is received and passed on from people within the system, and the organisation can use that information so effectively that it is progressive or even breakthrough in nature.

The report assumes that the more profitable a company is, the more effectively it applies knowledge management methods, the faster it develops and grows, which further strengthens it. The topic presents the spiral model (SECI) and the model for building and using Wiig and knowledge, spiral model (SECI) as well as Wiig and the model of building

and using knowledge the study seeks to point out how the strategic application of knowledge management increases a company's success and how it does so.

2. KNOWLEDGE AND INFORMATION MANAGEMENT

A high degree of knowledge management ability is very important in the knowledge economy. The creation and dissemination of knowledge have become vital for market competitiveness. Knowledge is considered a valuable commodity that can be considered an embedded product, especially among high-tech products, and its adaptability is extraordinary. Although knowledge can be considered a commodity or intellectual capital, this theory is not irrefutable, as knowledge as an asset has paradoxical characteristics that are radically different from other commodities. Using knowledge is not lost or destroyed, if knowledge is transferred it is not lost, there is a lot of knowledge in the world, but its use is still out of proportion, and finally, most of the organisational knowledge at the end of the day leaves the premises.

From the numerous definitions of knowledge management, this report will use Girard's (2015). His concise and understandable definition of knowledge is as follows: conscious management is the conscious and systematic alignment of knowledge that encompasses people, technology, processes, and organisational structure to create value in an organisation through reuse and innovation. Coordination takes place through the creation, sharing, and application of knowledge itself, and its nurturing, and invests lessons learned and best practices in corporate memory to facilitate ongoing organizational learning.

2.1. Background for Amazon.com

Amazon is the first company to sell goods and services online that has grown into an economic giant. Founded by Jeff Bezos in 1994, it started as an online bookstore and then grew rapidly with sales of new products such as DVDs, video games, electronics, and apparel. The company logo symbolizes that all products from A to Z are sold. They are not selling the product, but the information about the immeasurable amount of product collected on a platform. Amazon.com strives to maximize the needs of its customers and does its utmost to gain the loyalty and trust of its customers. They offer a delivery service and have several retail stores in different

countries. In addition, it purchases customer data and information to meet customer needs and requirements. Amazon.com is among the first in the world to sell online and has some competitors such as eBay, Rakuten, and Flipkart. Amazon has more than 40 subsidiaries, e.g. Zappos, Shop bop, IMDb, Amazon Prime, AppStore, and Amazon Drive.

2.2. Brief introduction of the company

Amazon has recognized from the beginning that the user experience for customers affects the success of a company, because if they can find what they are looking for quickly and easily, then when they want, customers will be satisfied and willing to use the platform.

Portal, interface. The idea that everything we want to buy on Amazon can be found on a single portal and all purchases can be made in one place is incredibly successful. Food, electronics, books, clothing - whatever, we can call it a one-stop-shop. The portal is always the same, ensuring a consistent user experience.

All information about the product is displayed in the same way, which indicates excellent content management and consistency.

Modular content. Every page on Amazon is organized into easy-to-read sections, with no questions about the details scrolling in front of the buyer, so if you read that information, you can just click toward the target device. This is completely optional for anyone interested in clicking on it. This allows customers to quickly reach the required product and customers to read only the content without any obstacles, so there is no time wasted.

Distributed upstream content creation. The content that appears on the Amazon.com portal appears to be written by Amazon employees. However, in most cases, the content is produced by truly skilled product companies that conform to Amazon's design standards, writing styles, and other practices and guidelines.

Almost a magical personality. For most Amazon.com customers, the feeling that the site knows them is very valuable. The more we use the site, the better it seems to know them. Customers can be reminded of their search history, be offered products they may like, and be referred to additional information to what they have been looking for. That is why they are happy to register with Crowdsourcing.

With features like customer reviews (including the most useful and least useful) and the products purchased, what customers have bought, Amazon builds knowledge and awareness among users. There are simple and consistent transactions on the platform: Are you buying something from Amazon? Product suspension? Want more information? No matter what is looked at, the process is the same system.

Subscriptions, alerts, and reminders. The system remembers searches, even on behalf of the customer, and combined with personalisation, knowledge management (KM) can improve productivity and awareness of new information without repetitive and exhaustive searches. This improves productivity.

Feedback. Amazon is one of the most successful eCommerce sites that encourage users to provide meaningful feedback. Why? Because the company values what customers have to say and knows that feedback gives value back to customers.

The number of calls to the Amazon call centre is very small because they try to make the website as user-friendly and comprehensive as possible, where almost everything can be solved. This means huge cost savings for the company. Whether the customer wants to cancel the order or change it, or the delivery or payment method is changed and/or the product is returned, Amazon is looking for a clear course of action for all the tasks to be performed by customers. The online help option is also great.

2.3. Knowledge management models

Among the many knowledge management models, three are briefly presented in this report because these are the ones that can be mainly found in Amazon.com's KM strategy. The first model is the SECI model or Spiral model. One of the most important sub-processes of KM processes is knowledge creation. Nonaka (2008) has developed a well-known and comprehensive SECI model of the knowledge creation process. SECI models the cycles of tacit and explicit knowledge transformation: socialisation, externalisation, combination, and internalisation (Nonaka, *ibid.*). The model is precise enough to allow a deep understanding of small details as well, and its IT aspect is easy to interpret. The simplest interpretation of the essence of the four cycles is that socialisation is the sharing of knowledge, externalization is the writing (codification) of knowledge, the essence of the combination is storage, organisation, and

processing of data, information, knowledge, and finally the sub-process of internalisation learning. Using these simple facts, the SECI model exercises the available IT knowledge base for KM development or support.

Another popular model of KM was developed by Choo (1998) who argues that “knowledge organizations” are the ones that use information strategically, namely, it lists three areas where this is done. In other words, in reporting, knowledge creation, and decision making. The three processes are interrelated, strategically defining the organization’s concept of knowledge. The essence of the strategy is to ensure that new information is sought and applied in the long run so that they can keep up with competitors and trends. As well as to be able to adapt to other external environmental conditions and to cope with new challenges. The process of knowledge creation creates the opportunity for an organisation to create or acquire, systematise, and process information to produce new knowledge through organisational learning. And with the new knowledge that is created, the organisation can teach new skills and competencies, create new products and services, or improve existing ones. From this procedure, the “potential for action” of the organisation is created. This model accepts that decision-making is limited by the principle of limited rationality, as explained by March and Simon (1975).

Finally, the model of the structure and use of knowledge, or the Wiig model (1993), is process-oriented at the level and describes the structure and use of knowledge within an organisation. The whole model is built around a taxonomy of knowledge types. According to this approach, for certain knowledge to be valuable and useful, it must be orderly, and its organisation depends on the purpose for which the knowledge will be used. The parameters of the model are as follows:

1. The Principle of completeness shows the nature of the relevant information in the source, i.e. whether it is tacit/explicit knowledge.
2. The Principle of connection points to the system of connection between each knowledge object. The more complete the knowledge network, the greater its value.
3. The Principle of the dimension of congruency means that facts, concepts, perspectives, values, judgments, associations, and relationships between knowledge objects are consistent, i.e. there are no internal conflicts, illogicality, or misunderstandings.

4. Perspective and goals refer to the phenomenon of “knowing something,” but we often look at it from different perspectives and intentions. We usually organise our knowledge in the duality of it, that is we develop time or sufficient knowledge.

2.4. Parallelism between models

Wiig's (1993) model defines different levels of knowledge internalisation, while the four levels of Nonaka and Takeuchi's (1995) model refine from rudimentary knowledge to deep inner knowledge. It also defines intermediate levels that can provide a very nuanced picture of knowledge and are useful to organisations. The aim of this report is not to present these levels in detail but to shed light on the fact that each of the presented models can be used successfully in organisations, choosing the one that best uses the organisational strategy, and the most useful parts or combinations of each of them for the organisation should be used.

2.5. The main expectation or outcome of the report

The present paper aims to point out that the application of knowledge management as a strategy in companies greatly contributes to the success of the company. The close relationship between knowledge management as a strategy can be well observed with the activities of corporate knowledge management and the specifics of the organisation, as the knowledge management strategy is closely related in both theory and practice. For this reason, that is, to consider company characteristics when developing a knowledge management strategy, it is important to know which aspects of the organisation it considers to be of strategic importance. In addition, which knowledge elements provide the greatest added value to the company that can be demonstrated when designing a creative knowledge management strategy. Therefore, this also represents market competitiveness depending on the market position of the organisation, the situation of the industry, and varies depending on the resources available. That strategy will be key to achieving significant growth and high added value. When developing the strategy, different areas of knowledge and KM models are applied that differentiate the company from its competitors and will have the greatest impact on the life of the organisation value.

3. EVALUATION OF KNOWLEDGE AND INFORMATION MODELS

The models discussed above are separate “entities”, as evidenced by the fact that authorship is different in each case. However, it is also clear that certain aspects of the analyses are very similar, so it is highly recommended to combine these individual models, as mentioned above, according to the needs of the corporate strategy. Well-structured strategies with a high level of application of knowledge management reveal the weaknesses of the organisational system and great development plans can be implemented. For this purpose, the results of comparative analysis can help to design empirical research based on organisational learning case studies and to design focal points. Based on the results, the organisation can change the areas to be developed, choose new methodological elements for efficient knowledge flow, collection, storage, and knowledge reuse.

4. INVESTIGATING OF KNOWLEDGE MANAGEMENT TECHNIQUES USED BY AMAZON.COM

Amazon's sales strategy was unique, reflecting its mission. The company continued to build its business from a single-tier sales strategy with a multi-tiered e-commerce strategy. The initial growth of the organisation was driven by sales between businesses and the very conscious use of business models. Recent events have greatly changed the e-commerce population and transformed the interactions between consumers and businesses. Yet Amazon.com has become a top priority because it has redesigned its IT system to incorporate customer feedback into its business strategy. As a result, it made every effort to serve the needs of consumers by allowing customers to operate Amazon.com to the exclusion of retailers, which led to the company's growth.

Looking at Amazon's business model, it's clear that it employs management information systems and technologies. Browsing, data management, and shopping also reflect the use of unique MIS technology. Flexible cloud computing is Amazon.com's business strategy that has grown into a leading web service. EC2's goal at Amazon was to serve consumers who work with web-sized computing technology, which of course requires top developers and technology. It becomes a leader in a service that innovatively gives end users even control over the use of the Amazon computing environment.

The advantage of Amazon's E2C computing is that it saves more time because there is no need to start a new server. Amazon takes a machine image of the end-user to use E2C Services and pays only for the actual use, helping developers customize their applications. According to Nabil (2013), the Amazon E2C application acts as the S3 storage device and the interface allows end-users to save, retrieve and use any amount of data from anywhere. It works with a data mining technique where you can retrieve a product or service from a central database and offer only the most appropriate one to the customer.

Merchants who want to sell their product with a small image and product description will need to upload it to Amazon using the broker model as a business platform for business-to-consumer transactions. Amazon charges users a fee for each transaction. Auction Brokers is another technical tool also used by Amazon that includes bidding information and fulfilment. Amazon has filed a patent (on February 8, 2005, in the United States) to offer personalized content by tracking user activity while surfing. This, of course, follows a huge data storage and probability computing technology that shows the uniqueness of Amazon's competency. They take great care to retain customers and have also triggered a sense of privilege of belonging to customers.

Customers can add any number of products to their shopping list, and the CRM integration in this section allows users to save the product for later purchase. This information is stored in the Infomediary model. Amazon has created not only a customer platform but also a social networking platform within the site that offers even more interactivity. Such as to view their search history so they can select similarly or re-purchase the same products. This feature was patented by Amazon on 28th June 2005, expanding the list of core competencies for management information systems. During the Amazon sign-in process, it collects new user information with the appropriate fields which is directly related to the Infomediary model. The next time you log in to your site, you will receive recommendations based on your history. Then the platform integrates the consumer to select unique delivery modes, and this again shows the high degree of competence of the logistics and delivery department of the enterprise transportation resource management.

According to Rao and Tugrul (2010) through active data use, the logistics department ensures that the customer receives the products within the required lead-time. The technology used by Amazon includes web services, middleware, groupware, and most importantly, networking. These are the cornerstones of Amazon.com's information system. These are enterprise systems

that integrate logistics, accounting, and human resources into the Internet. Payment systems offered to Amazon customers can also be multi-tiered to enter credit or debit card information as an end-user. Netscape Secure Commerce Server is a vibrant device that uses Amazon's secure socket layer to store banking information that is not accessible over the Internet, and customer data is treated with a high level of confidentiality and protection.

According to Zhu (2018), another important part of the CRM system is the integration of logistics systems with the customer's contact data, which can also track the delivery process. Each of Amazon's marketing strategies and preferences is such an incentive to attract more customers and businesses to your site. The virtual showcase was the interface that attracted more and more customers to Amazon's website, as found by several people who deal with Amazon's corporate policies. The company enjoys a high degree of customer confidence by appreciating customer loyalty. Amazon employees are also happy with their work because ERP packages meet their expectations.

5. CONCLUSION AND RECOMANDATION

Through the example of Amazon.com, using the methods of knowledge management has been presented in a small fraction of what can call digital capitalism. The main elements of digital capitalism are the economics communication policy and labor control. Relying on Amazon case studies and articles on the policies of other leading digital majors, it can be concluded that key corporate participants in digitisation are trying to become strong monopolies. This has been said to take advantage of the network effects and scalability of digital goods and to create new socio-technical ecosystems.

These strategies can sometimes lead to the formation of isomorphic structures, thus creating an oligopolistic market competition. Relying on the principles of monopoly capital theory, the rationalisation of work processes is most likely in this situation. The expansion of digital governance has created a digital economy where the organisational structures shaped by the company representatives can be seen as evidence of the expansion of the capitalist workforce rather than its reduction.

Studying the above article, it becomes clear that the application and production of new technologies illustrate both the spread of labor demand. It also points to the limitless new opportunities and exploitation of new technologies in the online economy, exemplified by Amazon.com's revolutionary economic growth.

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Annex 1 Poster

Challenge	Solution
Amazon.com may face in the future HUMANITY PRODUCES LOTS OF DIGITAL DATA, DATA STORAGE IS A VERY GOOD BUSINESS AND WILL BE IN THE FUTURE, BUT IT WILL BE A BIG CHALLENGE FOR THE COST OF STORAGE. DATA STORAGE IN THE FUTURE WILL NEED NOT ONLY CAPACITY BUT KNOWLEDGE NEEDS AND DEVELOPMENT OF NEW TECHNOLOGIES. 	Innovative data storage SOLAR POWERED TO REDUCE CARBON FOOTPRINT IN SPACE TO SAVE ENVIRONMENT, ENERGY AND LAND GIGANTIC DATA STORING CAPACITY 