

BMSW5106

Knowledge and Information Management Skills for the

Workplace

Task 1 - Individual report

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Introduction

Knowledge is the most significant intangible resource of a firm. Knowledge comes from the skill of the employees. Knowledge management refers to the activity of generating, identifying, sharing and storing the necessary knowledge within the company. Knowledge can be generated from different sources within the company. Knowledge can be generated through R&D. Again, knowledge can be generated from the employees within the company. Skilled employees generate a proper flow of knowledge management within the organisation for which organisations want to retain skilled employees so that their knowledge can be retained within the company. Knowledge can be considered one of the most strategically important resources of a company. A firm operating within a certain industry holds a competitive advantage over its competitors just because it has the right knowledge which it tends to keep secret to retain its competitiveness in the market. Knowledge management is very necessary for a company to retain its competitiveness in the market. A company's success depends on how it is keeping its operational secrets and thus knowledge within its companies. And, when these knowledge or operational secrets get leaked, the company may face various issues such as losing its competitiveness in the market to other competitors. To ensure better use of knowledge, it is necessary that knowledge flows properly within the organisation. For example, skilled employees need to pass their knowledge to other employees especially the freshers so that they can develop operational competency. Otherwise, this knowledge will be a burden due to a lack of collaboration. In this report, the knowledge management of two famous companies and Amazon will be discussed. In the process, a KM value chain will be shown to understand the knowledge flow and management within the organisation. Then, recommendations will be provided for both company's knowledge management.

Company Overview

Boeing Company



Figure 1: The Boeing Company (Haider and Kayani, 2021).

Boeing is one of the most iconic and pioneer organisations in the aerospace industry. The company was established in 1916. It is headquartered in Chicago, USA. Boeing is famous for cutting-edge technology in designing and marketing beautiful and technologically advanced commercial airliners. It has also developed some cutting-edge military defence systems. The company's famous commercial airliner Boeing-787 has been widely used in commercial air flights by different famous operators. Apart from being a manufacturer of commercial airliners, the company is also one of the major suppliers of military defence systems in the world. Boeing also provides a comprehensive suite of solutions to support the lifecycle of aerospace platforms. Boeing is the leader in the commercial airliner manufacturing industry. The company has grown through innovative approaches and proper use of R&D knowledge (Haider and Kayani, 2021). A proper knowledge management system of the company has helped the company to achieve competency in its process management. Boeing's supply chain management is known as one of the most complex supply chains in the world and the company has developed good efficiency in case of managing its operations through a proper flow of knowledge within the organisation. Proper knowledge management has helped the company to maintain its competitive advantage in the industry.

Amazon



Figure 2: Amazon Inc (Dimitrakaki, 2022).

Amazon is the world's largest e-commerce site. Amazon was founded by Jeff Bezos as an online bookstore. It was founded in 1994. With the evolution of time, the company has developed itself as an e-commerce behemoth. The company now has business in e-commerce, web services, digital media, artificial intelligence and so on. Amazon is known for its reachability to everyone and for its collection of a variety of products starting from clothing to daily groceries, electronics products and many more. In the case of its e-commerce platform, Amazon has the commitment of fastest delivery, competitive pricing and seamless experience to the customers. Amazon's founder and CEO Jeff Bezos has developed himself as one of the richest persons in the world with a net worth of over a hundred billion (Dimitrakaki, 2022). Amazon has developed itself into a global giant because of its proper management of the information within the company. The company works with information and knowledge and ensures the flow of knowledge within the company is in a balanced state. The company tries to value the knowledge of skilled employees by retaining them with proper approaches. Also, the company has a proper system to store the valuable knowledge it has gathered from various sources.

TOWS Analysis

TOWS analysis of Boeing Company

Boeing is the industry leader in the aerospace industry. The company has immense opportunities to expand its business in different sectors. This has been possible due to its success in its primary market aerospace industry (Bryson and Rusten, 2018). A TOWS analysis will be helpful to understand the company's strengths, weaknesses, opportunities and threats from a strategic point of view.

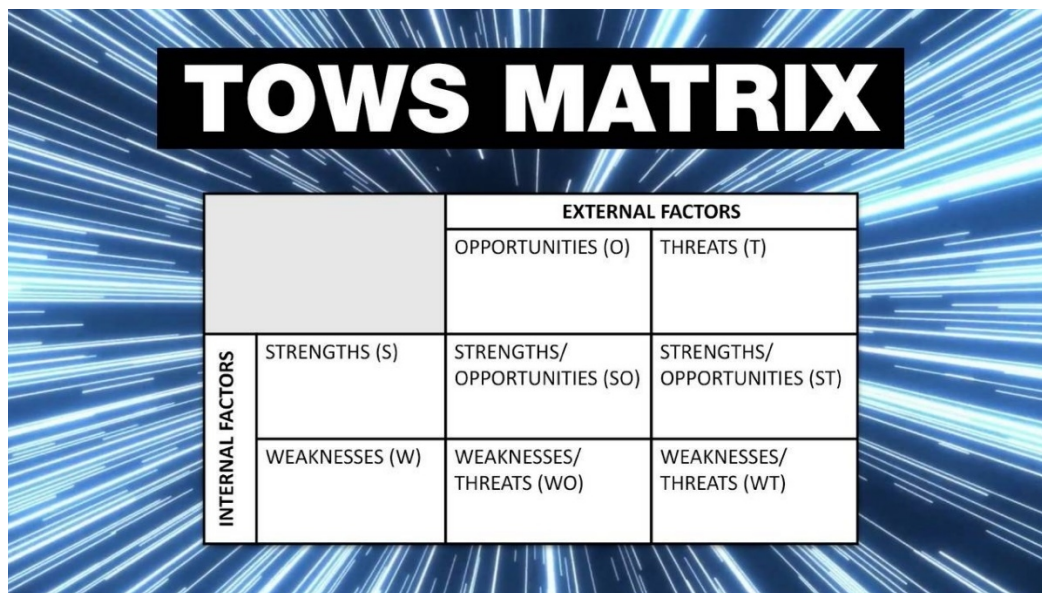


Figure 3: TOWS analysis (Marquardt, 2021).

Strength

Boeing manages the knowledge of the employees through all possible means. Boeing tries to retain the knowledge of the skilled employees through arranging training sessions where the skilled and experienced employees get to train the new or fresh employees so that the proper flow of knowledge within the organisation can be maintained. It is a very effective way to manage knowledge within the organisation (Tiwari, 2022). Boeing also uses its knowledge management to reduce risk. There are risks associated with skilled employees if the skilled employees leave the organisation, it will be problematic for the company to maintain operational fluency within the organisation.

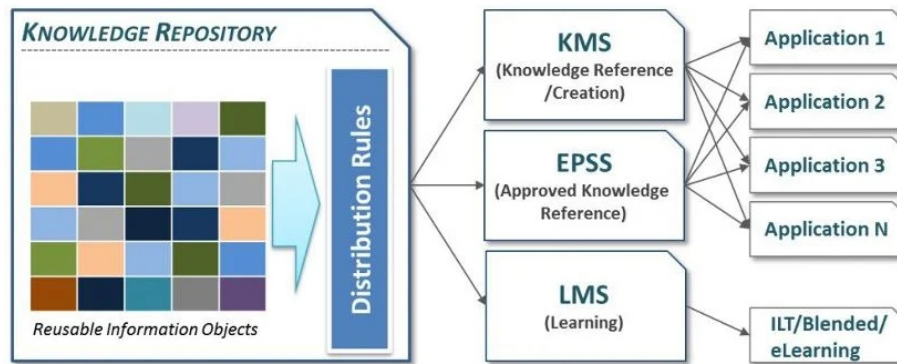


Figure 4: Knowledge repository (Bibi et al., 2021).

Weaknesses

The main vision of Boeing's knowledge management is "Knowledge without borders". In the current era of information technology, information can be shared easily thus it is readily available. With the advancement of information technology, the sharing point of knowledge for Boeing's employees got larger but it put the company's operational and strategic secrets at risk (Edwards, 2022). As a result, information gets easily leaked and can be found on the dark net. Again, there are risks of hacking and unwanted access to the company's databases which create the risk of data leak and thus hampers the company's competitive advantage.

Opportunities

As the sharing point for knowledge got expanded, new employees got to learn the company's process easily which reduced the company's cost in learning and development. It has also reduced the risk of the company's loss of competency (Ode and Ayavoo, 2020). Using the company's own network, Boeing can easily make the acquiring experience of the employees better and it will help to sustain the current competitive advantage in the industry.

Threats

There are various threats in the case of the knowledge management of Boeing. The company's knowledge management has various sharing points which can cause a leak of information thus it can hamper the competitive advantage it has (Muhammed and Zaim, 2020). The company has a centralized repository for storing its knowledge. This centralized repository or database has the risk

of getting hacked and the data may get leaked in the dark net which can cause security concerns for the company and the company may get trapped by a lot of hackers and may claim ransom from the company. It may cause the company to lose its competitive advantage in the market.

TOWS Analysis of Amazon

Amazon has a great knowledge management system. The company puts a lot of emphasis on data-driven decision-making processes. Amazon collects a lot of data from various sources including customer behaviour, market trends, operational metrics etc. These data are then analysed using statistical methods then a decision is suggested (Shahzad et al., 2020). It is a complex process but it is very effective in most of the cases. The TOWS analysis of Amazon's knowledge management can help to understand the strategic viewpoint of Amazon in managing the flow of knowledge for decision-making purposes.

Strengths

Data-driven decision-making is the main strength of Amazon's knowledge management system. The company uses big data analysis to gather a lot of data then using statistical methods, a result is generated and interpreted (Di Vaio et al., 2021). It helps the company to ensure the proper use of the information and knowledge it has. Another strength of the company's knowledge management is that it has a central repository for storing data. It helps to keep track of knowledge and thus is helpful in solving future problems.

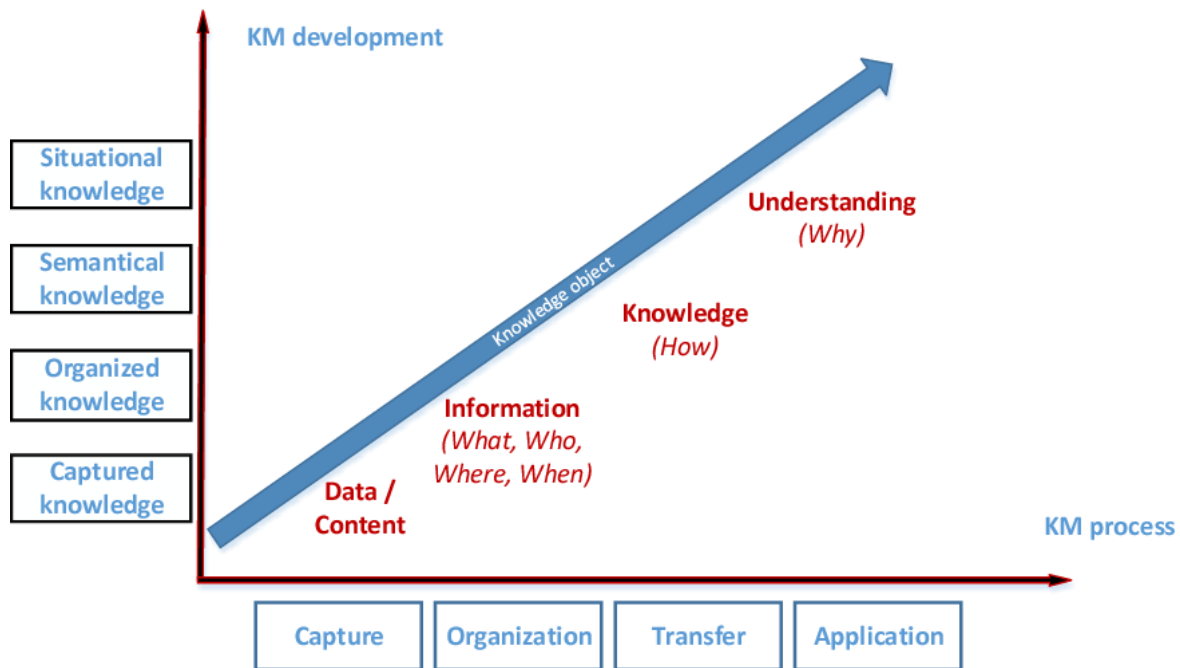


Figure 5: Data-driven knowledge management system (Perz et al., 2021).

Weaknesses

The company's main weakness is its exposure to the vendors. A lot of knowledge gets leaked by the vendors which puts the company at risk of losing a competitive advantage in the market (Dimitrakaki, 2022). Sometimes there are miscalculations in the knowledge management process which creates operational delays and thus creates problems for the customers and bad reviews can be seen in the case of some particular products.

Opportunities

The company's main opportunity in its strong knowledge management is to create an evidence-based decision-making system using its data-driven decision-making process. The big data analysis of Amazon is very useful for making accurate assumptions thus giving a proper opportunity to make proper use of the knowledge that the company has or gathers (Schein, 2020). Also, a central repository system is very useful for gathering and utilizing the company's knowledge sourced from customer preference, operational activity and employee experience.

Threats

Amazon's knowledge management system is mostly technology-based and depends on big data analysis. There are risk of getting attacked by hackers. Once the hackers get a hold of the database

of the company, they may blackmail the company and claim ransom for not releasing sensitive company information on the internet (Haider and Kayani, 2021). So, the risk associated with the data-driven decision-making system is greater.

Comparison Between Boeing and Amazon's Knowledge Management System

Boeing and Amazon have some great similarities in the case of knowledge management systems. Both of the companies have a central repository system for storing valuable information. Both of the companies use this repository to use the previously recorded data for future reference and for solving similar problems in the future. However, this put both of the companies at the risk of data theft. As their knowledge management system is technology-based, there are risk of cyber-attacks. Again, both of the companies use a learning and development approach to retain and pass on the knowledge of the skilled employees (Chen et al., 2023). In case of dissimilarities, the main dissimilarity is that Amazon uses a data-driven decision-making system to utilize its vast knowledge stored in its central repository. However, Boeing does not have a system to utilize its stored knowledge. It does maintain some manual processes to share information it has in its repository.

Critical Evaluation of the Knowledge Management System

Critical Evaluation of Boeing's Knowledge Management System

Boeing has a very sophisticated knowledge management system. In that case, it is very necessary to address a specific process to understand the company's knowledge management system. The knowledge management system of Boeing includes:

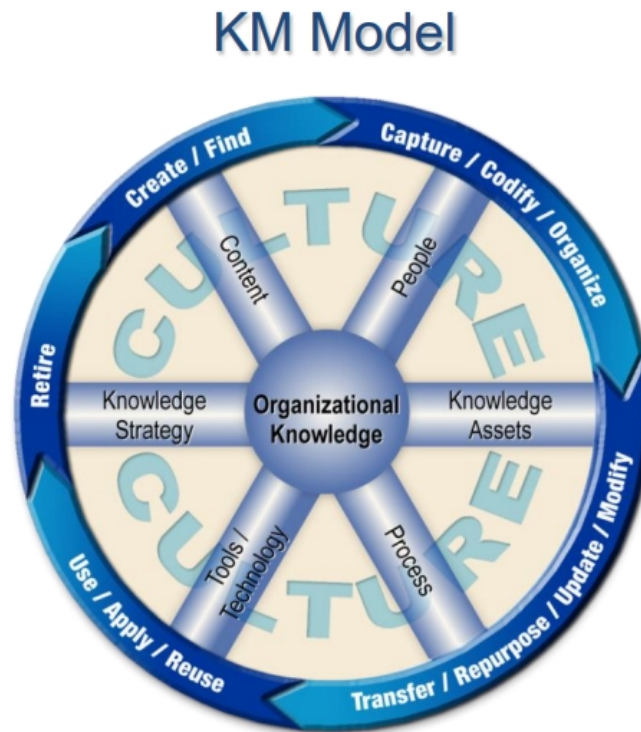


Figure 6: Boeing's knowledge management system (Acha et al., 2017).

Central Repository: Boeing has a central knowledge repository for managing its information and knowledge. The central repository of knowledge helps to store and utilize the data and knowledge properly. It can be used in future for similar problems (Bryson and Rusten, 2018). The central knowledge repository stores best practices, lessons learned, technical expertise etc. Boeing spends a lot of money on research and development. To keep a record of these data and information, it is very necessary to have a central knowledge repository.

Communities of Practice: Boeing fosters a collaborative environment through communities of practice where people with similar interests can share their ideas and thus the flow of knowledge

can be ensured (Marquardt, 2021). It is very necessary to increase the sharing point of gathered knowledge so that it can be utilized properly for organisational development.

Learning and Development Program: The learning and development program of Boeing is a very effective knowledge management tool to ensure that the knowledge of skilled employees can be passed to new employees (Tiwari, 2022). It is a very effective way to ensure that the knowledge has been properly utilized. For that reason, Boeing can easily train new employees with the help of their skilled employees.

Cross-Functional Collaboration: The cross-functional collaboration among various departments of Boeing helps to keep the flow of knowledge functional so that knowledge and information can pass from one function to another within the organisation (Edwards, 2022). It is very necessary to maintain the flow of information within the organisation through the cross-functional sharing of data and information.

KM Value Chain of Boeing

The knowledge management value chain explains how knowledge flows within the organisation. The knowledge management value chain of Boeing is explained through a value tunnel. First of all, Boeing input the mission, vision, goals and strategy with the knowledge inventory and the available knowledge. When the company's mission, vision, goals and strategy are integrated with the current knowledge inventory or available knowledge, a proper knowledge development activity is conducted (Bibi et al., 2021). Then the knowledge is shared through various approaches such as day-to-day interaction between the employees, training and learning programs, seminars, meetings etc. The KM value chain tunnel shows exactly how the knowledge is developed and distributed from one person to another within the organisation. After the knowledge development stage, knowledge is shared with employees. Then, employees apply knowledge in particular cases. In the end, the implementation of the knowledge is evaluated.

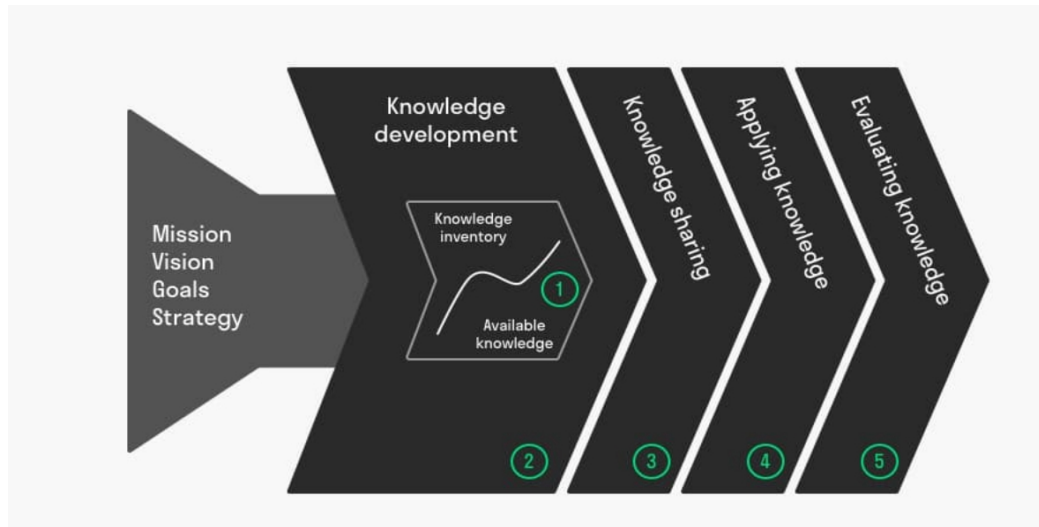


Figure 7: KM value chain of Boeing (Ode and Ayavoo, 2020).

Critical Evaluation of Amazon's Knowledge Management System

Amazon has a very sophisticated knowledge management system and the company has a data-driven decision-making process to make statistically logical decisions supported by historical data. Amazon is one of the biggest brands in the e-commerce industry and has a good reputation for technological advancement in case managing information (Muhammed and Zaim, 2020). Amazon has used that approach in the case of its knowledge management. The knowledge management approach of Amazon is critically evaluated below:

Data-Driven Decision-Making: Data-driven decision-making is one of the most exclusive features of Amazon's knowledge management system (Shahzad et al., 2020). Using this system, Amazon runs analysis based on knowledge or data from various sources such as employee experience, operational data, customer data, market trends etc. Amazon makes the best use of big data through the data-driven decision-making process. It is very effective in case of generating a logical decision in any complex situation.

Knowledge Repositories: Amazon has a data and knowledge repository. A prime server of Amazon which stores all the data of Amazon and utilizes them for future needs. Through this approach, Amazon keeps a record and details of every little thing that is deemed necessary. For example, the company has dealt with a particular situation in a special manner (Di Vaio et al., 2021). The company keeps all the necessary information about the situation in the knowledge repository so that it can be used in the future for similar situations.

Collaborative Tools: Amazon has various collaborative tools through which the employees can collaborate with each other in terms of knowledge and strategy sharing (Dimitrakaki, 2022). Amazon has tools like Chime, Amazon Work Docs, Amazon Connect etc. enable the employees to share necessary documents and information and to maintain proper communication to ensure a collaborative environment within the organisation.

Innovation Culture: Amazon has an innovative culture where employees are encouraged to experiment take risks and reflect on their failures so that new knowledge can be generated to prevent similar situations in future. It is a very effective approach (Perz et al., 2021). Amazon has a reflective workstyle where the employees are required to keep a reflective journal for each of their assignments and submit those reflective journals in the knowledge repository of the company.

Training and Development Program: Amazon invests in various training and development programs and they often arrange a lot of training and development programs (Schein, 2020). It helps to generate knowledge and thus improve employee expertise and competency. It also helps the company to create effective leaders.

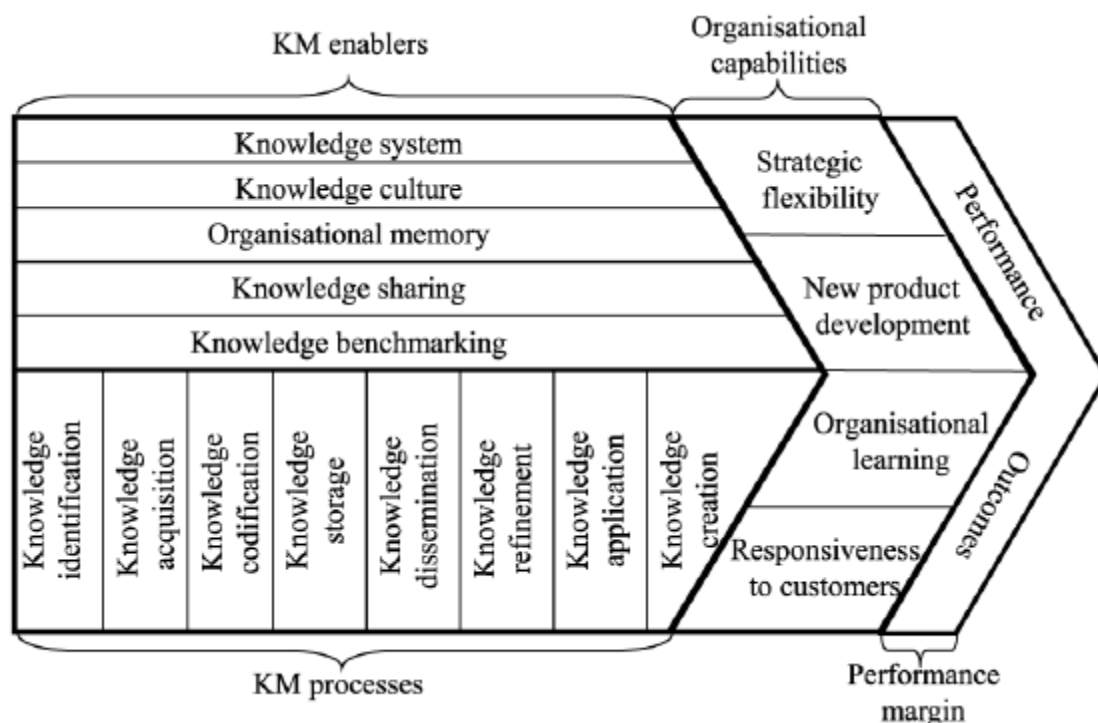


Figure 8: KM value chain of Amazon (Haider and Kayani, 2021).

KM Value Chain of Amazon

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Recommendations for Improving the Knowledge Management of Boeing and Amazon

Boeing and Amazon both have extraordinary knowledge management approaches. But still, they can use some recommendations. Recommendations are discussed for both the Boeing company and Amazon.

Recommendations for Boeing Company

Boeing is one of the most technologically advanced companies. There are R&D approaches through which Boeing maintains its knowledge management process. However, Boeing can still use some recommendations to improve its knowledge management. These recommendations are discussed below:

Implement a Centralised Knowledge Repository: Boeing should create a centralised platform where employees can easily access and contribute to valuable information, best practices, and lessons learned. This repository can help streamline information sharing and collaboration across different departments and teams.

Encourage Cross-Functional Collaboration: Boeing should foster a culture of collaboration by encouraging employees from different departments to share their expertise and insights. This can lead to a more holistic understanding of the business and promote innovation through diverse perspectives.

Invest in Training and Development: Boeing should provide training programs on knowledge management practices and tools to equip employees with the skills needed to effectively capture, share, and utilise knowledge within the organisation.

Establish Knowledge-Sharing Forums: Boeing should create dedicated forums, such as communities of practice or regular knowledge-sharing sessions, where employees can discuss key topics, exchange ideas, and learn from each other's experiences.

Reward Knowledge Sharing: Boeing should recognise and reward employees who actively contribute to knowledge management initiatives to incentivise participation and create a culture that values sharing information for the common good.

Recommendations for Amazon

Amazon is one of the companies that has made blazing-fast improvements in its operations and has gained a lot of profit. It is one of the fastest-growing e-commerce platforms. It has a very advanced knowledge management system through which it keeps a balance within the flows of knowledge and information within the organisation. However, after having a critical analysis of the company's knowledge management system, it can be said that they can still use some recommendations to improve the knowledge management process of the company. These recommendations are discussed below:

Utilise Advanced Analytics and AI: Amazon should leverage advanced analytics and artificial intelligence tools to extract valuable insights from data generated by its various operations. This can help identify trends, patterns, and opportunities for improvement across the organisation.

Promote Cross-Functional Collaboration: Amazon should encourage collaboration and knowledge sharing among different teams and departments within the organisation. This can foster innovation, break down silos, and ensure that valuable insights are shared across the organisation.

Implement a Robust Learning and Development Program: Amazon should invest in comprehensive training and development programs to upskill employees in knowledge management practices and tools. This can help create a workforce that is adept at capturing, sharing, and utilising knowledge effectively.

Create Knowledge-Sharing Platforms: Amazon should establish dedicated platforms, such as internal social networks or knowledge-sharing forums, where employees can easily collaborate, ask questions, and share expertise. This can facilitate organic knowledge sharing and foster a culture of continuous learning.

Encourage Experimentation and Risk-Taking: Amazon should promote a culture of experimentation and risk-taking where employees are encouraged to test new ideas and share their learnings, regardless of success or failure. This can lead to valuable insights and drive innovation within the organisation.

Conclusion

The most important intangible resource for a company is knowledge. Employee skill is the source of knowledge. The process of creating, recognizing, disseminating, and preserving the essential knowledge inside the organization is referred to as knowledge management. Knowledge can be produced within the organization from a variety of sources. R&D has the capacity to develop knowledge. Once more, knowledge might be produced by the company's staff. Organizations seek to retain competent workers in order to preserve their expertise within the company, as they contribute to a good flow of knowledge management within the organization. One of a company's most strategically valuable resources is its knowledge. A company in a particular industry has an advantage over its rivals just by virtue of possessing the necessary knowledge, which it often keeps under wraps to maintain its competitiveness in the marketplace. A corporation needs to manage its knowledge if it wants to be competitive in the market. How well a corporation maintains its operational secrets and, consequently, information within its companies, determines how successful it will be. Additionally, the organization may experience a number of problems, such as losing its competitiveness in the market to rivals, if this know-how or operational secrets are disclosed. Effective knowledge flow within the organization is essential to ensuring better utilization of knowledge. Both Boeing and Amazon have a very extensive and vast knowledge management approach through which they manage the flow of knowledge within the organisation. Having a proper flow of knowledge within the organisation is very necessary as knowledge or information is the most important asset in the current era of information and technology. In that case, it is necessary to state that having correct information and knowledge is very important. As companies like Amazon put emphasis on technological aspects of knowledge management, there are scopes for errors in the results. Whereas Boeing has a balanced knowledge management system. Still, both of the companies should utilize their full capacity to improve their knowledge management approach.

References

- Acha, V., Brusoni, S. and Prencipe, A., 2017. Exploring the miracle: strategy and management of the knowledge base in the aeronautics industry. *International Journal of Innovation and Technology Management*, 4(01), pp.15-39.
- Bibi, G., Padhi, M. and Dash, S.S., 2021. Theoretical necessity for rethinking knowledge in knowledge management literature. *Knowledge management research & practice*, 19(3), pp.396-407.
- Bryson, J.R. and Rusten, G., 2018. Transnational corporations and spatial divisions of 'service' expertise as a competitive strategy: the example of 3M and Boeing. *The Service Industries Journal*, 28(3), pp.307-323.
- Chen, Y., Chen, Y. and Guo, Y., 2023. Dynamic capabilities for value creation from AI innovation ecosystem: a comparison between IFLYTK and Amazon. *International Journal of Knowledge Management Studies*, 14(2), pp.212-236.
- Di Vaio, A., Palladino, R., Pezzi, A. and Kalisz, D.E., 2021. The role of digital innovation in knowledge management systems: A systematic literature review. *Journal of business research*, 123, pp.220-231.
- Dimitrakaki, I., 2022. Organizational Knowledge as a Source of Competitive Advantage-Amazon Case Study. *London Journal of Research in Management and Business*, 22, pp.27-37.
- Edwards, J.S., 2022. Where knowledge management and information management meet: Research directions. *International Journal of Information Management*, 63, p.102458.
- Haider, S.A. and Kayani, U.N., 2021. The impact of customer knowledge management capability on project performance-mediating role of strategic agility. *Journal of Knowledge Management*, 25(2), pp.298-312.
- Marquardt, M.J., 2021. Developing global leaders via action learning programs: a case study at Boeing. *Thai Journal of Public Administration*, 1(3), pp.133-133.
- Muhammed, S. and Zaim, H., 2020. Peer knowledge sharing and organizational performance: the role of leadership support and knowledge management success. *Journal of knowledge management*, 24(10), pp.2455-2489.

- Ode, E. and Ayavoo, R., 2020. The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation. *Journal of Innovation & Knowledge*, 5(3), pp.210-218.
- Perz, S.G., Arteaga, M., Baudoin Farah, A., Brown, I.F., Mendoza, E.R.H., de Paula, Y.A.P., Perales Yabar, L.M., Pimentel, A.D.S., Ribeiro, S.C., Rioja-Ballivián, G. and Rosero Peña, M.C., 2021. Participatory action research for conservation and development: experiences from the Amazon. *Sustainability*, 14(1), p.233.
- Schein, A., 2020. Organisational ambidexterity, hard power management and smart power management at Amazon, a case study. *Global Business and Economics Review*, 22(1-2), pp.27-40.
- Shahzad, M., Qu, Y., Zafar, A.U., Rehman, S.U. and Islam, T., 2020. Exploring the influence of knowledge management process on corporate sustainable performance through green innovation. *Journal of Knowledge Management*, 24(9), pp.2079-2106.
- Tiwari, S.P., 2022. Knowledge Management Strategies and Emerging Technologies--An Overview Of the Underpinning Concepts. *arXiv preprint arXiv:2205.01100*.