

**Title:**

**“Critically analyze the potential challenges and opportunities for leading and managing organizational resources in introducing products and services adopting emerging technologies at Drax”**

## **Executive Summary**

This business report has been created based on the contemporary innovation practices of Drax including specific recommendations. Necessary data of this report has been applied based on secondary research. Actually Drax is a giant IT firm that has immense focus on innovation in their products and services. So, this report has been produced with a bunch of recommendations based on the identified challenges. The aim of the report is to critically analyze the potential challenges and opportunities for leading and managing organizational resources in introducing products and services adopting emerging technologies at Drax. The major finding of the report is that technology is the most effective blessing for Drax that can play the most effective role to improve the innovation power of Drax. Also, the report has clarified that Drax has positive side only in knowledge management power through KTP project (Knowledge Transfer Partnership). The recommended technologies for Drax are AI (Artificial Intelligence), ML (Machine Learning) and IoT (Internet of Thing). These three tools can play the vital role to improve the innovation power of Drax.

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## **1. Introduction**

Drax is a giant information technology based company that sells hardware, resells software and installs panel (Drax, 2019). Drax is operating their business successfully specially with the application of different business strategies specially innovation through research and development. The given case scenario has proved that the research and development of Drax has been successful through new products and services development that have been possible only because of partnering with different academic institutions which is called Knowledge Transfer Partnership. This report is basically related to how Drax Company can make the best utilization of their resources through different challenges and opportunities to introduce new products and services adopting emerging technologies. So, the report has been decorated with specific aim and objectives of the report, challenges of Drax, required skills and knowledge management, Role of Human Resource Management, Leadership. All these terms will help to achieve the aim of the report.

### **1.1 Aim of the report**

The aim of the report is to critically analyze the potential challenges and opportunities for leading and managing organizational resources in introducing products and services adopting emerging technologies at Drax.

### **1.2 Objectives of the report**

The report has some specific objectives which are:

1. To identify the current challenges and opportunities of Drax Company regarding innovation in products and services
2. To analyze how the company can make sure the best practices to utilize their resources to improve innovation in products and services
3. To critically analyze how leadership, Human Resource Management and Operation management can impact on innovation
4. To recommend proper solution to over all those challenges



## **2.0 Analysis of the Hot Topic**

The topic of the report focuses on the challenges and opportunities of Drax to utilize their resources to develop new products and services with the help of technologies. So, at the initial stage of the report, the challenges and opportunities of the company should be identified.

### **2.1 Challenges of Drax**

The case study is showing some weaknesses and challenges for Drax which are being short listed here:

1. First of all, Drax has a lack of integration between Draxg services and Technology. The integration could help the company to utilize their resources at the best way.
2. The company's biggest challenge is their lacking behind IT experts which has led them to take help from different academic institution.
3. They don't have any environment that can lead them proper innovation through research and development
4. High Competition in the industry that forces the company to improve innovation

### **2.2 Opportunities of Drax**

1. Fortunately, the company became able to partner with KTP project (Knowledge Transfer Partnership) that has helped them to improve their innovation through new product development process
2. The Company is unique in term of leadership and operation management and their integration
3. Though integration between Drax technology and service is efficient, it is very problematic.

### **2.3 Influence of the Challenges and Opportunities**

According to Finkelstein et al., (2016), a company's biggest and the most valuable resource is its manpower. Adding more Powell and Dent-Micallef (2017) stated that an IT based giant

company's success 98% is dependent on skilful and experience manpower because software development, hardware selling, IoT functions are completely dependent IT experts. In this sense, Drax ltd has a big lacking behind IT experts. Bastos, et al., (2016) stated that IT experts just shouldn't have practical knowledge because management is essential. On the other hand, Yukl, (2018) said that integration among different sectors of an organization can help to improve the chain work of that company and it ultimately results in effectiveness. But, there is a lacking of this integration in the company that may discourage the innovation power of Drax. Though there are some opportunities for the company, these are small in number in comparison with the challenges for the company. The case has not been clarified how effectively the company is applying leadership and operation management system. It has just clarified integration among the functions. So, challenges are the first impediment of the innovation of Drax.

## **2.4 Required technologies to overcome the challenges to improve innovation utilizing resources**

The major challenges of Drax against have been discussed. To face those challenges, the company should focus on some immediate skills which are being discussed.

### ***2.4.1 Artificial Intelligence (AI)***

AI is the most important invention of computer science that basically refers to the implementation of human acts with machine like robots, computer or any other digital machine that can act as an alternative to man (Russell and Norvig, 2016). The company is trying to take the advantages of AI and also because of being an IT firm; they must depend on AI system. And Russell and Norvig, (2016) said that the maintenance of AI require skilful manpower. This will help the company to improve their efficiency and artificial thinking in innovation and decision making.

### ***2.4.2 Machine Learning (ML)***

This is another important blessing of modern science and technology. Machine learning refers to the process of continuing learning from machinery system (Glover, 2016). ML can help Drax to avoid mistakes took place in the previous experience. In this regard, machine learning skill is required for the company to reduce the possibility of repeated mistakes (Turban, 2008).

### ***2.4.3 Internet of Thing (IoT)***

Lee and Mirchandani, (2017) said that internet has connected the whole world into a web. As a result, communication system has become easier and cheapest. As the company is focusing on innovation, they are focusing on internet day by day to improve their connections and communication.

When all these three blessings of technology can be able to ensure by the company, the company will be able to make sure the best utilization of their resources because McCarthy and Hayes, (2017) stated that AI and ML are the tools that reduce the manual efforts of manpower and increases production rate and efficiency. When efficiency rate increases, the innovation power also starts to increase (McFarlane, 2019).

## **2.5 Application of above technologies in Knowledge Management, HRM, Operation Management and Leadership**

AI, ML and IoT are the three major technologies for Drax applying which the company can make sure the best utilization of their resources in term of innovation, research and development in new products and services. The applications are being shown here:

### ***2.5.1 Technology based Human Resource Management***

According to Truss and Gratton, (2018), Human Resource management is the process of planning, recruiting, selecting, training and distributing in a systematic way. Truss and Gratton, (2018) also said when HRM functions are related with internet, artificial intelligence and machine learning, the system becomes very easy and specific. It means AI, ML and IoT can help to make sure the best utilization of manpower (Wright and McMahan, 2015). Artificial intelligence based skill testing has become popular in different giant companies because it reduces costs, efforts of manpower and saves time (Solms, 2015). Drax has a big opportunity to focus on AI, IoT and ML based HRM system because it will help Drax to connect all employees internally and externally, plan and recruit skilful IT experts. This is how the company can be able to remove their HRM problem especially problem regarding unskilful employees.



### ***2.5.2 Knowledge Management***

According to Glover, (2016), knowledge management is the process of how generated idea, decision and plan of each stakeholder of an organization is organized and control. Drax is quite advance in knowledge management. As the company doesn't have enough IT experts to improve their innovation, they have undertaken UK Govt funded Knowledge Transfer Partnership (KTP) with different academic institutions. University of Bedfordshire is one of them. This innovative idea has helped the company to transfer zest IT knowledge from UoB to Drax. According to Venkatesh, et al., (2013), when more ideas are gathered by an organization, its innovation improves because minimum one idea will be accepted among thousands. This is how technology based knowledge management system is helping the company to improve their innovation.

### ***2.5.3 Technology in Operation Management***

According to Ngai et al., (2011), operation management includes many functions from raw material collection to complete products and services. So, effectiveness in operation management can play very important role to achieve the goals of an organization (Ngai et al., 2011). AI, ML and IoT have a big impact on improving the performance of operation management in an organization (Ngai et al., 2011) like Drax. Ngai et al., (2011) also said operation management usually includes accounting and financial function, inventory management, salaries and major is production. Maintaining these functions manually is very complex, difficult and time expensive for Drax. The technological factors such as AI, ML and IoT have made all the operational functions easier to easiest (McFarlane, 2014). For example, Drax has a service sectors and Drax Technology sector. Customers who want Drax service should have an appointment before taking the service. IoT and AI based operation management can help customers spontaneously. For example, customer can place an order for service in the company's website and the AI system will accept the order and place consecutively. It will need no charge, short time and authentic. This is how AI, ML and IoT can help to ease operation management functions.

When operation management system of Drax will be effective, the company will be able to apply their new ideas and concepts into real shape because technology based operation management

system can process millions of data within second and can give a decision instantly (Russell and Norvig, 2016). This ultimately increases the power of creativity of Drax.

Production is an important function of operation management. The research team of the company will be responsible to give idea and concept and manufacturing department will produce accordingly (Russell and Norvig, 2016). If the latest machinery (AI based) system can be installed, production will increase minimum 10 times (McFarlane, 2019).

#### ***2.5.4 Technology can help in leadership***

In term of leadership, IoT and ML can play very important role to improve innovation. According to Kouzes and Posner, (2019), leadership is a kind of team work where everybody will co-operate each other including the team leader. Yukl, G.A., (2018) said leadership has a goal to improve innovation. A leader's first condition is to maintain good relation with their subordinates (Kouzes and Posner, 2019) which IoT can implement successfully by making all the members connected internally through social networks or mobile. ML can help the leader of Drax not to do same mistakes repeatedly. This is how team work can be improved and ultimately it will result in innovation and new product development. There are some leadership theories as well such as:

#### **Situational leadership**

According to Yukl, G.A., (2018), when leaders are aware of take instant decision based upon different changing environment, it is called situational leadership style. After going through the case, it can be clarified that the company is following this trait because the company could be able to take instant decision regarding knowledge management with UoB.

#### **Contingency leadership theory**

According to Kouzes and Posner, (2019), the continuous development process is contingency leadership. With the help of technology, Drax is regularly focusing on innovation.

As Drax is focusing of IoT and ML more and more, the company will soon be able to improve efficiency in every sector and this will result in more innovation.

### **3.0 Recommendation**

Actually the whole report is a recommendation for Drax Company. However, based on the above report, the company is being recommended some effective strategies and techniques which will help them to improve their innovation.

First of all, Drax must focus on AI, ML and IoT. These three factors are the primary requirement to improve the innovation for the company. These three tools of technology can easily help the decision making body of Drax company to generate idea. In this regard, Drax must focus on more investment in these three sections. Digital technologies including computers, robotics system, high speedy internet connection can improve innovation power.

Secondly, the company is highly recommended to make an integration between service and technology sectors of Drax. When ML, AI and IoT will be focused by Drax, the integration of the two departments will bring about efficiency even not a single problem because AI will resolve the problems.

Thirdly, technology based HRM system especially online based recruitment through AI testing system must be applied to increase IT experts in the company. KTP system is fine but in house manpower must be skilful to increase innovation.

### **4.0 Conclusion**

The report was based on the challenges and opportunities of Drax meeting which how the company can improve its innovation with the help of emerging technology. After completing the report, it has been found that Drax has both challenges and opportunities but they are facing more challenges. The report has focused on three technologies such as AI, ML and IoT to improve the innovation of Drax utilizing the resources of the company. This very real that these three factors can reduce wastages and improve efficiency that lead innovation. The report has also clarified that technology is the only instrument that can make the best utilization of resources of the company such as manpower, digital instruments, leadership train, knowledge and operational resources.



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