

## The Role of Artificial Intelligence in Redefining the Concept of Management

*Farah Mohamed El-Masry*

**E-mail: frh0163909@inf.ju.edu.jo**

**Received: 11 May 2018, Revised: 22 May 2018, Accepted: 31 May 2018**

**Published online: 6 June 2018.**

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### Abstract

The world is changed every day and each second a new technology is innovated which is accelerating toward the future. The world is in growth and there is great progress in a technology which makes a huge change in the future of our life. Nowadays, there is a new technology that is called artificial intelligence (AI) or machine intelligence; it is intelligence which is demonstrated by a machine that acts and reacts like a human. Artificial intelligence is the simulation of human intelligence processes by machines having computer systems. Artificial intelligence has a great effect on our home lives and plays a basic role on our work lives. The artificial intelligence achieves a great success to the individual and organization. It is a supportive tool to the manager which helps him to make a correct decision. Its work depends on learning, planning and problem solving. Applying artificial intelligence at management gives the managers a great capacity to focus on the organization values and goals. At this research we will reveal the role of artificial intelligence at the work, in redefining the concept of management, and can the managers be replaced by the artificial intelligence.

**Keywords:** artificial intelligence, management, redefine, learning, leadership

## **Introduction**

The artificial intelligence is a branch of computer science and many people associate artificial intelligence with that science, but the fact that artificial intelligence is applied at many fields, it is in our daily lives, and at our work. It has a great wide of uses and applying artificial intelligence at business leads to a great change at the work. It impacts the management and enables the good managers to be a great. It is computer software which engages in human activities. It is a supportive tool that helps the manager to collect a huge data, analyze, get information to make a decision at a second and more quickly than a human brain and traditional software can do. Also, it performs the complex and unsafely tasks rather than the human. So it is highly valuable at many industries and using this technology at business safes the time, the effort and achieves great profitability (Brynjolfsson & McAfee, n.d.). With artificial intelligence the work depends more on the creative tasks rather than repetitive tasks. It redefines the meaning of management; it depends on innovation management rather than traditional management. Artificial intelligence is concern with the knowledge and technical part at management, so the employee, managers and leaders will be chosen to accord their empathy, creativity, innovation, and implementation abilities (Ransbotham, Gerbert, Reeves, Kiron, & Spira, 2018). At this research we will focus on the artificial intelligence, its role at business, and in redefining the concept of management. We will indicate if the artificial intelligence can be managed the organization and substituted the manager. Also, we will reveal the role of artificial intelligence in creating future leaders who will achieve a great success at the business.

## **The study problem**

The management is the core for the success at a business. It must be depend on innovation, creativity and effective implementation. But it is still seen that the managers are in the position of power and their jobs are to collect data,

organize, staff, plan, direct and control. All that tasks consume the time of managers and lead to a traditional management that can't get along with the world change, so the business will end and disappear from the market. The artificial intelligence is the solution that redefines the concept of management; it changes the management from the traditional management to the innovation management. So at this study we will reveal the role of artificial intelligence in redefining the concept of management. Also, we will indicate if the artificial intelligence helps the managers or against the managers and will substitute them at the future. This research will answer the following questions:

- 1- What is the artificial intelligence?
- 2- How will artificial intelligence redefine the management?
- 3- How will artificial intelligence help the manager?
- 4- How will artificial intelligence be at the future?
- 5- Will the manager be replaced by the artificial intelligence at the future?

### **What distinguishes this study from previous studies**

The previous studies deal with the artificial intelligence as a new technology and indicate its role in the business. Here, this study will deal with artificial intelligence as a simulation to the human intelligence. It will reveal the effect of artificial intelligence at the business and its role in redefining the concept of the management. Also, it will discuss the effect of artificial intelligence on the manager and if it will cancel the role of the manager or help in creating a great leader.

## **The study content**

### **1.0 Artificial intelligence**

Artificial intelligence is a branch of computer science, it helps in creation intelligence machines that act and work like humans. It depends on computer software which acts by learning, planning and problem solving. Nowadays, it becomes an essential part at the technology of industries and business. The concept of AI is to enable a computer system to be learned, trained and do the tasks as it has been trained to perform (Nilsson, 2014). There are five types of artificial intelligence that might be at business, they are:

#### **1.1 Analytic AI**

It is a machine learning by advanced deep learning technique, it depends on scanning a data to produce information and recommendations which contributing at decision making.

#### **1.2 Functional AI**

It is like the analytic AI, depending on scanning a huge amount of data, but instead of giving recommendations, it takes actions.

#### **1.3 Interactive AI**

This type of AI helps businesses to automate communication without interactivity such as chatbots and smart personal assistants; this can improve the organization's internal process.

#### **1.4 Text AI**

The text AI is used to power an internal corporate knowledge base at the organizations, it is such as text recognition, speech-to-text conversion, machine translation, and content generation.

#### **1.5 Visual AI**

It helps businesses to identify, recognize, classify and sort objects or convert images and videos into insights (Nilsson, 2014).

## **2.0 Artificial intelligence redefines the management**

There are many applications to AI at business. It can collect a huge data volume and perform repetitive tasks every day. AI software can control the employees, perform audit, calculate payments, and set a schedule. It is a powerful and supportive tool to the managers; they will have a great benefit with AI and will have more time to focus on the organization's value. The managers can depend on AI during decision making process, where AI can crunch numbers, process large amount of data, give a fast data driven decisions at a second. AI will help the managers with their administrative work and this will save 54% from the time of the manager that is taken up with routine and repetitive activities. They will develop their skills at management and will have the time to innovate and make a strategic planning to achieve the vision and value of their organization. Artificial intelligence will redefine the concept of management; it will be change from the routine management to innovation management which will depend on the skills of the managers on creativity and implementation abilities. AI can help the senior, middle, and front line managers(Kolbjørnsrud, Amico, & Thomas, 2016).

### **2.1 Senior management**

Senior managers do the strategic planning, set the vision, and overall goals of the organization. AI plays a role in collecting and analysis data for effective strategy.

### **2.2 Middle management**

Middle managers are the ring between senior and lower managers; they communicate the strategy and the organization goals from the top level management to the first line of management. AI helps the middle manager to communicate the information without changed and faster than traditional methods.

### **2.3 Lower management**

Supervisors play a role in controlling the work of employees, set the schedules, and perform audits. They spend their time at administrative work. AI can help lower manager at their day to day routine, and perform these tasks at a short time(Kolbjørnsrud et al., 2016).

### **3.0 Artificial intelligence at the future**

AI will change the concept of management and the managers will have enough time to develop their skills and talents. AI will lead the manager to be a great leader who will create vision, inspire others, embrace challenges, and strive to do the right work. The management will be changed to the leadership(Liebowitz, 2001).

### **4.0 Artificial intelligence versus the managers**

Artificial intelligence at business is a vital tool to the managers; it is a supporting for them at the administrative activities. AI can't replace the manager because management is not only some data, information, and recommendations. It needs to humanity and a touch of the manager that is not found at the AI. The manager is a spirit that motivates the others and leads them to achieve the goals(Liebowitz, 2001).

## **The results of the study**

Management is a complicated process and artificial intelligence is a technology or a tool that helps the managers at their administrative activities that waste their time. So it will change the concept of management and redefine it. AI will transform the management to the leadership; it can't replace the leader who is the innovator, strategic planner, and motivator to others.

## **The suggestions**

1- All must know about artificial intelligence which will be a day to day at our life and work.

2- Artificial intelligence is a benefit to industry, and this technology must be at business where it will save time, effort, and cost.

## **The conclusion**

Artificial intelligence is created by the human intelligence; it impossible to replace the human begin who combines between the thinking and emotional. It is programmed by the human to be a supportive tool and perform some day to day activities at life and work. Applying AI at business makes a great change and becomes a vital tool to the manager; it achieves the concept of leadership, and makes a manager to be a great leader.

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