#### **CHAPTER I**

#### **INTRODUCTION**

### 1.1 Research Background

Industry 4.0 or also known as The Fourth Industrial Revolution, is the current centre of attention in the industrial sector. It is a shift in paradigm due to the changes and improvement of technologies throughout the years, thus changing the way industries operate in general (Chiarello et al., 2018). These advances with technology results in transformations and encourage innovation in companies that will create their own competitive advantage. Other than that, it supports production processes to be much simpler (da Silva et al., 2020). With the changes caused by the revolution, leaders that are transformational can be beneficial for a company to positively adjust to these changes due to the fact that transformational leaders are able to maximize the potential of the organization to achieve their goal, which results in transformational leadership as an alternative and new breakthrough for the industrial progress (Suyanto et al., 2019). These variables can create a competitive advantage for companies to possess (Elidemir et al., 2020). Healthcare is affected by industry 4.0 as well in terms of their production processes (Wan et al., 2019). It can be a challenge for the industry and any companies involved to be competent to adjust to the phenomenon of industry 4.0 in their operations due to the fact that "industry 4.0 must take into account the hindrances and needs that may arise due to technological resources and organizational management" (Da Silva et al., 2020). Because of this, an effective leadership style and cooperative employees are needed.

There are six general proven leadership theories. This includes The Great Man or Trait Theory, Behavioural Theory, Situational Theory, Contingency Theory, Transactional and Transformational Leadership Theory, Participative Theory, and Skills Theory (Allen, 2018). The fourth industry revolution calls for the transformational leadership theory, which refers to the competency of a leader in changing the view, behaviours, or even culture that is needed in the company as well as effectively lead the employees through these changes (Okanga & Drotskie, 2019). The importance of a leader that is able to adjust can create a competitive advantage for the company itself. In this case, to continuously lead as well as motivate employees for innovating.

With the constant changes, innovative work behaviour is crucial for employees to be able to positively adjust along with creatively come up with ideas that can support these changes (Javed et al., 2019). As mentioned, an effective leader can affect the innovative behaviours in employees. This is because the effect leaders can have on their subordinates may influence the mindset and way of thinking of their subordinates which in turn encourage the creative flow of ideas for innovative work behaviour in employees. For example, the new introduction to advanced technologies due to industry 4.0, creating new production techniques, processes, performing work tasks that facilitate the implementation of new ideas. Employees may create a new technical

way to input sales or inventory, it is not necessary new in general, but new to the company involved. In addition to that, motivation to learn is essential in supporting innovative behaviours of employees (Afsar & Umrani, 2019). For employees to be motivated well enough or be willing to learn can boost creative behaviour which leads to innovative work behaviour when implemented. Lack of motivation can lead to ineffective innovations and overall changes needed for the company. Several employees responsible for innovating in particularly the technological advances in a company can eventually lead to new sales. To be able to prove this, research will be needed (Javed et al., 2019).

To conclude, it is necessary for companies to be capable in adjusting to the industry 4.0 phenomenon into their practices with the help of transformative leaders and innovative employees as well as their willingness to learn. Leaders are responsible to lead their followers through these changes as well as motivate them to learn despite some being resistant to the alterations.

#### 1.2 Problem Identification

Based on the background of this research, the effects of transformational leadership supported by employees' motivation to learn towards their innovative work behaviour can be identified due through these questions:

1. Does transformational leadership positively influence innovative work behaviour?

2. Does motivation to learn mediate the effects between transformational leadership and innovative work behaviour?

# 1.3 Research Scope

Based on the research background above, the researcher set a limitation on the problem based on the uncertainty of industry 4.0 in especially the medical field.

## 1.4 Research Objectives

Based on the research questions above, the objectives of this research includes:

- 1. To analyse the influence of transformational leadership on innovative work behaviour.
- 2. To analyse the influence of motivation on innovative work behaviour.
- 3. To analyse the influence of motivation to learn as a mediation between transformational leadership and innovative work behaviour.

#### 1.5 Research Benefits

### 1. For the Company

This research will help the company to identify and understand the influence of transformational leadership on innovative work behaviour mediated by motivation to learn due to industry 4.0. Therefore, the author hopes that the company can formulate the appropriate method to adapt to the overall changes.

# 2. For Author

This study will add to the knowledge and experience of the author in researching, especially those related to the HRD field that the author has studied at the University of Atma Jaya Yogyakarta.

# 3. For Other Parties

It is hoped that this research can be used by other parties to increase their knowledge or as a reference for conducting similar research.