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Investment in Technology as Competitiveness Factor in the Circular Economy Perspective.

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Lately the development of circular economy model and benefit of its implementation are widely presented in scientific publications (Lieder & Rashid, 2016; Tsiliyannis, 2014; Singh & Ordoñez, Ghisellini et al., 2015; Rashid et al., 2013) and international strategies such as Europe 2020, Horizont 2020, „Trends in manufacturing to 2020“. Over the past decade, South Korea, China, the United States started the research related to the implementation of circular economy. Europe's economy remains very resource dependent and is still wasteful in its model of value creation. According to McKinsey report (2015) on Europe's circular economy perspective, adopting circular economy principles could not only benefit Europe environmentally and socially but could also generate a net economic benefit of €1.8 trillion by 2030. In addition, the European Commission is implementing the policy actions to promote the implementation of circular economy model in European Union countries.

Moreover, the theme of investment in technology is relevant in the scientific field and journalists' publications (Simpson, 2015; The Daily Reckoning, MarketWatch 2015) where the benefit of investment in technology, the time for investment and investment sources are analysed. Scientists introduce that investment in technology has a significant return, so this investment is attractive, but risky.

In general, investment in technology is a source to create the technological progress due to developed or adapted technological processes, products or knowledge. Research in the field shows that it is efficient to invest to technology creation for financially strong countries or companies. Financially unstable companies can gain benefit from existing technologies. In manufacturing, the effective use of technological progress determines economic growth, social changes, and wealth creation.

A number of previous studies have analysed different aspects of circular economy and investment in technology. However, there is a lack of sufficient studies that investigate how the factors of circular economy and investment in technology are related to each other, or investment in circular technologies influence competitiveness of a company. To fill this gap, the paper seeks to answer the following research question: how investments in circular economy technologies influence competitiveness of a company? Thus the purpose of the paper is to analyse theoretically the interaction of investment in technology and competitiveness of a company in the circular economy perspective.

The interaction between investment in technology, circular economy and competitiveness of company is analysed using constructive research approach by applying systematic review, analysis, deduction and other methods.

The theoretical literature and empirical studies are analysed. Moreover, the theoretical method is created for the evaluation of interaction between investment in technology, circular economy and competitiveness of company.

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Also, science-based evidence would be presented to business representatives that implementation of circular economic model has economic, social and environmental benefits, the company's activity is becoming more efficient, leading to greater competitive advantage gained.

On the basis of the scientific literature review it could be concluded, that companies should buy, adapt or create technologies for implementation of circular economy model. The implementation of this model is closely related to creating a competitive advantage for a company.