Assessment of Master Thesis – Academic Consultant

Study programme: **Applied Informatics**
Field of study: **Information Systems Management**
Academic year: **2018/2019**
Master Thesis Topic: **Analyze and Design New Concept of Supply Chain Management in Pharmaceutical Industry by Blockchain.**
Author's name: **Osman Efe Adalier**
Ac. Consultant's Name: **Ing. PhDr. Antonín Pavlíček, Ph.D.**
Opponent: **Ing. Jan Kučera, Ph.D.**

	Criterion	Mark (1–4)
1.	Comprehensibility of the Master´s Thesis topic and objectives	**2**
2.	Fulfilment of defined objectives	**3**
3.	Logical structure and cohesion of each parts	**2**
4.	Extent and relevance of description of the current level of knowledge	**1**
5.	Adequacy of methods in respect of the topic (selections of the methods and their application)	**2**
6.	Extent, quality and precism of description of the thesis´s results	**3**
7.	Relevance and correctness of discussion of the thesis´s results	**3**
8.	Correctness and relevance of information sources	**3**
9.	Grammar, stylistic style, terminology and overall formal and grahic level of the Master´s thesis	**2**
10.	Student's independence during the process of composing the Master thesis	**2**

Comments and Questions:

Comments:

The agreement on the topic of the thesis was relatively fast, the theoretical part of the thesis (research) was without problems, but there were some issues with the practical part, which unfortunately reflected in the final version of diploma thesis as well. The student worked relatively independently on his work, although he had minor problems to follow the timetable. The theoretical part of the thesis is quite well-elaborated, it covers the topic cryptocurrency comprehensively and it is correct and does not contain grave factual errors. The description of the Pharmaceutical Supply Chain is also adequate.

However, chapter 4. Designing Pharmaceutical Supply Chain Framework with Blockchain is a bit weaker. The goals are vaguely defined, the proposed solution is just briefly sketched in the form of Process design, but the biggest problem I have with the chapter 4.4 Payment, where the possible automatic payment in the cryptocurrencies is discussed, based on three categories; Transactions per second (tps), transaction confirmation time (tct) and volatility, while the most important part – price of transaction – is missing. Other problems: TPS is flagrantly misunderstood – quote: "Bitcoin (BTC) TPS is from 3 to 7 seconds, Ethereum (ETH) is 15 to 20 seconds same as Tether (USDT), Ripple (XRP) is 1500 seconds and Bitcoin Cash (BCH) is 60 seconds"... please explain, why do you measure TPS in seconds? And there is absolutely missing explanation of the methodology used to calculate volatility ...

Questions to be discussed:

1) Please, clarify the issues in chapter 4.4. Quote transaction costs for the all proposed currencies, explain what is TPS and how is measured, defiy volatility and explain, why you did not mention stablecoins like Tether or USDcoin, which are here exactly to prevent volatility.

2) Try to estimate overall costs and benefits of implementing Bitcoin (or some other cryptocurrency) into Pharmaceutical Supply Chain Framework

Conclusion: The Master Thesis is recommended for the defence.

Suggested Grade: **3**

Date: 30/05/2019

Ing. PhDr. Antonín Pavlíček, Ph.D.
Academic Consultant