



FACULTY OF MECHANICAL
ENGINEERING
UNIVERSITY OF WEST BOHEMIA

Opponent's opinion on the defense of the dissertation

University of West Bohemia

Author: Roland Stankalla, M.Sc., M.Sc.

Name: Conception of an effective Six Sigma belt deployment structure for manufacturing small and medium-sized enterprises
(Konceptce efektivního rozvoje struktury Six Sigma belt v malých a středních výrobních podnicích)

Faculty: Faculty of Management and Economics

Degree programme: 6208 Economics and Management

Degree course: 6208V038 – Management and Economics

Supervisor: prof. Ing. Felicita Chromjaková, PhD.

Reviewer: doc. Ing. Milan EDL, Ph.D.
Department of Industrial Engineering and Management
Faculty of Mechanical Engineering
University of West Bohemia

The submitted dissertation consists of 167 pages, 6 chapters and an appendix.

Topicality of the topic

I consider the submitted dissertation not only current, but also very important due to the implementation of Six Sigma principles in the environment of small and medium-sized enterprises. The opponent considers this to be very important, because small and

medium-sized enterprises are very important for any healthy economy. It is also very important to realize the structure of small and medium-sized enterprises in the network of subcontractors for large enterprises, where the principles of Six Sigma are traditionally implemented and used. The opponent also emphasizes the impact on practice, where the benefits can be expected in the short term.

Fulfillment of dissertation goals

The goals of the dissertation are described on page 21. A total of 6 research goals were described, which are addressed in the dissertation. Further in Chapter 5, these goals are commented on and a detailed discussion is made. And the verification of the dissertation outputs is also described. The opponent must state that the defined objectives are met.

Steps to resolve the issue

The author devoted the first chapter of his dissertation to defining the goals, research questions and structure of the dissertation. From the methodological point of view, the opponent must appreciate the approach to the solution of the methodical management of research works. The work conceived in this way has a clear and logical trace of the process of solving scientific research tasks, with the implementation of the results into practice and its verification. The thesis meets the formal requirements in terms of needs for defense. The opponent considers the solution procedure to be correct. Following the basic goals of the dissertation, the methods were correctly selected and applied in the solution. There is a "Zlín".

The importance of the development of the scientific field and for practice

The presented work has described both theoretical and practical benefits of the dissertation, which is devoted to the last sixth chapter. Due to the research part of the dissertation, the opponent can state that it is possible to say that the work also has a pedagogical benefit. The dissertation conceived in this way is important for the connection of theory and practice.

Formal and language level

The formal, presentation and language level is very good. Here you can see a very good level of expression of the doctoral student. The work contains 4 figures and 67 tables at an acceptable level.

Publishing activity

The publishing activity is at a very good level, where the responses in the citation databases can also be seen. The author has published at both domestic and foreign conferences and magazines.

The opponent must emphasize that publishing is important not only for the doctoral student himself, but also for the development of the field and workplace.

Comment

The opponent considers the submitted work to be very successful methodologically and in terms of content. The work reflects on the problems of today's practice. Here you can see a very strong connection between theory and practice, where the benefits can be seen in a relatively short period of time.

After answering the questions asked and based on the submitted dissertation, I recommend it for defense.

I recommend awarding the academic degree of "philosophiae doctor" - Ph.D. "after a successful defense I **RECOMMEND** that the submitted dissertation be accepted for defense on the basis of the previous evaluation. After its successful defense, I propose to award an academic degree.

„Philosophiae doctor (Ph.D.)“

Additional questions:

1. What is the chance of enforcing your proposed measures in the real environment?
2. How did the company / companies react to your proposed methodology / methodological procedure, where did you verify everything?

Plzeň, 4. 6. 2021



Milan EDL