



Conclusions of the 21<sup>st</sup> International Symposium on Quality  
Crikvenica, Croatia, 18<sup>th</sup> – 20<sup>th</sup> March 2020; (Zagreb online 23<sup>rd</sup> – 25<sup>th</sup> September 2020)

The 21<sup>st</sup> International Symposium on Quality, organized by the Croatian Quality Managers Society (CQMS), is planned for 18<sup>th</sup> – 20<sup>th</sup> March 2020 in Crikvenica. Due to the epidemiological situation, the Symposium was not held as planned, but was held on a new date, 23<sup>rd</sup> – 25<sup>th</sup> September 2020. online, from Zagreb. The co-organizers of the symposium are: 1) MSEECQI – Middle and South East European Countries Quality Initiative; 2) Herzen State Pedagogical University, Faculty of Management, St. Petersburg, Rusija; 3) Department of Production Engineering and Safety, Faculty of Management Czestochowa, University of Technology, Czestochowa, Poland; 4) University North, Varaždin – Koprivnica, Croatia; 5) University of Žilina, Žilina, Slovakia and 6) University of Rijeka, Rijeka, Croatia.

The Symposium was held under the working title  
„QUALITY – YESTERDAY, TODAY, TOMORROW“

The patrons of the symposium were: MSEECQI – Middle and South East European Countries Quality Initiative; Ministry of Economy, Entrepreneurship and Crafts; Ministry of Environment and Energy; University of Zagreb; University of Rijeka; Croatian Chamber of Economy; Croatian Accreditation Agency; State Bureau of Metrology; Primorsko – goranska County; Faculty of Economics and Business Zagreb (Postgraduate specialist university study programme Quality Management). Media patrons were: Kvalitet & izvrsnost, Belgrade; Portal Kvalitet, Belgrade; scientific journal Production Engineering Archives, Poland; Poslovni savjetnik, Zagreb; Portal Crikva.hr, Crikvenica. Donors and sponsors were: Split Airport, Split; University North, Varaždin – Koprivnica; Croatian Chamber of Economy; BDO Consulting Ltd, Zagreb Airport, Ltd; Gradska plinara Zagreb d.o.o., Zagreb; University College Algebra, Zagreb; The University of Applied Sciences Velika Gorica, Velika Gorica; TÜV Croatia, Nord Group; Oskar – Centre for Quality and Development, Zagreb and Oskar Edukos, Zagreb.

The online symposium was attended by about 100 authors and participants from Croatia and abroad from 13 countries: Bosnia and Herzegovina, Finland, Hong Kong – China, India, China, Hungary, Poland, Russia, Slovakia, Slovenia, Serbia, Thailand and Croatia. Among the authors and participants were students and professors from numerous universities, colleges and polytechnics. As part of the symposium, a panel was held on the topic: "Quality in public administration". A meeting of the Steering Committee of the MSEECQI consisting of fifteen institutions and organizations from nine countries took place, too.

The Symposium Proceedings accompanying the Symposium (book and CD) contains 43 scientific and professional papers by authors from 13 countries. After the presented papers and discussions, the CQMS Steering Committee formulated the following symposium conclusions:

1. Management systems in organizations are to some extent integrated. They have elements of different management systems (quality, environment, social responsibility, safety, risks, etc.). One can speak of an insufficient degree of management cognition of this fact. What they all have in common is that they imply a certain management model that basically contains all the elements of the management function (planning, organizing, resource management, decision-making and control). In complex integrations, this can cause the entropy of the management system due to the non-existence of a generic model of the integrated management system.





2. The ISO 9004 standard is the most demanding in the ISO 9000 series. However, organizations that apply ISO 9000 standards often don't clearly recognize the differences and relationship between ISO 9004 and ISO 9001 standards and therefore could not use the potential of the standard in implementing quality management systems.
3. The basic motive of the business has not changed: the owner's profit is still the main motive of all activities. What is important is that the management of the growth of the company's value be based on ethical principles. This can enable the organization to respond well to the requirements of all stakeholders and to ensure long-term prosperity.
4. In the global market, companies are finding it increasingly difficult to gain a competitive advantage by applying traditional business models, especially if certain assumptions influenced their development before the digital economy. In such a situation, companies are increasingly opting to apply innovation in their business model as a source of competitive advantage.
5. In conditions of growing uncertainty and rapid change, modern business needs a new management model. The old one is based on a rigid hierarchical structure and mainly on competition and achieving individual success. Empathy, communication skills, openness to others and self-awareness are key elements in building a leading position in the 21<sup>st</sup> century. These are the so-called "soft" competencies, which are usually perceived as "female".
6. In the context of quality of life, it is necessary to constantly work on raising awareness about the inclusion of persons with disabilities in the labour market, and in order to more effectively implement vocational rehabilitation programs should integrate all relevant stakeholders, from associations, funds to government institutions.
7. Higher education faces serious challenges. It is certain that the higher education institutions of the future will differ greatly from the current ones, not only in the content of the curriculum, but also in the essential modification of the existing organizational structures. It is estimated that the model of a learning organization is the only sustainable form of organization of higher education institutions of the future.
8. Systematic quality management as set by the requirements of the family of standards ISO 9000 and other standards for management systems requires new competencies of experts who will be the drivers and coordinators in the process of quality management and other management systems. This imposed the need for continuous education of already educated staff in this activity. The set minimum requirements for continuous education of certified staff according to the EOQ scheme are not a guarantee that sufficient maturity of this staff will be achieved, because there are a number of other factors that affect the achievement of the required maturity.
9. Quality and standards are key segments of the established catering service in order to achieve guest satisfaction and affirm future demand. Given the development of modern catering and observing the same through the prism of responsible mass tourism, we should continuously invest in quality and update standards because they are the key to success.





10. There is no consensus in the perception of the need to manage the quality of cultural and natural heritage, which is sometimes perceived as an unnecessary additional burden and cost. Natural and cultural heritage undoubtedly represent tourist attractions and as such are a valuable source of income and it is necessary to develop awareness of the need to manage quality and measure the quality of such sites. Croatia has a high-value continental area that is increasingly involved in tourist flows and is an untapped and attractive strategic resource.
11. In today's time of uncertainty in the global market, it is essential to base business on the principles of social responsibility and business excellence.
12. Ecological collapse and climate catastrophe threaten everything. There are many reasons to engage quality professionals in the desire to focus on quality by informing about the creation of new quality services or enabling improved customer access to new, sustainable quality. Existing quality management systems and their practices and models in organizations are no longer effective for challenges, especially related to ecosystems.
13. In order to achieve the goals set by the EU that the share of energy produced from renewable sources in total consumption should be 32% by 2030 according to Directive 2018/2001 / EU on promoting the use of energy from renewable sources, there has been an increase in the use of wood biomass as renewable sources and to a significant increase in the amount of wood biomass ash that occurs. In the future, difficulties in finding new landfills and an increase in the cost of disposing of wood biomass ash can be expected. Previous research shows that wood biomass ash has great potential for application in construction, especially in the cement and concrete industry.
14. Buildings play a central role in the EU's energy transition as they are responsible for around 40% of EU primary energy consumption and around 36% of energy-related CO<sub>2</sub> emissions, while at the same time around 75% of the building stock is energy inefficient. Government policies and initiatives to encourage the implementation of Building Information Modelling (BIM) should be comprehensive, including public procurement, education, development and standardization.
15. The strategic risk management system is a good tool for managers in reviewing the existing strategy and its compliance with the expected changes in the environment and consequently creating recommendations for the necessary changes in the company's strategy.
16. The Global Reporting Initiative (GRI) standards represent the world's best practice for public reporting on a range of economic, environmental and social impacts. The new GRI 403 Health and Safety at Work 2018 standard emphasizes the approach to managing non-financial impacts related to the safety of workers and their health.
17. Air transport is characterized as the safest form of transportation. In order to reduce the human factor as the main cause of aviation accidents and increase safety, many technological innovations, improved procedures and stricter regulations are being introduced in aviation.





18. "Last mile" is the last part of the supply chain through which goods from the supplier of raw materials reach the final consumer. In relation to a unit of product, the supply of goods in the "last mile" is often considered inefficient and expensive and can be a generator of environmental pollution. Considerable attention needs to be paid to the introduction of quality, sustainable and innovative solutions that increase efficiency, improve business results and reduce the negative environmental and social impact of transport.
19. The introduction of a quality management system in public administration in the Republic of Croatia is a project that should transform public administration in such a way that it is a much greater service to citizens and the economy. This is one of the key reforms to improve the competitiveness of the Croatian economy.

It was awarded at the Symposium for the first time the "Dr. Josip Čiček Award" for the best student paper in the field of management systems. The winner of the award is Ivan Rezek, a 4<sup>th</sup> year student at the University College Algebra in Zagreb. The paper was published in the Proceedings.

The framework for making these conclusions was presented to the participants of the 21<sup>st</sup> International Symposium on Quality at the closing of the Symposium on 25<sup>th</sup> September 2020. The conclusions were adopted by the CQMS Steering Committee at the 22<sup>nd</sup> meeting held on 8<sup>th</sup> October 2020 in Zagreb.

Zagreb: 8<sup>th</sup> October 2020

CQMS Steering Committee

Assist. prof. Miroslav Drljača, PhD  
President

