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ROLE OF RESPONSIBILITY IN THE QUALITY MANAGEMENT SYSTEM

Abstract: This manuscript is focused on the role of responsibility in concept of quality management. Some open questions are: Does development of standards influenced on improvement in implementation or only shifted the focus of responsibility? To which extent focus of standards on management responsibility contributed clear, full responsibility.

Using morphology of responsibility we can prove that better implementation of management system as well as responsibility have clear contribution to better and more quality result, which is goal of all stakeholders.

Keywords: *Quality management system; Responsibility; Morphology of responsibility; ISO 9001*

1. Introduction

Number of authors emphasize that present moment is characterized by irresponsibility (Iguman Jevremije, 2011), so present time could be characterized as time of lawless low, justice of injustice, and no moral ethics. Time where the basic of business is more or less only profit (Friedman, 1970), brings a number of examples of irresponsible activities, and two from auto industry will be listed:

1. In accelerated procedure of launching Ford Pinta, managers according to cost benefit analysis, made decision motivated by profit incensement, to avoid covering of gas reservoir and decreased safety of people (Birsch & Fielder, 1994; Leggett, 1999).
2. According to Mansour (2016), Volkswagen, by a fraud in the test of diesel fuel emission, presented a false data and caused direct and indirect consequences for its interested parties. In number of articles this approach was named as an s Fraud of the century.

In the research (Conchie, 2004) the following mistakes of executive leaders have been underlined: vision, maximizing values, challenging experience, mentoring, building constituency, making sense of experience, knowing self. Irresponsible decision should initiate question of total responsible management. This concept was initiated by number of authors (Waddock & Bodwell, 2007; Waddock et al., 2002). Research (Mitcham & von Schomberg, 2000) emphasizes that engineering ethics is good example of ethics of responsible roles. Research points on possible mediation between ethical systems and social structures which was named ethics of collective responsibility. In situation when bad results exists, meaning that nonconformities are implicitly connected with the concept of responsibility, it implies that the term quality is in the correlation with traditional sense of the word, so it is necessary to make distinction between responsibility - which is named "negative responsibility" from "positive responsibility" (Gotterbarn, 2001). This article examines the relationship between engineers and society, and

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engineers' professional responsibilities given that relationship (Nichols, & Weldon, 1997).

Learning on sincere and true character using the history of events, presents the best possibility for pointing on professional and scientific responsibility, in order to elevate the level of competences of management as profession (Stutz & Schrempf-Stirling, 2019).

The purpose of this paper is to integrate quality management system, corporate social responsibility guidelines, United Nations Sustainable Development Goals, block chain related documents and qualitative interview results from Hong Kong and Slovakia (Yeung, 2018).

Orientation on module 5 "Responsibility of management" standard ISO 9001:2015 which is used to define role of management during the implementation of QMS the information system for responsible management of quality is defined (Sakthivel et al., 2007). Responsibility is key factor of quality management system and the program of business ethics (Fisscher & Nijhof, 2005). Research (Krivokapić, 2017) underlines that two key elements of cross section of the joints ethics and quality management systems are: responsibility and trust. Since quality is measure of everything, this manuscript has goal to explain role of responsibility in the function of quality management system. Is the development of standards influenced only implementation or we are witnessing only in shifting of responsibilities. How the standards focus on responsibility contributed to definition and realization of clear, total responsibility. These questions will be addressed in this manuscript.

2. Responsibility

Responsibility is reaction on question of the other person and in different language we have: ot-vetstvennostь, od-powiedzialnošć, Ver - antwortung,responsibility, responsabilité, responsabilità, odre-spondeo – od-govarati. Word "responsibility" describes reality: responsibility is communication,

responsibility is dialog. From etymology of word responsibility, we can concluded, that responsible means giving response to the act, or to do the best in order to solve delegated task, as well as being ready to have consequences for oversights as well as to take punishment for something you have done wrong.

It is necessary to have following in the mind "In making decision we involve our personality, because responsibility is not just performing commitments not even in acting toward some determinate and predictable goal (in that case it is pre calculated goal oriented procedure), stable base for responsibility is in us not in the matter we are making decision "(Šijaković, 1997).

This statement direct us to define:

- To which extent the someone is responsible,
- Based on which set of criteria.

Historically responsibility is present from the moment of creation of humans and it has been connected with divine particle in human (conscience). If we observe this term, which has been the topic of interest for philosophers, according to researches (Mitcham, 2000; Barker, 1962; Jonas, 1994; Vučković, 2000; (Morris, 2013) we can define five important epoch, which could be presented in the table 1.

It is clear that we can find different classification of responsibility in manuscript is presented on the figure 1.

Personal responsibility is form of responsibility in front of self-conscience. Legal responsibility covers legal interpretation and measurement what is good and what is wrong. Moral responsibility covers moral demands it is ethical measurement of good and wrong. Descriptive responsibility expresses cause-and-effect relation of perpetrator and act, consequence and does not make qualification of act itself. Objective responsibility expresses moral or legal responsibility to do something or avoid something. Subjective responsibility expresses evaluation of perpetrator which is

working according to law, moral or against them. Human presents key "element@ of responsibility and that relation in the context of being is presented on the figure 2.

Table 1. Historical epoch and responsibility

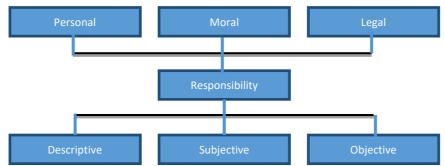| Historical epoch	Responsibility
Antic	In the antic, term responsibility had been observed as a teaching about happy life, where polis is place for realization of such of life. Better life of people will make polis better. Good life is the political ideal and in the same time ideal of individual, not accidently, but because there direct interconnection.
Christian	Christian responsibility consists in actions according to Christ and into Christ. Salvation as goal on personal level, could not be observed narrow because the first Christian command is 'Love your neighbor as yourself.'
Medieval	After division of politic and ethics, state and church, number of ethical theories emerged directly connected with responsibility, on the first place Kants moral philosophy and Webers protestant ethics. So the term responsibility takes place of duty in ethics.
Modern	Development of technic, technologies and principles, usage of resources and endangering to environment caused emergence of new ethical approach, based on the elements of ethical responsibility. This principle aside to responsibility is characterized with responsibility for others.
Post modern	New technologies, industry 4.0, climate changes, pandemics are demanding emergence of new ethical theory, which pints on collective responsibility and totally treat responsibility (total responsibility).

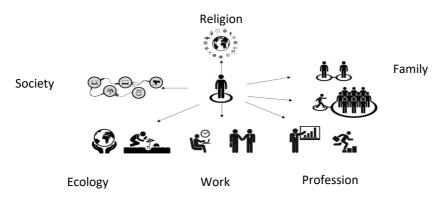**Figure 1.** Clasification of responsibility

Figure 2. Individual in the context of responsibility

Person has number of responsibilities. On the first place person is responsible for himself, because he or she refused to do delegated task, or have not foiled delegated commitments or cross over moral boundaries, consciously and willingly. On the second place person is responsible for family and close individuals, due to not helping them or have not met their requirements. It also could not be neglected relation to other people. Responsible to society and especially toward environment is obligation toward future generation, resources and to the general quality of life. Responsibility for professional and job is relation described by responsibility. Person is also responsible to God, because in his soul people have seed of divine. This is an approach in analysis of relation between person and responsibility in the all scope of persons' activities and intensities in order to provide concept of total responsibility. You cannot be responsible toward profession and irresponsible in all other fields. If we wish to reduce responsibility only to active part,

neglecting religious dimension, then we responsibility is divided on natural one delegated (artificial).

This manuscript has delegated responsibility in its focus.

This responsibility could be only realized by acceptance of some kind of agreement, according to specific conditions, so it is called conditional responsibility. It means that wit acceptance of specific task we accept some level of responsibility according to content and time. Using this approach we have binding character of responsibility, having the root in agreement. Being responsible as person mean to fulfill commitment, being reasonable, doing according to conscience, and performing the task for award. Meaning of responsibility is based on obligation from which we derive all other meanings (Martin & Schinzinger, 1989; Vujović et al., 2014).

According to different researches (Vučković, 2000; Ropohl, 2009) morphology of responsibility is presented in the table 2.

Table 1. Morphology of responsibility

SUBJECT	INDIVIDUAL	ORGANISATION	SOCIETY
OBJECT	Action	Product	Omission
CONSEQUENCES	Predictable consequences	Unpredictable consequences	Remote consequences
VALUES	Moral rules	Organizational values	Laws and regulations
ACTION	Conscience	Judgment of others	Court(s)
TIME	Before	Present	After
WAY	Active	Virtual	Pasive

While it is clear that responsibility is a relationship in which someone is responsible for something, nevertheless this simple formula cannot cover all the elements of responsibility.

Therefore, the morphology of responsibility includes:

- The subject of responsibility, which is broken down into the bearers of responsibility: the individual, the organization or the society (institutions). An entity's responsibility can be held responsible, that is, be responsible

for something, it can take responsibility for something, it can be held accountable and, ultimately, it can act responsibly.

- The object of responsibility is first the act, the action that someone performs. So that the individual is responsible for the activities (actions) entrusted to him, the organization is primarily responsible for the product / service, process and system, and the institutions for defining reactions to they may also miss out on surveillance for defined area of work.

Z. Krivokavpić, M. Stefanović

- Consequences of liability, refer to intended and unintended consequences. Responsibility for something is not only viewed on the basis of cause and effect, but should also include the context of events.
- Responsibility values. Accountability is always based on values. These values for the individual are conditioned by moral rules, for organization they are linked to business values (values which are inherited by the organization), doxidual values are most often manifested on the basis of prescribed norms (laws, regulations, standards…)
- Fact gives an answer to who is responsible. Although the answer is multifaceted, it is clear that one's own conscience has the greatest influence on the individual, while the organization is the basis of the court of others, especially the beneficiaries, while the judiciary (rule of law) plays the most important role for society. One cannot ignore the role, especially the public opinion. One open-ended question is: which instance is the last before which is responsible. In principle you should answer to anyone who is able to ask the question "why?", "with what right?".
- Responsibility time refers to the question of when liability arises. It points to the many-sided responsibilities that result from focusing on different temporal dimensions. Of course, the individual has the opportunity to look at the time before the act or act, the organization acts at the time the product / service is created, and the institutions act subsequently. These responsibilities can be defined as retrospective or prospective. The retrospective notion of responsibility refers to the actions behind us and their consequences. The prospective notion of responsibility begins before self-employment, it is followed by itrails as they last.
- The mode of accountability, is a testament to our responsibility. Thus, the individual is an active participant, an organization virtuous, and society (institutions) passive.

3. Quality management system

In everyday life, we are often confronted with the notion of quality that has different sounds, e.g. trait, characteristic, virtue, value and always associate with something good.

Quality as a term today is often enhanced by the adjective total (although the word itself denotes the ends, it should be seen as complete, all-encompassing), so that total quality does not only signify the quality of an object, but encompasses all activities aimed at complete improvement, so it is a state of mind, a way of thinking and acting.

Quality and excellence are two words that are used in a close sense, sometimes with a certain level of overreacting, but we need to avoid mistake in understanding of these terms. Excellence is not about seeking performance beyond what is required, but exploring ways to eliminate the causes of errors, real or potential. Excellence refers to the concept of continuous process improvement through systematic effort.

Quality refers to three entities:
1. Quality is in the product. Quality is sometimes referred to as if it were an independent (separate) object. Here, quality is expressed by the set of characteristics inherent in the product.
2. Quality is in the process. The second meaning is a complement to the previous one, where emphasis is placed primarily on the process of

realization and everything is tried to be kept under control.

3. Quality is in the system. Quality is everyone's concern and no one can distance itself from quality. Taking into account the three stated objects, which must also include a society in which individual will not be an adjunct to new technologies, the development of a quality philosophy can be represented by Figure 3 (Krivokapić et al., 2016; Delis et al., 2017).

Figure 3. Development of quality philosophy

The concept of quality has become a planetary phenomenon thanks to the emergence and development of ISO 9001. ISO 9001 was first formalized in 1987 and is the first step in creating trust between users and suppliers. At that time, a quality infrastructure was introduced and consistently built, which should guarantee the confidence of all interested parties, with evidence through system certification.

This phase of initialization of quality system standards can be treated as formal. It was insisted on consistently meeting the requirements for different models (ISO 9001, ISO 9002 and ISO 9003).

The first revision of this standard was publicly promoted in 1994 and was only a cosmetic upgrade of the first version.

Significant changes to the standards occurred in 2000, when the process approach of the standard was promoted, which has eight principles in the foundation, which by joint action guarantee the raising of the level of effectiveness and efficiency (Filipović et al., 2018).

The revision in 2008 was expected to bring about significant new changes, however, the revision of ISO 9001: 2008 remained at the level of correction of inconsistencies or identified needs for further clarification.

A significant step forward for the unification of all standardized management systems was in the year 2013, when the annex SL emerges, which, on the basis of a unique architecture, provides guidelines to be followed by all management system standardizers.

On this structure we had an audit of ISO 9001: 2015, which, following a process approach, introduces a significant novelty and is based on risk-based thinking. All the current development of the standards of management systems has undergone through evolution, which is the best witnessed by over one million certifications of organizations of various activities and sizes. The basis for this success should be found on the strengths that provide the process approach, the 3P concept and risk management (Figure 4) (Krivokapic & Vujovic, 2011; Krivokapić et al., 2018).
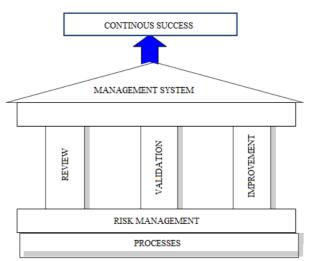
Figure 4. Basis of quality management system as a road to continous success

Based on Figure 4, it follows that the fundamentals of a quality management system based on a process approach, all processes are evaluated on the basis of adequate risk management tools, in order to channel the three validated tools (review, validation and improvement) to the quality management system on the way to continuous success.

3.1. Responsibility as a role in QMS

An organization, in the function of its responsibility, which primarily refers to certified organizations, should provide a better quality of product / service, and constantly improve its processes and provide a more efficient and effective system.

Of course, all this is overseen by certification bodies, which rely on quality infrastructure, and the court on the condition of all actors provides the market with the basic aspiration of society to raise the quality of life. The key actor in all of these elements is the individual (P), who ensures his responsible action through continuous learning, enhancing knowledge and increasing competence (Figure 5).

For such a relationship, the morphology of the participants can also be defined, as shown in Table 2.

In the context of the development of ISO 9001, looking from the point of view of significant revisions, there is an increase in the level of responsibility (Figure 6).
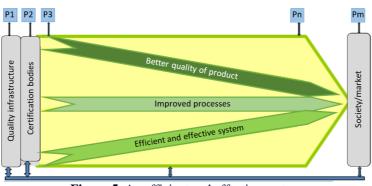

Figure 5. An efficient and effective system

Table 2. Morphology of the participants

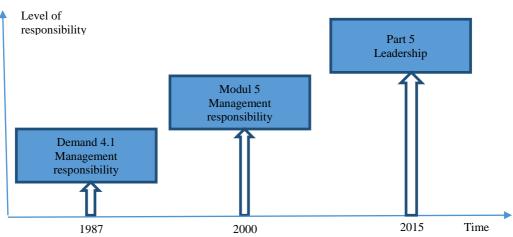| SUBJECT	EMPLOYEES	ORGANISATION	QUALITY INFRASTRUCTURE
OBJECT	Activity in process	System	Reclamation
CONSEQUENCES	Redictable consequences	Risk evaluation	Ensurence policies
VALUES	Moral rules	Principles of QMS	Rules, directives, and principles of quality management
ACTION	Preventive measures	Certification	Monitoring
TIME	Before	Present	After
WAY	Active	Virtual	Pasive

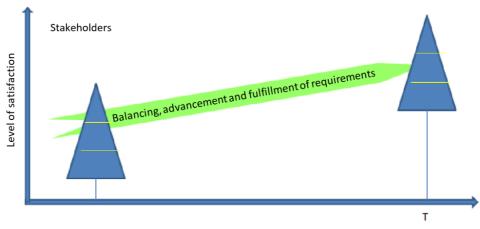**Figure 6.** Level of responsibility of QMs over time

It should be emphasized that the basic requirement of the previous versions of the quality management system is that the responsibility of the management, following the theory and practice, has become a new concept of leadership.

Then, on the basis of a literal analysis of the standards ISO 9001: 20008 (requirement 5.5.1.) and ISO 9001: 2015 (requirement 5.3), someone could conclude that requirement 5.5.1 is more complete in the area of responsibility. Based on the situation on the ground, ie. in the testimonials and certificates of organizations received from the certification body, it is clear that 99.9% of certified quality management systems have approached HOLOS in certification. Expert logic based on requirement 5.3 is reduced to Pareto ratio (80:20), because experts believe that these 20 most commonly refer to small, micro, or self-contained fractals that belong to a larger whole (Krivokapic, 2019).

However, one must keep in mind the context, which, in the spirit of developing a management system standard and standardization principles, requires that the requirements of the standard should be strengthened, which means that the role of responsibility cannot be minimized.

On the contrary, as the standard shifts the focus from manager to leader, so responsibility is shifted to leaders, as evidenced by Figure 7.

Z. Krivokavpić, M. Stefanović

Figure 7. From management (triangle) through leadership

Fig. 7 clearly shows that in the vision of the leaders we have a clear aspiration for a greater level of satisfaction of all stakeholders, and by engaging them through balancing, advancement and fulfillment of requirements, with a view for the future, the responsibilities of managers and leaders differ. which can be formally expressed by relations:

- $Ol = f(T)$,
- $Om = f(dt)$,
- Ol- Leader Responsibility
- T –Leadership Vision Timeframe
- Om – Manager Responsibility
- dt – Manager Responsibility Interval

Considering the development of standards in the spirit of standardization principles and life-cycle rules, it is not difficult to conclude that previous versions of the standard have paved the way for increased levels of responsibility, and that a new revision on this basis alone goes a step further strengthens the power of responsibility.

This relationship of the role of responsibility in the quality management system is based on a holistic approach.

4. Conclusion

Irresponsible action can only be taken if the accountability exists.

In order to crystallize the attitude towards performance, the standards of the management system, of which ISO 9001 is the root one, have always insisted on management responsibilities.

As the new revision of standardized management systems is developed on the basis of Annex Sl, it is the basis of all management systems and shift away from management to the leadership.

This paper indicates a misunderstanding of the position of ISO 9001: 2015, where it can be stated at first that the area of responsibility is narrower than in previous versions of the standard.

It would turn out, as in our everyday life, that everything starts from 2015, that there is no continuity and that the principles of standardization are a letter on the paper.

Only by applying morphology of accountability can it be proven that this is not so. Overall action, and as soon as responsibility then begins, has a clear striving for a better and better quality of life.

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