

Luburić, Radoica

Article

Quality Management Principles and Benefits of their Implementation in Central Banks

Journal of Central Banking Theory and Practice

Provided in Cooperation with:

Central Bank of Montenegro, Podgorica

Suggested Citation: Luburić, Radoica (2015) : Quality Management Principles and Benefits of their Implementation in Central Banks, Journal of Central Banking Theory and Practice, ISSN 2336-9205, De Gruyter Open, Warsaw, Vol. 4, Iss. 3, pp. 91-121,
<https://doi.org/10.1515/jcbtp-2015-0013>

This Version is available at:

<https://hdl.handle.net/10419/217579>

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DE GRUYTER
OPEN

UDK: 005.6:336.71

DOI: 10.1515/jcbtp-2015-0013

Journal of Central Banking Theory and Practice, 2015, 3, pp. 91-121

Received: 14 August 2015; accepted: 30 August 2015

Radoica Luburić*

* Central Bank of Montenegro

E-mail:

radoica.luburic@cbcg.me

Quality Management Principles and Benefits of their Implementation in Central Banks

Abstract: This article discusses the principles of quality management and benefits of their implementation in central banks. It is based on new principles of quality management, in particular to: customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and, relationship management. With a view to continuously improving their performance and achieving sustained success, central banks have a realistic opportunity to use these principles in an efficient and effective manner whereby the top management certainly holds the most responsibility. Quality management principles are analysed herein both in their original form and in terms of their implementation in the financial system and its most prominent entity - central bank. The article also incorporates new standard-related terms such as 'context' and 'risk-based thinking' that significantly strengthen quality management principles and contribute to a more effective and efficient achievement of sustainable success.

Keywords: Quality management principles, Customer Focus, Leadership, Engagement of People, Process Approach, Improvement, Evidence-based Decision Making, Relationship Management, benefits, implementation, central banks.

JEL Classification: M00, M54

1. Introduction

Quality management principles that top management uses as guidance in running an organisation with the aim of continual improvement of the organisation's

performance are in the focus of numerous international standards, in particular ISO 9000:2005, *Quality management systems – Fundamentals and vocabulary*¹ and ISO 9001:2008, *Quality management systems – Requirements*.² The international standard that considers these principles in the context of achieving financial and economic benefits is ISO 10014:2006, *Quality management – Guidelines for realizing financial and economic benefits*.³ However, the international standard ISO 9004:2009, *Managing for the sustained success of an organization – A quality management approach*⁴ is particularly important for our topic.

All these international standards are based on eight quality management principles in one way or the other: customer focus, leadership, involvement of people, process approach, system approach to management, continual improvement, factual approach to decision making, and, mutually beneficial supplier relationships (ISO, 2009, p. 38-42). Given that this article addresses the issue of achieving sustainable success of an organisation and a central bank in a wider sense and narrower sense, respectively, we will consider quality management principles through the prism of the relevant international standards. Further on, we indicate the standardized description of the principles and benefits arising from their use, as well as measures that the management usually takes in order to improve an organisation's performances.

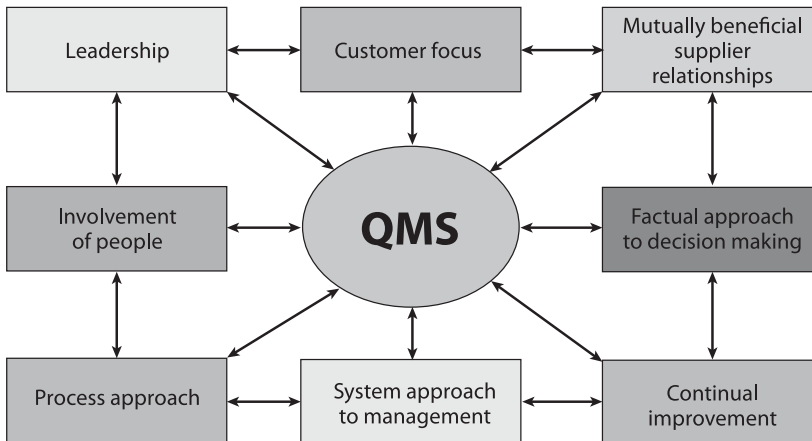
¹ The Montenegrin standard *MEST EN ISO 9000:2009, Quality management systems – Fundamentals and vocabulary* corresponds to the international standard ISO 9000:2005, *Quality management systems – Fundamentals and vocabulary*.

² The Montenegrin standard *MEST EN ISO 9001:2009 Quality management systems – Requirements* corresponds to the international standard ISO 9001:2008, *Quality management systems – Requirements*. The addition to this standard is the correction of EN ISO 9001:2008/AC:2009 that corresponds to the correction of the Montenegrin standard *MEST EN ISO 9001:2009/Cor.1:2009*.

³ The addition to the international standard *ISO 10014:2006, Quality management – Guidelines for realizing financial and economic benefits* is also its technical correction *ISO 10014:2006/Cor.1:2007*.

⁴ The Montenegrin standard *MEST EN ISO 9004:2010 Managing for the sustained success of an organization – A quality management approach* corresponds to the international standard ISO 9004:2009, *Managing for the sustained success of an organization – A quality management approach*.

Figure 1: Overview of eight quality management principles based on the international standard ISO 9004:2009, *Managing for the sustained success of an organization – A quality management approach*.



(Source: Luburić, R. (2010). *Umijeće uspješnog upravljanja, Zasnovano na svjetskoj teoriji i praksi upravljanja ukupnim kvalitetom*, p. 43.)

As it can be seen in Figure 1, the network of principles makes up a polycentric system which starts with customer focus, and then continues with leadership, involvement of people, process approach, system approach to management, evidence-based decision making, and ending with relationship management. In this consistent network system, all the aforesaid principles are both individually and jointly very important for the management success and they achieve full effectiveness and efficiency when they act together, which means acting in a harmonious, synchronized, and synergistic manner. Failure to follow any of these principles and its requirements jeopardizes the entire management system.⁵

Quality management principles given in the international standard *ISO 9001:2015, Quality management systems – Requirements* significantly differ from the previous version, both in the formal and substantive terms. Unlike earlier international standards, this standard identifies seven quality management principles: customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and, relationship management (ISO, 2015, p. vii).

⁵ For more details see: Perović, M. & Krivokapić, Z. (2007). *Menadžment kvalitetom usluga*, p. 92.

Figure 2: Overview of seven quality management principles based on the international standard ISO 9001:2015.



As seen in Figure 2, the key difference in relation to other standards is that this standard does not accentuate the principle of system approach to management as it considers it a part of the process approach, as well as of the other quality management principles. However, that is not all. A significant difference in the principles that used to be designated as “Continual improvement” and “Mutually beneficial supplier relationships” is that they are now referred to as “Improvement” and “Relationship management”, respectively. We will see where these differences are reflected further on as we analyse each of the seven principles individually, both in their original format and in terms of benefits of their implementation in central banks.

The spectrum of implementation of quality management principles in central banks is rather wide, both individually and as a whole. However, let us first see how central banks can be defined as that could facilitate the identification of potential areas of implementation of these principles.

The *International Monetary Fund* (IMF) characterizes central bank as the national financial institution that exercises control over key aspects of the financial

system and carries out such activities as issuing currency, managing international reserves, transacting with the IMF, and providing credit to other depository corporations. In a wider sense, central bank involves the currency boards, as well as government-affiliated agencies that are separate institutional units and primarily perform central bank activities (this type of central bank is usually called payment or monetary authority) (IMF, 2000). However, some common characteristics can be drawn from numerous definitions given in economic dictionaries and encyclopaedias, professional literature, and prescribed institutional norms that basically define central bank as the supreme monetary institution that can perform a series of different functions and which has the monopoly over currency issue, with the primary objective of maintaining price stability in a narrow sense and financial stability in a wider sense.

In practice, however, central bank objectives are defined in very different ways although they mostly come down to price stability.

The main objective of the *European Central Bank (ECB)*, for example, is price stability that is considered to be reached if the rate of inflation, measured by the Harmonised Index of Consumer Prices (HICP) is below, but close to, 2% over the medium term. Also, without prejudice to price stability, the ECB should support the general economic policies in the EU with a view to contributing to the achievement of full employment, balanced and non-inflationary growth, high level of competition, and convergence of economic performances. The objective of the U.S. *Federal Reserve (FED)* is maximum employment, stable prices, and moderate long-term interest rates. The *Bank of England's* objective is to deliver price stability and support the HM Government's economic policy, including its objective for growth and employment (Fabris, 2006. p. 14).

The objective of the *Bank of Japan* is to issue bank notes and carry out currency and monetary control. The *Bank of Canada's* objective is to regulate credit and currency in the best interest of the economic life of the nation, to control and protect the external value of the national monetary unity and to mitigate by its influence the fluctuations in the general level of production, trade, prices, and employment so far as may be possible within the scope of monetary policy instruments, as well as to promote economic and financial welfare of Canada. The objective of the *Sweden's Riksbank* is the maintenance of price stability and the promotion of safe and efficient payment system.

The Croatian National Bank's objective is the achievement and maintenance of price stability. Without prejudice to the main objective, the Bank should support the Government's economic policy. The objective of the Central Bank of Bosnia

and Herzegovina is the achievement and maintenance of stability of the domestic currency by issuing it according to the rule known as a currency board. The National Bank of Serbia's objective is the achievement and maintenance of price stability. Due to its specific monetary system (euroisation), the Central Bank of Montenegro defines its objective in a different way – maintenance of financial stability. Also, it is to contribute to the achieving and maintaining of price stability (Fabris, 2006. p. 14).

After a brief introduction with the objectives of a selected number of central banks, let us get back to the quality management principles and opportunities for their implementation in this supreme monetary institution. As we have already said, the acceptance of quality management principles represents a strategic decision of top management. This confirms the connection between effective management and achievement of financial and economic benefits. Development of proper methods and tools fosters the development of a consistent system approach to setting up financial and economic objectives. Economic benefit is generally attained through effective management of resources and implementation of applicable processes for the improvement of common good and situation in an organisation, while financial benefit is the result of organisational improvements in monetary terms and it is realized by applying cost-effective management in the organisation.

Successful integration of the management principles relies on the application of the process approach and the Plan-Do-Check-Act (PDCA) methodology. This approach enables top management to assess requirements, plan activities, allocate appropriate resources, implement continual improvement actions and measure results in order to determine effectiveness. It allows top management to make informed decisions, whether they relate to the definition of commercial strategies, the development of a new product or the execution of financial agreements (ISO, 2006, p. v-vi).

After all the aforesaid, we can conclude that financial and economic benefits that could result from the implementation of the quality management principles in the financial system, and thus in central banks as well, could cover a series of very important elements of sustainable success in central banks such as: improved profitability, improved revenues, improved budgetary performance, reduced costs, improved cash flow, improved return on investment, increased competitiveness, improved customer retention and loyalty, improved effectiveness of decision making, optimized use of available resources, heightened employee accountability, improved intellectual capital, optimized, effective and ef-

ficient processes, improved supply chain performance, reduced time to market, and enhanced organizational performance, credibility and sustainability.⁶

However, in case of central banks, we should add that these quality management principles also contribute to the achievement of the main central bank mission – price/financial stability. Further on, we will address each quality management principle and try to identify their individual benefits.

2. Customer Focus

“Customer focus” is the first quality management principle and one of the key factors of successful business. The international standard ISO 9004:2009 (ISO, 2009, p. 38) describes this principle as follows: *“Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.”* This standard identifies three key benefits of this principle: increased revenue and market share obtained through flexible and fast responses to market opportunities, increased effectiveness in the use of the organization’s resources to enhance customer satisfaction, as well as improved customer loyalty leading to repeat business.

Application of the “Customer focus” principle could lead to significant results in research and understanding customer needs and expectations, ensuring that the objectives of an organization are linked to customer needs and expectations, communicating customer needs and expectations throughout the organization, measuring customer satisfaction and acting on the results, systematically managing customer relationships, ensuring a balanced approach between satisfying customers and other interested parties such as owners, employees, suppliers, financiers, local communities and society as a whole (ISO, 2009, p. 38).

Putting customers in focus has been the main idea behind the entire way of observing quality. Quality has been the foundation and customer focus the basis of the entire concept of quality management, whereby the concern has always

⁶ International standard ISO 10014:2006, *Quality management – Guidelines for realizing financial and economic benefits* refers both to the public and private sectors and it can be a useful guideline regardless of the staffing, product diversity, income, process complexity or the number of locations. It also provides support to the public and government organisations in facilitating sustainable economic growth and progress.

been of what customers think of the quality of products and services⁷ and not what others think. With time lapse, it has become more apparent that in order to achieve a sustained success, an organisation should not necessarily be preoccupied with customers only (although they have remained most important) but due consideration should be given to other interested parties as well. In the process of attaining sustained success, interested parties take special place as they, as we already know, also have their own needs and expectations that should be adequately met.

The importance of this was also recognized in the standard that deals with the sustained success of an organisation. In a nutshell, it identifies the most important needs and expectations of interested parties. For example, while the main customer needs and expectations involve product quality, price and deliver performance, the most important needs and expectations of owners/shareholders are profitability and transparency. People in an organisation have the need for good working environment and job security, expecting also proper recognition and award for their work. Suppliers and partners focus on mutual benefits and continuity. Society, however, has the need for environmental protection and also expects ethical behaviour and compliance with laws and regulations (ISO, 2009, p. 3).

As we have already said, the primary focus of quality management is to meet customer requirements and to strive to exceed customer expectations. Sustained success is achieved when an organization attracts and retains the confidence of customers and other interested parties on whom it depends. Every aspect of interaction with customers offers possibilities of creating added value for them, whereas understanding current and future needs of customers and other interested parties contributes to sustained success of an organization.

As per quality standards, customer can be identified as a person or an organisation that receives a product or a service. Let us clarify this statement. The term “customer” can cover, for example, a consumer, client, end-user, retailer, but also inputs for the internal process, beneficiary, purchaser, and others. As for the organisation, its customers can be internal or external, depending on whether they are inside or outside the organisation. An output of every internal process is an

⁷ The international standard *ISO 9001:2015* standard makes reference to “products and services” that cover all categories of output categories (hardware, services, software, and processed materials). Specific reference to “services” is meant to emphasize the differences between products and services. The characteristic of services is that at least one part of output is realized on interface with the customer. For a better understanding of these terms, output is the same as process result, whereas interface implies component links between two or more separate sub-systems (ISO, 2015, p. 21-22).

input for the next process, and the next process is internal customer of the previous process.

Communication with both customers and other interested parties is important for achieving sustained success of an organisation. An organisation needs to establish processes for the communication with customers concerning the information on products and services, as well as inquiries, contracts or handling orders, including any changes thereof. In addition, this communication also has to serve the customers to communicate their opinions, perception, and objections as well.

Applying the “Customer focus” principle of quality management and the PDCA methodology of continual improvement generates numerous significant benefits such as: improved profitability, increased competitiveness, improved customer retention and loyalty, improved supply chain performance, reduced time to market, as well as enhanced organisational performance, credibility, and sustainability (ISO, 2006).

When it comes to central banks, this principle is extremely important although central banks do not have individual customers as is the case with financial institutions (such as banks) or some production companies. However, end-users of central bank services is the public, that is, all citizens and all companies because central bank has to ensure price stability that is the main prerequisite for the development of both businesses and economy. Therefore, this principle is of great importance for central banks since its implementation largely affects the extent to which other institutions will be efficient in following this principle in their day-to-day operations.

3. Leadership

This quality management principle is of key importance for achieving sustained success of every organisation, including central banks. In order to fathom the essence of leadership, we should first try to properly define it, which is far from being an easy or simple task. Leadership is such a complex concept that there is no universal definition that could cover all that make its essence. Although it has been the top topic discussed and written about, the question that keeps resurfacing is – what leadership really is? This is best illustrated by the fact that there is still no complete, comprehensive and definitive answer about this phenomenon and there can hardly be any. Maybe this is because everyone has their own view on leadership, same as when it comes to other similar phenomena such as democracy, peace and love.

The eminent American experts and writers of numerous papers in this field, Tom Peters and Nancy Kimball Austin, believe that leadership is crucial to the success of an organization, that it must be established at all levels of the organization, and that it must involve a wide range of very important and very sensitive variables. For these top researchers, leadership means “*vision, cheerleading, enthusiasm, love, trust, verve, passion, obsession, consistency, the use of symbols, paying attention as illustrated by the content of one’s calendar, out and out drama (and the management thereof), creating heroes at all levels, coaching, effectively wandering around, and numerous other things.*” (Dent, 2006, p. 6). A famous American scholar, Professor Warren Bennis, described leadership as “the capacity to translate vision into reality.” This world-renowned author of numerous books on leadership astutely noted the essential difference between managers and leaders: “Managers do things right. Leaders do the right things.” And how much he believed in the strength and power of leadership is best supported by his statement: “If you have to choose only one element to make a company better, then it is certainly leadership”.⁸

Indeed, leadership is a driving force of success whose power lies largely in the ability of leaders to “bestow their dreams” to people, as well as to master their own and other people’s emotions. Leadership is, in fact, the art of mobilizing people to be selfless and to struggle to realize their common aspirations with fervour. Such liberated and creative energy, if effectively and efficiently managed and used, always gives certain results and often leads to the attainment of set goals. Scholars have singled out several key components that can help to review and define leadership in a holistic and comprehensive manner. All these components are organically related and interdependent, and boil down to the fact that leadership is a process, that it exercises influence, that leadership arises in the context of a group, and that leadership involves goal attainment. Based on these claims, leadership could be defined as “a process whereby an individual influences a group of individuals to achieve a common goal.” (Northouse, 2008, p. 1-2).

The international standard ISO 9004:2009 demonstrates the quality management principle by indicating what leaders should be doing: “*Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization’s objectives.*” The same standard also defines three key benefits from this principle that could come down to this: people will understand and be motivated to achieve general and particular goals of an organisation, activities are

⁸ http://www.fms-tivat.me/predavanja4god/Nauticki_turizam9.pdf.

valued, harmonized and applied in a unique manner, and inadequate communication between various levels in the organisation is to be reduced to minimum.

Application of the leadership principle is necessary for the purpose of attaining a sustained success of an organisation as it leads to numerous positive effects such as taking into consideration the needs of all interested parties, including customers, owners, employees, financiers, local communities, and society as a whole. It also leads to establishing a clear vision of the organisation's future, setting general and specific objectives, creating and maintaining shared values, righteousness, and ethical models at all levels within its framework, leading also towards the establishment of confidence and elimination of fear, provision of necessary resources, training and freedom to employees so they could act responsibly and reliably. The leadership principles could lead effectively towards inspiring, encouraging and recognizing people's contribution, which is very important in achieving sustainable success (ISO, 2009).

Pursuant to ISO 9001:2015 (ISO, 2015, p.3), top management is to demonstrate leadership and commitment with respect to customer focus by ensuring that: customer and applicable statutory and regulatory requirements are determined, understood and consistently met, the risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed, as well as the focus on enhancing customer satisfaction is maintained. Leaders at all levels establish a unity of purpose and direction and create conditions in which people are engaged in achieving quality objectives of the organization. Creation of the unity of purpose, direction and engagement enable the organization to align its strategies, policies, processes and resources to achieve its objectives.

Leaders in various organisations have different goals but they are all measured by the same yardstick – the level of achievement of what has been planned. Organisations need effective leaders that develop team work and fulfil their objectives, as demanded and expected by their followers. There is no good leader without a good team. The type of leadership that could respond to the needs and expectations of this management principle is *team leadership*. This type of leadership, however, is very complex, primarily because there are no simple recipes for team success.

Team leaders must learn to be open and objective when identifying and considering team problems, as well as in the process of implementation of the team objectives. It is important to underline that these key functions should not be solely performed by the leader but also by more experienced team members in order

to stimulate their responsibility and leadership behaviour. As long as the team's most important needs are met, leadership is considered to be effective, regardless of being manifested by the leader himself or by certain team members. The key claim from the functional aspect is that the "leader is to do whatever is necessary to take care of unmet needs of the group. As long as the group members are taking care of most of the needs, then the leader has to do very little." (Northouse, 2008, p. 148).

The key characteristic of team leadership is mutual confidence and respect. A team leader always has confidence in, and respect for, the people in his team. He sets flexible goals for his people, adjusts the pace, intensity, and rhythm, he stands ready to take personal responsibility for the team's results, gives constant feedback, and acts as a team coach to his people. The team leader adapts his authority to team work and team spirit and he does not mind doing that as he is capable of recognizing the moment when to leave independence to his team and when to engage actively and act effectively and efficiently. And maybe the most important thing is that a leader learns together with his team and followers, and the learning is based on requirements, needs, and expectations of users and other interested parties.

Essentially, the role of team leaders is different from their traditional roles. The attention of the leaders of the team in today's business circumstances should focus on two priorities: managing external constraints affecting the team and facilitating team process. It is not a small challenge for the top management to learn how to become effective team leaders because it implies that they have to learn skills such as patience to convey information, to trust each other, that they are able to give up the role of the authority, as well as to build the capacity to recognize the moment when to intervene.

For someone to be a successful leader it is very important to have emotional intelligence. Well-known American professors and researchers, *Daniel Goleman*, *Richard Boyatzis*, and *Annie McKee* indicate that for a success, it is no longer sufficient to have a high IQ. Without emotional intelligence, one can be a good analyst, an intelligent manager, have great ideas and personal relationships but simply fail being a good leader. As these authors argue, emotions are extremely important for management of an organisation (as, indeed, for everything else as well) where "primal leadership" is the most important dimension that largely determines "whether a leader's other efforts take off or go awry."⁹

⁹ For more details see: Goleman, D; Boyatzis, R. & Maki, E. (2006). *Emocionalna inteligencija u liderstvu*, *Naučite da emocionalno inteligentno rukovodite*; Goleman, D. (2014). *Emocionalna inteligencija*.

Daniel Goleman went a step further in his research, stepping into biology and neuroscience to discover that “we are wired to connect” and that this has a profound influence on our relations in every sphere of our lives. And much more than we are aware, our everyday encounters – with our parents, spouses, bosses, colleagues, like-minded people and opponents, and even strangers – shape our brain, either in a good or a bad way, affect our bodies on the cellular level, all the way to our genes. In his book on social intelligence, *Goleman* explores this “new science” by pointing to its astounding implications to our interpersonal world. Our reactions to others, and their reactions to us, have a far-reaching biological impact as they send out “cascades” of hormones that regulate everything from our hearts to our immune systems, “making good relationships act like vitamins—and bad relationships like poisons.” This eminent scientist warns that we can “catch” other people’s emotions the way we catch a cold, and the consequences of isolation or persistent social stress can be life-shortening. It is very important that we, as human beings, have a built-in bias toward empathy, cooperation, and altruism – provided we develop the social intelligence to encourage these capacities in ourselves and others.”¹⁰

Besides emotional and social intelligence, another leadership concept has attracted attention more recently. Two respectable professors from the Harvard Business School, *Anthony J. Mayo and Nathan Noria* (2006, p. 8), introduced another concept in leadership and called it *contextual intelligence*. If *Goleman, Boyatzis, and McKee* showed that emotional intelligence is of key importance for leadership and that it is actually “winning over” people and allowing them to “win you over”, contextual intelligence goes a step further to grasp and tackle all social, economic and other factors in the environment that affect the organisation’s selected course of action.

Why mention all this? Because context is very important for the attainment of a sustained success of an organisation. This is specifically indicated in the international standard *ISO 9001:2015*. While this standard considers context in the sphere of business environment, in contextual intelligence, it remains in the area of thinking and preventive actions. No matter how we look at it, context is of vital importance as it shapes the structure of opportunities at a certain point in time. It seems that contextual essence, in fact, is the understanding of how to have the sense of contextual timing and opportunities it provides. This sense is what we see as contextual intelligence - a profound sensitivity to contextual factors at the macro level in creating, developing or transforming business and achieving

¹⁰ For more details see: Goleman, D. (2007). *Socijalna inteligencija, Nova nauka o ljudskim odnosima*.

sustained success. In their book on contextual intelligence called “*Their Time*”, Mayo and Noria write, among other things, about giants of the business world who had contextual intelligence and the ability to apply it in practice. Many of those giants had exceptional personal characteristics (willingness to take risks, a clear vision, thirst for innovation, infectious charisma, and the like), but these qualities were not critical for their success as was their ability to know when to apply them in a particular contextual framework (Mejo & Noria, 2006, p. 437).¹¹

Finally, it is not difficult to conclude that none of the business world giants was a pauper. This means that these people needed something else to achieve success and maintain sustained success. First of all, it is financial intelligence that leaders must possess in order to understand what the language of the financial world. The book of top U.S. financial experts, Karen Berman and Joe Knight, “*Financial Intelligence*”, reflects the fact that everyone in an organization works better when they understand how to measure financial performance and how they can affect its performance. Berman and Knight (2007, p. 16) found that “it isn’t some innate ability that you either have or don’t have... Financial intelligence is no more than a set of skills that must be, and can be learned.”

However, even if a leader had a remarkable level of emotional, social, contextual and financial intelligence, a leader is not a leader without power. Where does he draw this power from? A leader’s sources of power may come from his legitimate power (as a result of the position he has in an organisation), coercive power (through his authority to control and sanction), power to reward (rewards and benefits), professional power (influence based on expertise, special skills and knowledge) and the reference power (power that promotes based on the fact that a person has desirable resources or personal traits).

In nowadays uncertain environment, one of the main abilities of a leader is to gain trust and credibility. The main component of credibility is honesty. While credibility is the degree to which followers consider someone honest, competent, and capable of inspiring others, trust is the believing in integrity, character, and capabilities of a leader. The trust concept refracts through five dimensions: integrity (honesty and sincerity), competence (professional and interpersonal skills),

¹¹ Mayo and Noria relate *contextual intelligence* to the manner in which business executives reacted to contextual factors at the macro level (government interventions, global developments, demographics, social practices, technology, and labour force) in business design, development or transformation. In his book *The Triarchic Theory of Human Intelligence* (Viking, New York 1988), Robert J. Sternberg defines contextual intelligence as “mental activity directed toward purposive adaptation to, selection and shaping of, real-world environments relevant to one’s life”.

consistency (reliability, predictability, and good judgement in handling situations), loyalty (desire to protect a person, both physically and emotionally), and openness (desire to share ideas and information freely).

What is particularly important in leadership, especially in team leadership, is organisational culture because it affects an organisation's strategies (defining of the area of business, selection of objectives and strategies), determines its ability to change in order to adapt to the environment, represents its coordination mechanism, and it can be a very efficient mechanism of control of employees' behaviour and it is also a good motivator. National culture, on the other hand, significantly affects the leadership style because it determines the followers' attitude towards the leader.

We should add here that it is not easy to be a leader, especially a team leader. The one who tries to do everything alone and take all the credits for that will never be a good leader. A good leader is the one who works to make himself replaceable whilst ensuring that it is almost not felt in an organisation's key processes. A leader has to have many traits that are more than difficult to be found in one person alone such as physical qualities (health, vitality, behaviour, moves, gestures), mental qualities (judgement, mental strength, ability to understand and learn, adaptability), moral qualities (energy, strength, willingness to take responsibilities, initiative, loyalty, tactfulness, dignity) and who know what else because sometimes even all these traits are not enough.

Leaders are usually characterized by motivation, energy (enormous desire for success, ambition, initiative), honour and moral integrity (reliability, confidence), self-esteem (believing in their own values), cognitive abilities (ability to accept, process, and interpret a great deal of information), creativity (originality), desire for leadership (willingness to become a leader), flexibility (ability to adapt to various situations). Leaders also have some other features that are not usually found in ordinary people. Those are motivation to persevere in attaining objectives, voracious desire to lead and influence people, integrity that implies desire to turn words into actions, self-esteem that makes others have confidence in him, intelligence that usually consists of the ability to process information, address problems and find solutions, and especially emotional and contextual intelligence...

Organisation whose objective is to attain a sustained success should create opportunities for leadership and install it at all levels. Top management must show leadership and commitment to the quality management system by taking all that is necessary for its full effectiveness and efficiency. It has to show both leadership and commitment with regard to customer focus by ensuring that customer re-

quirements and statutory and regulatory requirements are determined and met, that risks and opportunities that that could affect the conformity of products and services, as well as enhance customer satisfaction are determined and addressed (ISO, 2015).

Top management should encourage and promote team work yet avoid “suffocating” inventiveness, creativity, and individuality. What always has to be borne in mind is that team leadership flies on the wings of synergy and joint actions, which is a great driving force and energy both for achieving and maintaining success. A win-win situation where both needs and expectations of interested parties have been met is always better than the one where only some win. Unfortunately, there is more than a few number of organisations where leadership is just a dead letter and sooner or later they find themselves in the lose-lose situation.

Leadership, as one of the most important quality management principles, is the core of effective and efficient management of central banks as well. By applying this principle and the PDCA methodology, the following benefits can be achieved: improved performance, increased competitiveness, improved customer retention and loyalty, improved decision-making effectiveness, optimized use of available resources, heightened employee accountability, improved intellectual capital, optimized, effective and efficient processes, improved supply chain performance, enhanced organizational performance, credibility and sustainability (ISO, 2006).

Leadership is of great importance for a successful achievement of central bank mission. The importance of leadership in central banks can be observed from two aspects: internal and external. The internal aspect implies that the governor and top management have leadership abilities in order to motivate employees to continuously improve performance, optimize the use of resources, increase accountability, and to improve overall processes. However, the external aspect is important in case of central banks as it can contribute to the achievement of the main central bank mission. Numerous studies have proved a direct link between central bank credibility and a successful pursuit of monetary policy and/or accomplishment of its mission. If a central bank enjoys high credibility and if its announcement are trusted, then economic subjects will behave in accordance with the central bank's expectations. For example, if a central bank announces a restrictive monetary policy and deflation, and economic subjects believe that is to happen, they will refrain from increasing the prices of their products and services, inflationary expectations will trend downward, and it will be much easier for the central bank to achieve its mission. However, for something like that to happen, it is necessary that the governor is a person who can be trusted, who has the ability to convince the public that he pursues a sound policy, that he will

persevere in the implementation of announced measures that are realistic and attainable. Therefore, benefits of the implementation of this quality principle in central banks are: improved overall credibility, increased motivation of employees, more efficient implementation of monetary policy instruments, which all leads to the achievement of central banks' ultimate mission.

4. Engagement of People

People are the most important factor of success and the very essence of an organisation. Only full engagement of people guarantees a safe path to establishing sustained success. The task of the organisation's management is to exercise their duties professionally, consciously and responsibly as well as to discover how to include its employees into making important decisions as that will make them accept as their own, and they will feel a greater responsibility and the obligation to implement them. For example, an economic policy cannot be successfully pursued where economy avoid involving workers or, for example, an education policy without pupils, students and their teaching staff. In other words, active success cannot be recorded without active and fruitful participation of those who have life interest.

The international standard ISO 9004:2009 characterised this principle as: *"People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit"*. The key benefits identified in this quality standard include motivation, commitment and inclusion of people within an institution, and their innovativeness and creativity in the implementation of its objectives. Vital benefits were also identified in the domain of personal responsibility, underlining that people are responsible for their own performance and that they are ready to participate and contribute to continual improvements. The standard notes that the application of people inclusion principle leads to people understanding their role and importance of its contribution and role in organisation, identifying limitations to their performance, and accepting problems not only as just being their own problems but also taking responsibility for tackling them, valuing their own performance against their personal and general objectives, and to actively strive for increasing own competence, knowledge and experience. In addition to the aforesaid, the standard dealing with sustained success states that the application of this principle shows free exchange of knowledge and experience among people, and open discussion on problems and issues (ISO, 2009).

It is of utmost importance that all employees in an organisation are competent, empowered and engaged in providing value. This importance is reflected so as

that competent, empowered and engaged staff in the organisation improve its ability to create value. Effective and efficient organisation management requires that all people at all levels are included in all working processes. Recognition, empowerment and enhancement of skills and knowledge facilitate the engagement of people in achieving objectives of the organization.

As in all other organisations, people are crucial for accomplishing central bank mission. Bearing in mind that central banks are very complex organisations with many sub-systems and processes and very high responsibility, even assuming the best possible leadership, central bank management cannot pursue its mission independently without full participation and engagement of employees. The aforesaid clearly notes that decision-making on people – selection, appointment and assessment – must have the highest priority. Top management should always bear in mind that full inclusion of employees and good selection of staff is the most important managerial decision. The application of this quality management principle and of the PDCA methodology for permanent improvements result in the following benefits in central banks: reduced costs, improved customer retention and loyalty, heightened employee accountability, improved intellectual capital, optimized, effective and efficient processes, improved supply chain performance, enhanced organizational performance, credibility and sustainability (ISO, 2006).

5. Process Approach

Stronger reference to processes primarily means that the attention has significantly shifted from final results (products and services) to the activity chain shaping these products. One of leading American and international scientists for improving business processes and the author of many books, *James Harrington* (1997), undoubtedly claims that processes play the key role in achieving success indicating that senior management creates vision and guidelines, a team resolves problems, associates provide creativity, but processes enable performing tasks inside an organisation.¹² On the basis of a three-year study of the organisation of companies in Sweden and the USA, a famous Swedish expert for processes *Olof Rentzhog* (2000, p. 17–18, 42) came to conclusion that results primarily depend on improving processes, that a process actually creates the result which has to be primarily managed and improved, and that, “as long as there are variations in the way the job is performed there will also be variations in the result”. For Rentzhog (2000, p. 42) a process is “*a chain of activities that in a recurrent flow creates value*

¹² For more details see: Harrington, J. H. (1991) *Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity and Competitiveness*

for the customer". Shigeo Shingo, one of the creators of the astonishing Japanese development in the post-World War II period, added the following recommendation to the "new production philosophy": *General rule is recommended: first study and rationalise processes, then consider options*.¹³

The international standard ISO 9004:2009 characterised this principle as follows: *"A desired result is achieved more efficiently when activities and related resources are managed as a process"*.

The same standard defined three key benefits from this principle. The first one is reflected through cost reduction and shorter cycle time through effective use of resources, the second one through improved, consistent and predictable results, and the third one in focused and prioritized improvement opportunities. Application of the process approach principle typically leads to systematically defining activities necessary to obtain a desired result, and to establishing clear responsibility and accountability for managing key activities and their analysing and measuring. It also leads to identifying the interfaces of key activities within and between the functions of the organization, and focusing on the factors – such as resources, methods, and materials – that will improve key activities of the organization. The application of this management principle also leads to evaluating risks, consequences and impacts of activities on customers, suppliers and other interested parties (ISO, 2009).

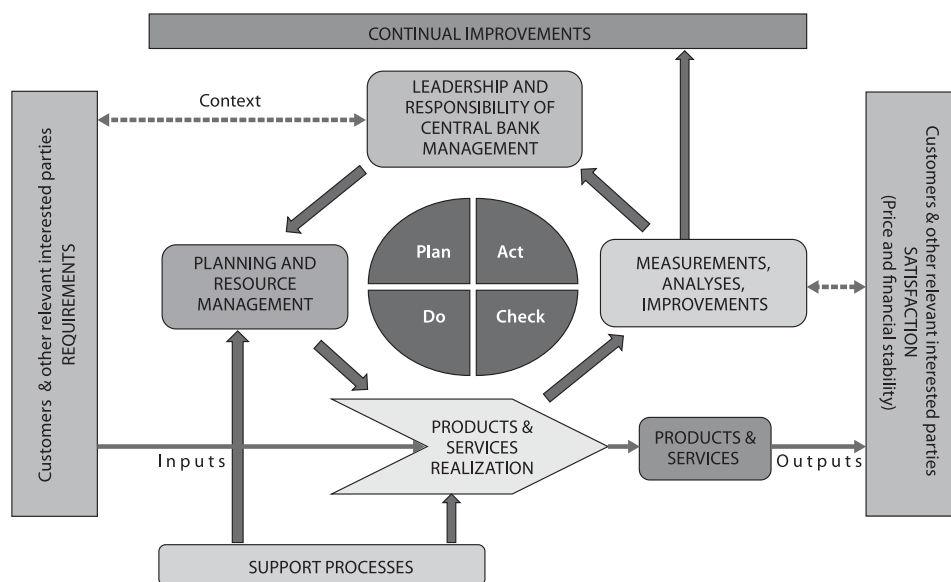
According to the international standard *ISO 9001:2015* (ISO, 2015, p. 2), the organization shall establish, implement, maintain and continually improve a quality management system, including the processes needed and their interactions. The organisation has to establish processes necessary for quality management system and to apply them in the whole organisation. It has to determine required inputs and expected outputs from these processes, their order and mutual interactions, as well as criteria, methods, including the measurements and related performance indicators necessary to ensure that the performance of these processes and their management are efficient. The organisation has to allocate required resources and ensure their availability, to determine responsibilities and authorities in these processes, to determine risks and possibilities in line with the quality management system requirements and to plan and pursue appropriate measures for their resolving.

Process may be defined as a set of interrelated or interacting activities which transforms inputs into outputs. Consequently, each activity, or a set of activities

¹³ For more details see: Šingo, Š. (1995). *Nova Japanska proizvodna filozofija*.

which receives inputs and transforms them into outputs may be considered a process. To function efficiently, organisations have to identify numerous interrelated and mutually interacting processes. Inputs in a process are usually outputs from other processes. Consistent and predictable results are recorded more effectively and efficiently when activities are explained and managed as interrelated process functioning as a single coherent system. Understanding how results appeared using such system, including its processes, resources, managing and interrelations, enables the organisation to optimise its performances. Figure 3 shows the process approach based model of quality management system in central banks.

Figure 3: Process approach based model of quality management system in central banks.



Customer satisfaction may be described as a customer's perception of the degree to which the customer's expectations have been fulfilled. In practice, however, it may happen that customer expectations are not familiar to an organisation or a person until the product or service has been delivered. Therefore, in order to achieve a high degree of customer satisfaction, it may be necessary to meet customer's expectations even when they have not been specified, or are not understood or obligatory by default. In general, customer's complaints are usually an indicator of its low satisfaction, although the absence of complaints does not necessarily mean high degree of satisfaction. Moreover, even when an agreement

is made with the customer on its demands, and when the requirements are met, it does not necessarily mean that high degree of satisfaction has been ensured.

As regards customer satisfaction, organisation has to monitor data referring to user perception on the degree of meeting its requests. Organisation has to collect data on customer's views and opinion on the organisation and its products and services. This is not the task to be performed easily, but the task where organisation has to determine adequate methods for collecting and using the information (ISO, 2015, p. 17).¹⁴

Customers play an important role in defining inputs the organisation has to fulfil in all phases of its quality management system. In addition, requirements and expectations of other relevant interested parties may also play a role in defining these requirements. Monitoring customer satisfaction requires valuing information on customer's perception of whether organisation has met these demands or not. Every individual processes and the system as a whole can be managed using the PDCA methodology.

Process approach applies systematic defining and process management, and their interrelations by accomplishing desired results in line with quality policy and organisation's strategic direction. Process and system management as a whole may be accomplished using "Plan – Do – Check – Act (PDCA)" methodology, totally focusing on "risk-based thinking" focusing on preventing undesired outcome. When used within a quality management system, process approach provides numerous different benefits such as understanding requests and consistency in their accomplishing, analysing processes in terms of value added, establishing its effective performances and improving processes on the basis of valuing data and information (ISO, 2015, p. vii-ix).

Central bank's mission is accomplished with the consistent structure of objectives implemented through multiple processes and sub-processes interrelated into functional and productive manner. Here is an example from a central bank's practice. In passing decision implementing a monetary instrument, the first process may be the compiling of statistical data on past key variables. On the basis of received input on the selected variable's trending, its possible trend in the coming period is assessed applying econometric models, which is another process. The third process is preparing proposal for the application of monetary

¹⁴ Information referring to customers' opinions may include user satisfaction surveys or public opinion polls, customers' inputs on quality of delivered products or services, analysis of market presence, praises, complaints in the guarantee validity, and traders' reports.

policy instrument based on inputs received from econometric analysis. In the last process, central bank's management passes final decision on the application of monetary policy instrument. However, the abovementioned processes in central banks need continual improvement. For example, the above econometric models are imperfect projections of future trends, which should be constantly improved on the basis of noticed deviations from forecasted value of a variable and its real trending. By applying this principle using the PDCA methodology of continual improvements, central banks receive the following benefits: correction of identified errors from previous periods, better quality of decision-making inputs, higher degree of connectedness of specific organisational units (to avoid the silo effect), monitoring modern trends in monetary policy, heightened employee accountability, optimized, effective and efficient processes, enhanced organizational performance, credibility and sustainability (ISO, 2006, p. 7).

6. Improvement

Sustained success cannot be recorded without constant improvements. *Professor Hubert Rampersad* (2010, p. 1), one of leading American experts in quality management, personal branding and leadership self-assuredly claims: "Organizations can only survive by continual quality improvement". The critical role of personal improvements in establishing sustained success was often pointed by Peter Drucker: "Whatever an enterprise does internally and externally needs to be improved systematically and continuously: product and service production processes, marketing, service, technology, training and development of people, using information. Let the systemic improvement become your priority." (Maciariello, 2012).

International standard ISO 9004:2009 characterises this principle as follows: "*Continual improvement of the organization's overall performance should be a permanent objective of the organization*" The same standard defines three key benefits from this principle: - improving performance through improved organisational abilities, harmonising improvement activities in all levels according to its strategic intentions and adjustability to quick reaction on possibilities. Application of constant improvement principle leads to the application of consistent approach in the entire organisation and to its permanent improving of performances, providing training of people on methods and tools for permanent improving, and establishing constant improvements of products. Application of this principle also leads to improving processes and system as an objective of each individual in an organisation, establishing guiding objectives, measures for monitoring constant improvements and recognising and awarding the improvement (ISO, 2009).

As it has already been mentioned, ISO 9004:2009 and earlier standards dealing with this issue, titled this quality management principle as “Continual improvements”, while it was renamed into “Improvement” in the ISO standard 9001:2015 – in singular and without the adjective “Continual”. However, the text of the standard uses both terms. *Continual improvement* is defined as the purpose of managing each process, while *improvement*, as a wider term, in addition to continual improvements and innovations, means refractive changes, corrective measures, and reorganisation. (ISO, 2015, p. 19-20).¹⁵ Successful organisations constantly focus on improving, as explained with the fact that improvement is of critical importance for their survival and development.

There is a confirmed rule that if we do not progress in quality, we will soon lag behind our competition. The best answer to it is continual improvement in customer orientation, as well as engagement of employees, leadership and process approach. This means that continual improvements have the integrative character of synergic acting. Continual improvements require the forecasting of demands and expectations of both users and relevant interested parties. The art of forecasting is one of the most important factors of achieving success.¹⁶

However, to be able to fulfil customers’ demands and improve their satisfaction, an organisation has to determine and choose improvement opportunities and apply necessary measures. If needed, these have to include improving processes for preventing non-compliance, improving products and services in terms of meeting known and foreseen requests, and improving quality management system results. Improvement may be achieved reactively (e.g. using corrective measures), gradually (e.g. with continual improvement), by changing steps (e.g. with refractive steps), creatively (e.g., with innovations) or by reorganisation (e.g. transformation).

Bearing in mind that total quality management finds continual improvement particularly important, an organisation that wants to apply this principle needs to continually improve appropriateness, adequacy and effectiveness of quality management system. It has to consider outputs of analysis and valuing, outputs from review by management, to confirm whether there are areas with unsatisfac-

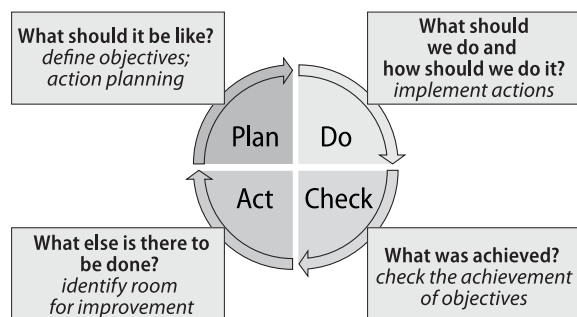
¹⁵ For better understanding, corrective measure is an action to eliminate the cause of nonconformity and to prevent its recurrence. *Corrective measure* is taken to *prevent recurrence*, while *preventive measure* is taken to *prevent occurrence*. Of course, it is always better to act preventively, following the saying *Better safe than sorry*.

¹⁶ For further reading: Radoica Luburić, *Umijeće uspješnog upravljanja*, Zasnovano na svjetskoj teoriji i praksi upravljanja ukupnim kvalitetom, Drugo izdanje, HESPERIAedu, Beograd 2010, str. 33-35.

tory performances or possibilities that have to be taken into account as a part of continual improvement. When possible, an organisation has to choose and use applicable tools and methodologies for researching samples and unsatisfactory performance and as a support to continual improvement. One of them is the PDCA methodology that we referred to several times in this paper, but which deserves an in-depth analysis.

According to our opinion, the PDCA cycle of continual improvement should answer four key questions: *What should it be like? What should we do and how should we do it? What was achieved? What else is there to be done?*

Figure 4: PDCA cycle of continual improvement of processes



PLAN (P) – What should it be like?

Each process cycle starts with *defining objectives and action planning*. The success of the whole cycle mostly depends on this stage. The reason for that is clear. If objectives are not properly defined, and particularly, if the plan was not set properly, it is difficult to expect that the complete cycle will function properly. The plan needs to have clearly defined operational rules and, in order to be comprehensive and besides planned activities, it has to be able to predict unexpected activities and problems.

DO (D) – What should we do and how should we do it?

Implementation of actions is crucial for this stage. The set plan is developed and worked out during this stage. In production, this phase means production and supply, and in services – it means realization of services. According to the current standard, the implementation of services is defined as the implementation of products.

CHECK (C) – What was achieved?

The primary task of this stage is to *check the achievement of objectives*. It studies the contributions of changes and examines all factors affecting the understanding of the problem. For the purpose of comprehensiveness and validity of initial assumptions and the comprehensiveness of the problem study, this stage applies specific methods and procedures such as statistical methods. In the production conditions, this stage cycle has the role of studying customers' reactions to the new product or service.

ACT (A) – What else is there to be done?

Identifying room for improvement is embedded in the last but very important stage. If previous stages have given good results, the implementation that has been planned, developed and studied is implemented.

One complete rotation of the circle means the complete cycle of improvement and/or quality improvement. If the performed cycle has not given expected results, the new cycle should be started with the new plan, new information and applying knowledge gained during the previous cycles.

Figure 5: Continual improvement of processes



The PDCA methodology is a universal approach – suitable for all domains (production, education, health, financial institutions, etc.). It has the main attributes of the quality management philosophy and the scientific approach to understanding and improving the process. PDCA cycles are continual processes of all working groups and they refer to all processes in the organisation. If applied,

this approach clearly indicated the management's commitment to its main role – continual improvements. The PDCA cycle means continual training and distribution of knowledge. It means that one completed cycle encourages starting a new one with a new plan, new information, and applying knowledge gained during the previous cycles. Every next cycle has the improved plan and processes – activities, improved checks and analyses and other new improvements. This methodology is a dynamic process with the role of catalyst in process improving.

The application of this principle and the PDCA methodology enables central banks to continually re-examine the manner of functioning and improving their performances. The only seeming limitation in terms of central bank objectives may be that the central bank does not define them individually as since they are primarily defined by the law. However, in no way does this limit central bank to continually re-examine the implementation of set objectives and to improve its processes and complete performances. The application of this principle records the following benefits: determining processes and their improvement, better budgeting, removing deficiencies from previous period, enhanced credibility, more quality inputs for deciding, and the like (ISO, 2006).

7. Evidence-Based Decision Making

The international standard ISO 9004:2009 qualified this quality management principle as follows: “*Effective decisions are based on the analysis of data and information*”.¹⁷ Key benefits of this principle defined by this standard are: informed decisions, an increased ability to demonstrate the effectiveness of past decisions through reference to factual records and increased ability to review, challenge and change opinions and decisions. This standard indicates that application of this principle of factual approach to decision making typically leads to ensuring that data and information are sufficiently accurate and reliable, and to making data accessible to those who need them. The application of this principle also leads to “analysing data and information using valid methods, and making decisions and taking action based on factual analysis, balanced with experience and intuition” (ISO, 2009).

Practice has shown that desired results are more likely to be achieved with decisions taken on the basis of analysis and valuing data and information than in

¹⁷ The title of this principle in the international standard ISO 9004:2009, and previous standards is “Fact-based decision making”, while *ISO 9001:2015* renamed it into principle “Evidence-based decision making”, giving it a wider meaning.

some other manner. Decision-making is a complex process, often entailing a certain dose of uncertainty. This often includes many types and sources of inputs, and their interpretation which may be subjective. Thereby, it is highly important to understand cause-effect relationships and potential unintended consequences. Facts, evidence and data analysis always lead to higher objectivity and confidence in decisions made.

As all decision makers, central bankers as well face uncertainty and insufficient knowledge on how the economy functions. However, the role of central bankers is very important since their decisions strongly affect total economic and financial flows. Making proper decisions requires relevant and well-grounded facts. Therefore, all central banks have specialised organisational units dealing with research, statistics and analysis, with the primary task to support monetary policy decisions, and/or to provide facts for making proper decisions. To complete these tasks, almost all central banks develop their macroeconomic models. Their task is to show interrelation between monetary policy instruments and other economic sizes from financial and real sectors of economy. To wit, the objective of these models is to identify variables that would enable insight into processes caused by the application of monetary policy instruments.

In economy, unlike natural sciences, it is not possible to make a controlled experiment that would confirm the validity of an economic model. Econometric models rely on historical data. This means that, using historical information, the objective is to come to facts that would enable making valid decisions within the monetary policy domain. One can get the impression that this principle was implemented in almost all central banks since they are aware that there is no efficient monetary policy without relevant facts (or at least assumptions on them where they are not available).

Primary benefits to central banks in the implementation of this principle are enhanced effectiveness and efficiency in decision-making, increased likelihood of mission accomplishing, enhanced organisational performances and sustainability, increased central bank's credibility, improved knowledge on manners of its functioning etc. (ISO, 2006).

8. Relationship Management

The international standard ISO 9004:2009 qualified this quality management principle as: *"An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value"*. The key

benefits of this principle identified by the standard include: increased ability to create value for both parties, flexibility and speed of joint responses to changing market or customer needs and expectations, and optimization of costs and resources. This standard states that the application of the principle of mutually beneficial supplier relationships typically leads to establishing relationships that balance short-term gains with long-term considerations, pooling of expertise and resources with partners, identifying and selecting key suppliers, and clear and open communication. The application of this principle also leads to sharing information and future plans, establishing joint development and improvement activities, and to inspiring, encouraging and recognizing improvements and achievements by suppliers (ISO, 2009).

In order to achieve sustained success, organizations manage their relationships with interested parties, which affect organisation's performances. It is more likely that the sustained success will be achieved when an organization manages relationships with its interested parties so as to optimize their impact on its performance. Management of relations with the own network of suppliers and partners is of special importance for every organisation, and accordingly, for central banks.

Although being a formally independent institution, central bank is highly dependent on its suppliers and other relevant interested parties. For example, central bank largely uses contemporary information technology, without which its mission cannot be successfully accomplished. The application of this quality management principle and of the PDCA cycle of continual improvements records the following benefits in the financial system and central banks: reduced costs, optimal use of available resources, improved performances of supply chain, decreased time for supply, enhanced organisational performances, credibility and sustainability, etc. (ISO, 2006).

9. Conclusion

This paper discussed quality management principles and benefits that may be expected with its application in the financial system and central banks. Quality management principles contain well-harmonised and best possible solutions from present managerial theory and practice. They are defined to act jointly, which in essence means that harmoniously, in synchrony and synergistically these principles were translated into international standards' requirements and guidelines suitable for implementation, with particularly established approaches to determining operational objectives, measuring their accomplishment and

continual improvements. These approaches and synergistic acting of the quality management principles create one new, clear, applicable and sustained paradigm of successful management.

Although central bank is a specific institution, all abovementioned quality management principles are implementable in its operations. The application of these principles leads to more effective and efficient accomplishing of central bank mission and objectives. Therefore, this paper is aimed at increasing awareness on the possibility of full application of these principles in central banks.

In addition to numerous and highly important benefits and synergistic effects which the application of quality management principles brings to the financial sector and central banks, their effect on change in thinking in terms of successful central bank management should be particularly highlighted since they generate a new attitude towards responsibility, objectives, employees and environment. A new way of thinking creates new behaviours and improved business culture as a safe path to establishing sustained success of central banks and other entities in the financial sector.

References

1. Berman, K. & Najt, Dž. (2007). *Finansijska inteligencija, Vodič za menadžere do znanja o tome šta brojevi zaista znače*. Novi Sad: Asee.
2. Dent, F. E. (2006). *Umeće liderstva, Praktični saveti i tehnike za lidere na svim organizacionim nivoima – strateškom, operativnom i timskom – kako na ljude uticati, pokrenuti ih i pridobiti za promenu i ostvarenje ciljeva, Džepna knjiga*. Beograd: Valera.
3. Fabris, N. (2006). *Centralno bankarstvo u teoriji i praksi*. Podgorica: Centralna banka Crne Gore.
4. Goleman, D. (2007). *Socijalna inteligencija, Nova nauka o ljudskim odnosima*. Beograd: Geopoetika.
5. Goleman, D. (2014). *Emocionalna inteligencija*. Beograd: Geopoetika.
6. Goleman, D; Bojasis, R. & Maki, E. (2006), *Emocionalna inteligencija u liderstvu, Naučite da emocionalno inteligentno rukovodite*. Novi Sad: Adizes.
7. International Monetary Fund (2000). *Monetary and Financial Statistics Manual—Washington*. Washington DC, USA: International Monetary Fund.
8. International Organization for Standardization (2006). *ISO 10014: Quality management – Guidelines for realizing financial and economic benefits*. Genève, Switzerland: International Organization for Standardization.
9. International Organization for Standardization (2009). *ISO 9004: Managing for the sustained success of an organization – A quality management approach*. Genève, Switzerland: International Organization for Standardization.
10. International Organization for Standardization (2015). *ISO 9001: Quality management systems – Requirements*. Genève, Switzerland: International Organization for Standardization.
11. Harrington J. H. (1991). *Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity and Competitiveness*. USA: McGraw-Hill.
12. Harrington J. H. (1997). *Business Process Improvement Workbook: Documentation, Analysis, Design and Management of Business Process Improvement*. USA: McGraw-Hill.
13. Luburić R. (2010). *Umijeće uspješnog upravljanja, Zasnovano na svjetskoj teoriji i praksi upravljanja ukupnim kvalitetom* (Drugo izdanje). Beograd: HESPERIAedu.
14. Maciariello J. (2012). *Joe's Journal on continual improvement*, Drucker Institute. Available at: <http://www.druckerinstitute.com/2012/07/continuous-improvement/>.

15. Mejo E. J. & Noria N. (2006). *Njihovo vreme, Najveći lideri biznisa dvadesetog veka*. Novi Sad: Adizes.
16. Northouse, P. G. (2008). *Liderstvo, Teorija i praksa* (Četvrto izdanje). Beograd: Data Status.
17. Perović, M. & Krivokapić, Z. (2007). *Menadžment kvalitetom usluga*. Podgorica: Pobjeda a.d.
18. Peters, T. & Austin, N. (1986). *A Passion for Excellence, The Leadership Difference*. New York: Warner Books, Inc.
19. Rampersad, H. K. (2010). *Total Quality Management, An Executive Guide to Continuous Improvement*. Berlin – Heidelberg: Springer.
20. Rentzhog, O. (2000). *Temelji preduzeća sutrašnjice, Procesima usmjerena poslovna filozofija*. Novi Sad: Prometej.
21. Šingo, Š. (1995). *Nova Japanska proizvodna filozofija* (Treće izdanje). Novi Sad: Prometej.