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PRIMENA KONCEPTA ŠEST SIGMA U BANKARSTVU

Rezime

Banke nude uglavnom iste proizvode, ali ih razlikuje kvalitet usluge. Kvalitet se nalazi u očima klijenta. Potrebe klijenata su kompetentnost, efikasnost, diskretnost i korektna cena. Kvalitet usluge je ključni element uslužne ponude banke. Banke žele da ostvare dugoročne odnose sa svojim klijentima i ostvare lojalnost.

Koncept Šest sigma je koncept upravljanja kvalitetom banke. Istovremeno predstavlja pametniji način vođenja banke ili organizacionih delova banke. Banke primenom Šest sigma koncepta na prvo mesto stavljaju poboljšanje zadovoljstva klijenta, što rezultira smanjenjem ciklusa vremena neophodnog da se skoro savršena usluga proizvede i isporuči klijentu. Uspeh implementacije koncepta Šest sigma zavisi od spremnosti samih zaposlenih da učestvuju u istom.

Primenom koncepta Šest sigma se postižu permanentna poboljšanja u poslovanju, koja rezultiraju odličnim finansijskim i nefinansijskim rezultatima i unapređenim performansama banke. Takođe, se omogućava izdizanje banke iz prosečnosti i obezbeđuje najbolje moguće rešenje za sve zainteresovane strane: klijente, zaposlene, vlasnike, društvo, itd.

Ključne reči: Šest sigma, banke, kvalitet usluge, klijenti, zaposleni

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IMPLEMENTATION OF SIX SIGMA CONCEPT IN BANKING

Summary

Banks usually offer the same products, with different service quality. Quality is in the eye of the customer. Customers' needs are competence, efficiency, discretion and fair price. Service quality is the crucial element of a bank's offer. Banks wish to establish long-term relationship with their customers and achieve loyalty.

Six sigma concept refers to the quality management of a bank. At the same time, it represents a smarter way of managing the bank or organizational parts of the bank. By implementing the Six sigma concept, banks focus on improving satisfaction of the customers, which results in decreasing necessary time for the production and delivery of the perfect service to the customer. The success of Six sigma concept implementation depends on the willingness of the employees to participate in it.

Through implementing Six sigma concept, banks achieve permanent improvement of their business, which brings about excellent financial and non-financial results and improvement of banks' performance. Also, it allows banks to be better than average, and provides the best results for all stakeholders: customers, employees, owners, society, etc.

Key words: Six sigma, banks, service quality, customers, employees

Šest sigma je pametniji način vođenja kompanija ili odeljenja, kreiran od strane Jack Welsh-a i Larry Bossidy-a, direktora General Electric-a, kako bi se unapredio kvalitet poslovanja kompanije u cilju uspešnijeg zadovoljavanja potreba klijenta. Šest sigima postavlja klijenta na prvo mesto upotrebom različitih raspoloživih podataka da bi se postigao što bolji rezultat. Područje delovanja Šest sigma je:

1. **poboljšanje zadovoljstva klijenata** (korisnika usluge),
2. **smanjenje ciklusa vremena neophodnog da bi se usluga realizovala,**
3. **smanjenje grešaka prilikom isporuke usluge.**

Uspešnom realizacijom prethodno navedenog banke ostvaruju značajne uštede, zadržavaju zadovoljne klijente, osvajaju nova tržišta i stvaraju dobru reputaciju odnosno zagaranovan kvalitet usluge.

Realizovati koncept Šest sigma u banci znači ostvariti takav napredak u svim delovima procesa rada odnosno stvaranja usluge koji znači da se proces i usluga realizuju bez bilo kakvih grešaka (defekata). Takođe, podrazumeva potpunu posvećenost menadžmenta filozofiji savršenstva, fokusiranje na klijenta, poboljšanje procesa i zakon vrednosnog merenja umesto osećaja. Cilj koncepta Šest sigme je da se cela banka prilagodi zahtevima klijenata, tržišta i tehnologije, i da od toga imaju korist sve zainteresovane strane - klijenti, zaposleni i vlasnici.

Koncept Šest sigma se **razlikuje od drugih konceptata upravljanja kvalitetom** u sledećem (Pande, Holpp, 2006, str. 4):

- Šest sigma je **fokusiran na klijenta,**
- Šest sigma predviđa veliki prinos (povraćaj) **na investiciju,**¹
- Šest sigma menja način rada menadžmenta. Suština Šest sigma je da **stvari ne treba raditi naporno, nego pametno.**

Šest sigma se može definisati kao:

1. **statističko merenje realizacije procesa ili usluge** - Sigma predstavlja znak standardne devijacije. Kao što je poznato "standardna devijacija je mera koja opisuje disperziju kroz čitavu populaciju u istim jedinicama koje su karakteristične za bazne podatke" (Cvetinović, 2009, str. 53).

Sigma mera je razvijena da bi pomogla:²

- a) u najširem smislu merenje klijenata određene banke,
- b) dosledan način merenja i upoređivanja raznih procesa.³

Prvi korak u izračunavanju sigme je razumeti šta klijent očekuje. Jezikom Šest sigma kupčevi zahtevi i očekivanja su nazvani **kritika za kvalitet (CTQ).**⁴ Svrha Šest sigma je razumeti i proceniti kako proces funkcioniše na sve teoretski moguće zahteve klijenta (npr., klijent želi da mu se stambeni kredit odobri i pusti na račun u roku od deset radnih dana umesto standardnih dvadeset i jedan radni ran). Znači, koristimo sigma merilo vrednosti da bismo mogli sagledati na koji način neki proces funkcioniše i u svim fazama procesa realizacije usluge dajemo način na koji se mogu izmeriti.

U startu prihvatljivi sigma nivoi za banke su bili tri odnosno četiri sigma (99,9937% bez defekata u procesu). Vremenom je postalo jasno da je šest sigma nivo neophodan za povećanje efikasnosti procesa odnosno postizanje izvrsnosti u isporučivanju vrednosti zainteresovanim stranama. Ujedno ostvarenje šest sigma nivoa ukazuje da se radi o **Best in class organizaciji.**

Karakteristike takve banke su: izuzetno (visoko) zadovoljni kupci, odlučni menadžeri, motivisani zaposleni, stabilan rast tržišnog učešća, poslovni rezultati koji svrstavaju banku u sam vrh na domaćem i međunarodnom tržištu, i dobijanje

¹ Npr. General Electric je ostvario rast profita od 2 milijarde dolara 1999. godine u odnosu na 1998. godinu odnosno rast profita od 2,4 milijarde dolara 2000. godine u odnosu na 1999. godinu.

² Različite definicije menadžmenta ukazuju da ukoliko se procesi kompanije ne mogu iskazati u brojkama, to znači da zaposleni kompanije ne znaju mnogo o tome odnosno da se time ne može ni upravljati.

³ "Proces je skup međusobno povezanih ili međusobno delujućih aktivnosti koji pretvara ulazne elemente u izlazne elemente" (ISO 9000:2000). U praksi je bitno da procesi imaju svoje „vlasnike“ kako bi se raščistili međuodnosi, odgovornosti i ovlašćenja.

⁴ CTQ - Critical to Quality

Six Sigma is a smarter way of managing companies or departments, created by Jack Welsh and Larry Bossidy, General Electric CEOs, in order to enhance the quality of company's business with a view to satisfying the clients' needs more successfully. Six Sigma gives priority to the client by using various available data in order to achieve the best possible result. **Six Sigma concept can be implemented in the following areas:**

1. **Increase of clients' (service users) satisfaction;**
2. **Reduction of the time cycle necessary for service realization;** and
3. **Reduction of errors in service delivery.**

By successfully implementing the above mentioned, the banks achieve considerable cost reduction, retain satisfied customers, tap new markets and create sound reputation and guaranteed service quality.

To implement Six Sigma concept in a bank means to achieve the progress in all business segments, i.e. all segments of service creation, which implies that the process and service are realized without any errors (defects). Also, it implies full commitment of the management to the philosophy of perfection, focus on the client, enhancement of the process and the law of value measurement instead of simple feeling. The objective of Six Sigma concept is for the entire bank to adjust to the requests of its clients, market and technology, so that all stakeholders - clients, employees and owners, benefit from it.

Six Sigma concept **differs from other quality management concepts** in the following (Pande, Holpp, 2006, p. 4):

- Six Sigma is **client-focused**;
- Six Sigma **involves large return on investment**;¹
- Six Sigma **changes the manner of management's operations**. The essence of Six Sigma is that **things should not be done**

in a difficult way, but in a smart way.

Six Sigma can be defined as follows:

1. **Statistical measurement of process or service realization** - Sigma is used as a symbol for standard deviation. As already known 'standard deviation is a measure describing the dispersion through the entire population in the same units that are characteristic for basic data' (Cvetinović, 2009: 53).

Sigma is a measure developed in order to assist:²

- a) the measurement of a certain bank's clients in the broadest sense;
- b) the consistent method of measurement and comparison of various processes.³

The first step in the calculation of sigma is to understand what the client expects. In Six Sigma terminology, the buyer's requests and expectations are named **Critical to Quality (CTQ)**⁴. The purpose of Six Sigma is to understand and assess how a certain process functions in case of all theoretically possible requests of the client (e.g. a client wants his housing loan extended and paid into the account within ten working days instead of the standard twenty one days). In other words, we use sigma value measurement in order to gain insight into the way a certain process functions, and in all stages of service implementation we provide the way in which these values can be measured.

At the beginning, the acceptable sigma levels for banks were three or four sigma (99.9937% without defects in the process). Over time, it became clear that six sigma level is necessary for the increase in the process efficiency, i.e. the achievement of excellence in delivering value services to all interested parties. At the same time, the achievement of six sigma level indicates **Best-in-Class organization**.

The characteristics of such a bank are the

¹ For example, General Electric recorded the profit growth in the amount of USD 2 billion in 1999, compared with 1998, and the profit growth of USD 2.4 billion in 2000, compared with 1999.

² Different definitions of management indicate that if the company's processes cannot be expressed in numbers, it means that the company's employees do not know much about them, i.e. that they cannot be managed.

³ "Process is a series of mutually related or mutually interactive activities which turns input elements into output elements." (ISO 9000: 2000) What is important in practice is that they have their 'owners' so that the inter-relations, responsibilities and authorities are clear.

⁴ CTQ - critical to quality

međunarodno priznate nagrade za poslovnu izvrsnost/savršenstvo.

2. **cilj koji postiže skoro savršenstvo za poboljšanje realizacije** - Cilj primene Šest sigma je da se pomogne zaposlenima i procesima da dostignu proizvodnju i isporuku usluge bez greške. Stoga, Šest sigma postavlja cilj gde su greške u procesima i uslugama skoro nemoguće. Primenom Šest sigma se obezbeđuje dugoročno ostvarenje ciljeva banke, kroz ostvarenje kratkoročnih dostižno postavljenih kratkoročnih ciljeva za kvalitet usluge.
3. **sistem upravljanja kojim se postiže dugoročna liderska pozicija i obavljanje posla na svetskom nivou.**

Bitna razlika između koncepta Šest sigme i sličnih menadžment koncepata je u tome što je visok stepen involviranosti menadžmenta u praćenju rezultata i dostignuća implementacije Šest sigma. Sistem upravljanja Šest sigmom nije vlasništvo direktora, niti je vođenje prepušteno menadžerima. Ideje, rešenja, unapređenja ili uvođenje novih procesa i poboljšanja koja proizilaze u Šest sigmi su događaji koji se dešavaju na najnižim linijama poslovanja banke (na nivou izvršilaca). Šest sigma banke nastoje da pruže što više odgovornosti zaposlenima koji rade sa klijentima.

Znači, Šest sigma je koncept koji **ujedinjuje jako upravljanje i uključuje sve zaposlene**. Koristi od Šest sigma su novčane i ne-novčane. U domenu ne-novčanih bitno je naglasiti da svi zaposleni na različitim nivoima banke bolje razumeju svoje klijente (obično je pogrešno shvatanje da je klijent samo u nadležnosti savetnika za klijente, a ne i zaposlenog u pozadinskim poslovima banke), jasnije postavljaju i unapređuju procese realizacije usluge. Merila realizacije procesa i zadovoljavanja zahteva klijenata su objektivna i značajna, što dovodi do efikasnijeg rada zaposlenih i većeg stepena zadovoljstva obavljenim radom.

Možemo istaći da su najvažniji elementi koncepta Šest sigma:

1. iskreno fokusiranje na klijenta odnosno ispunjavanje njegovih želja i zahteva,
2. upravljanje bankom bazirano na podacima i dokazima,
3. procesi realizacije usluge su mogućnosti

odnosno permanento poboljšanje tehnoloških i poslovnih procesa,

4. proaktivan menadžment odnosno upravljanje tehnološkim i poslovnim procesima,
5. bezgranična saradnja u proizvodnji usluge vredne za klijenta,
6. izražena potreba ka savršenstvu i toleranciji neuspeha.

Bitno je naglasiti da u konceptu Šest sigma puno toga nije novo. **Novo je ujedinjenje navedenih elemenata u proces upravljanja.** Takođe, Šest sigma je spor proces jer treba dostići savršenu uslugu koji u potpunosti zadovoljava zahteve klijenta.

Uspešnom implementacijom koncepta Šest sigma se mogu postići sledeći rezultati: ispuniti zahtevi klijenata, ostvariti veća korist za vlasnike kompanije, sniženje troškova, bolje korišćenje infrastrukture, stabilna organizaciona struktura i zadovoljstvo zaposlenih odnosno uspešnija motivacija. Pri tome je izuzetno važno ujedinjavanje svih zaposlenih u banci kako bi se što uspešnije realizovali procesi, procedure i postupak Šest sigma.

Mogući načini uvođenja šest sigma u vašu banku

Ukoliko se Vaša banka odluči za implementaciju koncepta Šest sigma, ne može se unapred znati kakav će put morati da pređe. Takođe, organizacije kompanija su različite i te razlike stvaraju varijacije u primeni koncepta Šest sigma.

Postoje tri osnovna načina uvođenja Šest sigma u kompanije:

1. **transformacija poslovanja** - podrazumeva promenu organizacije, organizacione kulture i organizacione klime u dosadašnjem radu banke, a u cilju boljeg zadovoljenja potreba klijenata i vlasnika. Obično se banke odlučuju za ovaj način uvođenja Šest sigma kada prerastu svoju optimalnu veličinu, odnosno, kada postanu glomazna i neefikasna organizacija. Timovi oformljeni za proces transformacije poslovanja bi trebalo da analiziraju različita područja procesa isporuke usluge i predlože rešenja odnosno savete za promene. Pomenuti timovi pažljivo ispituju:

following: extremely (highly) satisfied customers, decisive managers, motivated employees, stable market share growth, business results classifying the bank among the top ones at both domestic and international market, and winning the internationally recognized award for business excellence/perfection.

2. **Objective that achieves a near perfection regarding the realization enhancement -**

The objective of Six Sigma implementation is to help the employees and processes to achieve defect-free production and delivery of services. Thus, Six Sigma sets the objective in which errors in processes and services are practically impossible. Six Sigma implementation provides the long-term achievement of the bank's goals, through the achievement of the short-term, feasible objectives regarding the service quality.

3. **Management system that helps achieve a long-term leading position and conducting of operations on a global level.**

The essential difference between the Six Sigma concept and similar management concepts lies in the **high level of involvement of the management** in monitoring the results and achievements of Six Sigma implementation. Six Sigma management system is neither owned by the directors, nor is it in the hands of the managers. Ideas, solutions, enhancement or introduction of new processes, and improvements achieved in Six Sigma are events occurring at the lowest business lines of a bank (at the operational level). Six Sigma banks tend to delegate as much responsibility as possible to their employees working with the clients.

Six Sigma is, hence, a concept which **unites strong management and involves all employees**. The benefits of Six Sigma are both financial and non-financial. In the field of non-financial benefits, it is important to emphasize that all employees, at various levels in a bank, understand their clients better (the common misconception is that only clients advisor is in charge of the clients and not the back-office employees, too), define the processes more clearly and enhance the service realization processes. The measures of process realization and meeting the clients' requests are objective and relevant, which results in a more efficient

performance of the employees and the higher level of satisfaction with the work done.

We may underline the following elements of the Six Sigma concept as the most important:

1. Direct focusing on the client, i.e. the fulfilment of his/her wishes and requests;
2. Bank management based on data and evidence;
3. Service realization processes provide the possibilities for permanent improvement of technological and business processes;
4. Proactive management, i.e. management of technological and business processes;
5. Unlimited cooperation in the production of services valuable for the client;
6. Prominent need for perfection and zero tolerance of failure.

It is important to underline that many things in the Six Sigma concept are not new and original. **What is new, though, is the combination of the mentioned elements within the management process.** Also, Six Sigma is a slow process because a perfect service that fully satisfies the requests of a client needs to be reached.

Successful implementation of Six Sigma concept may lead to the following results: fulfilment of the clients' requests, larger benefits for the company's owners, cost reduction, better utilization of infrastructure, stable organizational structure and the satisfaction of the employees, i.e. higher motivation. In addition, it is of extreme importance to unite all the bank employees in order to implement Six Sigma processes, procedures and methods as fruitfully as possible.

Possible ways of implementing Six Sigma in your bank

If your bank opts for implementing the Six Sigma concept, the path it will have to pass cannot be known in advance. Also, companies are organized in different ways, and those differences create variations in Six Sigma concept implementation.

There are three main ways to implement Six Sigma into a company:

1. **Business transformation** - implies the change in organization, organizational culture and organizational climate in the

kako banka plasira usluge, da li je proces prodaje efektivan, kakvo je zanimanje novih potencijalnih klijenata, kakvi su kritični prigovori postojećih klijenata, koje vrste defekata usluga se javljaju kao česti problemi, kakvi su informacioni sistemi neophodni za donošenje odluka banke i gde su moguće velike uštede troškova.

Znači, u fokusu transformacije poslovanja su: klijenti, zaposleni, svi procesi vezani za isporuku usluge (uključujući internu organizaciju i strategijske odluke) u cilju povećanja profita banke. Bitno je naglasiti da su potrebe na tržištu i konkurencija van domašaja primene Šest sigma.

Ukoliko se banka odluči za ovaj put implementacije koncepta Šest sigma, onda će sve zainteresovane strane osetiti promenu.⁵

- 2. strateško poboljšanje** - je srednji ulaz, koji nudi najviše mogućnosti za banku. Poduhvat strateškog poboljšanja se ograničava na jednu ili dve ključne potrebe banke, sa timovima koji su fokusirani na velike mogućnosti ili manjkavosti procesa isporuke usluge (npr., kako unaprediti proces odobravanja kredita i praćenja naplate, odnosno, promene uslova korišćenja kredita). Takođe, poduhvat Šest sigma se može primeniti na ograničeni broj odeljenja ili sektora u banci.
- 3. rešavanje problema** - je najlakši pristup implementaciji Šest sigma. Ovaj pristup je namenjen bankama koje konstantno muče isti problemi. Različiti pokušaji rešavanja bili su bezuspešni (npr., kako smanjiti gužvu u filijalama, odnosno smanjiti redove klijenata koji čekaju da budu usluženi na šalteru). Stoga, pokušavaju problem da reše implementacijom Šest sigma. Koncept Šest sigma bolje analizira probleme i rešenja, bazirajući se na činjenicama i shvatanju uzroka i potreba.

Ovaj pristup je dobar za banke koje žele da osele koristi od implementacije koncepta Šest sigma bez velikih promena u organizaciji. Ovaj

pristup odnosno ulaz Šest sigma je koristan zato što se fokusira na bitne probleme i suočava sa njihovim uzrokom, koristeći podatke i analizu umesto osećaja.

Bitno je naglasiti da svaki pristup implementacije koncepta Šest sigma ima i dobre i loše strane. Uspeh implementacije prevashodno zavisi od volje i spremnosti samih zaposlenih da uzmu aktivno učešće u istom. U zavisnosti od toga za koji se način banka bude odlučila za implementaciju Šest sigma, zavisi i kakav će uticaj Šest sigma biti na zaposlene kompanije.

Novе uloge menadžera i zaposlenih

Pošto je menadžment banke odlučio kojim pristupom će implementirati koncept Šest sigma, posao se predaje grupi poslovnih vođa, članovima timova, vođama timova i izvršiocima. Neki zaposleni će dobiti funkcije nazvane po pojasevima iz borilačkih veština, kao što su: crni pojas, zeleni pojas i majstor crnog pojasa. Ostali članovi tima će imati slične nazive.

Crni pojas Šest sigma menadžer predstavlja najvažniju ulogu u implementaciji koncepta Šest sigma. Vlasnik crnog pojasa je predan usavršavanju mogućnosti promena i njihovom uvođenju da bi se postigli bolji rezultati. On mora biti vođa, inspirator, delegat, menadžer, trener i dadilja svojim kolegama, ali i stručnjak u alatima koji uviđaju i popravljaju probleme ili stvaraju procese i usluge.

Crni pojas Šest sigma menadžer obično radi uz tim koji je posvećen određenom projektu. Bez jake i neumorne osobe s crnim pojasom, timovi Šest sigma su obično neuspešni. Obično su izabrani iz redova srednjeg menadžmenta ili su već top menadžeri i ovakve timove u proseku vode do dve godine, a u tom periodu realizuju četiri do osam projekata.

Majstor crnog pojasa Šest sigma menadžer je mentor ili konsultant menadžerima sa crnim pojasom koji rade na različitim projektima. U najvećem broju slučajeva majstor je pravi stručnjak u analitičkim alatima Šest sigma, a

⁵ Prema podacima kojima autor raspolaže, Raiffeisen bank a.d. Beograd i Češka sporitelna banka iz Praga su se odlučile za ovaj način uvođenja koncepta Šest sigma.

bank's operations so far, with a view to achieving higher satisfaction of the clients' and owners' needs. The banks usually choose this method of Six Sigma implementation once they grow out of their optimum size, i.e. once they become a bulky and inefficient organization.

The teams formed for the purpose of business transformation process should analyze various fields of the service delivery process and suggest the solutions and suggestions for potential changes. These teams carefully examine: how the bank places its services, whether the sales process is effective, whether the interest of the potentially new clients is high, what are the critical objections by the existing clients, which kinds of service defects occur as frequent problems, which IT systems are required for the bank's decision-making process, and in which fields considerable cost reductions are possible.

So, business transformation process focuses on: the clients, employees, all processes related to service delivery (including internal organization and strategic decisions) in order to increase the bank's profit. It is important to emphasize that market needs and competition are outside of the scope of Six Sigma implementation. If a bank opts for this method of Six Sigma concept implementation, then all interested parties will experience the change.⁵

2. **Strategic enhancement** - is the middle entrance, which offers the greatest possibility to the bank. Strategic enhancement process is limited to one or two key needs of the bank, with the teams focused on huge possibilities or flaws in the service delivery process (e.g. how to enhance the process of loan extension and collection monitoring, i.e. monitoring of the changes in loan conditions). Also, Six Sigma may be applied to a limited number of departments or sectors in a bank.
3. **Problem solving** - is the easiest approach to Six Sigma implementation. This approach is intended for banks constantly facing the

same problems. Various attempts of solving these problems remained unfruitful (e.g. how to reduce crowding in branch offices, i.e. how to cut queues of clients waiting to be served by a bank teller). Therefore, they try to solve the problem by implementing Six Sigma concept. Six Sigma concept helps them analyze the problems and solutions in a better way, based on facts and understanding of causes and needs.

This approach is recommendable for banks wishing to experience the benefits of Six Sigma implementation without any major changes in their organization. This Six Sigma approach, that is entrance, is useful because it focuses on crucial problems and deals with their cause, using the data and analysis instead of guesswork.

It is important to underline that each approach to Six Sigma concept implementation has both advantages and drawbacks. The success of Six Sigma implementation mostly depends on the strength of will and readiness of the employees themselves to take active part in the process. The impact of Six Sigma on the company's employees depends on the approach a bank chooses for Six Sigma implementation.

New roles for managers and employees

Once the bank's management has decided on the approach for Six Sigma concept implementation, the job is delegated to the group of business leaders, team members, team leaders and operatives. Some employees will receive functions named after the martial arts hierarchy, such as: black belt, green belt and master black belt. Other team members will bear similar names.

Six Sigma Black Belt Manager represents the most important role within the Six Sigma concept implementation process. Black Belt Manager is devoted to perfecting potential changes and their implementation process with a view to achieving better results. He/She has to be a leader, originator, delegate, manager, coach and nurse to his/her colleagues, but also an expert in the field of tools for detecting and

⁵ According to the data available to the author, Raiffeisen bank a.d. Beograd and Češka sporitelna banka from Prague chose this method of Six Sigma concept implementation.

priznat je u struci posla kojim se bavi.⁶

U nekim slučajevima majstor crnog pojasa odigra ulogu posrednika u organizaciji promena, ili postaje stalan trener onima koji se spremaju za crni pojas ili se može uključiti u posebne projekte Šest sigma. Bitno je naglasiti da majstori crnog pojasa igraju ključnu ulogu u tempu promena, smanjenju troškova i poboljšanju zadovoljstva klijenata.

Zeleni pojas Šest sigma menadžer je osoba koja još uvek operativno učestvuje u procesu realizacije usluge i član je tima ili vođa tima. Njihova uloga je da unesu nove ideje u svakodnevni rad banke.

Šampion i/ili sponzor je direktor, viši menadžer ili član izvršnog odbora banke, koji započinje i podržava (sponzorise) nekoga sa crnim pojasom ili neki tim. Vrlo je bitno imati šampiona ili sponzora. Ova uloga šalje poruku: šampion je ugledna osoba, koja preuzima odgovornost projekta na sebe.

Uloga šampiona je:

- da osigura da projekti ostanu u formi ciljeva banke i ako nisu da ih preusmeri,
- da iznese napredak projekta svakog tima drugim članovima odbora,
- da nabavi potrebne resurse, kao što su vreme, novac i pomoć drugih za tim,
- da izvesti o pregledima na „naplatnim kućicama“,
- da pregovara u konfliktima sa drugim projektima Šest sigma.

Bitno je naglasiti, da šampion obično ima najmanje iskustva sa konceptom Šest sigma i obično je najslabija karika u izvršenju zadataka Šest sigme, pogotovo u ranim fazama.

Vođa implementacije je osoba koja rukovodi implementacijom postavke celokupne ideje Šest sigma. Obično je iz redova višeg menadžmenta banke i direktno kontaktira sa izvršnim odborom odnosno predsednikom banke. Potiče iz oblasti organizacionih područja banke ili ima iskustva u poslovima menadžmenta i administracije. Kao i crni pojas Šest sigma menadžeri, vođe

implementacije imaju vremenski ograničeni mandat. Krajnji cilj vođe implementacije je da uvede Šest sigma razmišljanje, alate i običaje kroz celu banku, kako bi se postigli profiti i koristi za klijente.

Šest sigma obezbeđuje zaposlenima uključenim u projekat izazove i koristi, kao što su: iskustvo, upoznavanje novih kolega, uzbudljivosti i obrazovanje.

DMAIC - način rešavanja problema u Šest sigma

Najvažnija karika u implementaciji Šest sigme su **timovi** za poboljšanje, rešavanje problema i kreiranje procesa. Timovi su formirani da **reše organizacijske probleme i iskoriste prilike**. Vođe timova su menadžer crnog ili zelenog pojasa. Timovi se sastoje od tri do deset članova, koji su operativno involvirani u proces koji je predmet projekta. Što ukazuje da su ekipe raznolike.

U procesu formiranja ovakvog tima, bitno je imati proces ili model koji je svima zajednički da bi projekat mogao da se realizuje. **DMAIC** je **fleksibilan proces** koji omogućava realizaciju Šest sigma projekta, a znači: **definirati, meriti, analizirati, poboljšati i kontrolisati**.⁷

DMAIC tim ima svoj **životni ciklus**, koji se sastoji iz sledećih faza:

1. **Određivanje i izbor projekta** - bitno je da se izaberu važni i sprovodljivi projekti, koji obezbeđuju korist i banci i klijentu. Na primer izabrani projekat može biti kako skratiti proces i unaprediti proces odobravanja stambenog kredita sa dvadeset jednog radnog dana na deset radnih dana.
2. **Formiranje tima** - izbor članova i vođe tima je vrlo važan. Ukoliko je neko od zaposlenih izabran za člana tima, to znači da se radi o savesnoj osobi, koja ima snagu i volju da doprinese napretku banke. Shodno izabranom primeru projekta članovi tima bi trebalo da budu iz sektora za poslove sa

⁶ Instrumenti Šest sigma su: razmena ideja, dijagram afiniteta, glasanje, stablo strukture, dijagram procesa, karta procesa i dijagrami uzroka i posledica (riblji kostur). Instrumenti za prikupljanje podataka su: anketiranje, operativne definicije, glas klijenta i tabele. Instrumenti analize procesa i podataka su: analiza toka procesa, vredne i bezvredne dodatne analize, i grafikoni. Instrumenti za statističku analizu su: test statističke važnosti, korelacija i regresija, i dizajn eksperimenta. Instrumenti za implementaciju i vođenje procesa su: metode vođenja procesa, analiza potencijalnih problema i analiza neuspeha i učinaka, analiza ulagača, dijagram moćnog polja, dokumentacija procesa, i uravnoteženi računi i procesi.

⁷ DMAIC - *Define, Measure, Analyze, Improve, Control*

fixing the problems or for creating processes and services.

Six Sigma Black Belt Manager typically works with a team delegated to a certain project. Without a strong and indefatigable black belt person, Six Sigma teams are usually unsuccessful. They are generally selected from middle management lines or are already top managers, and they lead Six Sigma teams for 2 years on average, implementing four to eight projects during that period.

Six Sigma Master Black Belt Manager is a mentor or consultant to Black Belt Managers working on various projects. In most cases, he/she is a real expert in Six Sigma analytical tools, but is also recognized in his regular profession.⁶

In some cases, Master Black Belt Manager plays the role of an intermediary in the change implementation process, becomes a permanent coach to those preparing for the black belt, or possibly joins some separate Six Sigma projects. It is important to underline that Master Black Belt Managers play the key role when it comes to the dynamics of changes, cost reduction and improvement of clients' satisfaction.

Six Sigma Green Belt Manager is a person which is still operationally involved in the service realization process and is either a team member or a team leader. Their role is to introduce new ideas into the bank's everyday operations.

Champion and/or Sponsor is a director, senior manager or a member of the bank's executive board, who originates the process and supports (sponsors) a black belt manager or a team. It is of crucial importance to have a champion or sponsor. This role conveys the message: champion is a reputable person, who undertakes the responsibility for the project.

The role of a champion is the following:

- to ensure that projects remain in the form of the bank's objectives, and if not, to redirect them;
- to inform other board members on each

team's project progress;

- to procure necessary resources, such as time, money and assistance of others, for the team;
- to report on the reviews at the 'toll stations';
- to negotiate in case of conflicts with other Six Sigma projects.

It is important to emphasize that champion usually has the least experience with the Six Sigma concept and is typically the weakest link in the execution of Six Sigma tasks, especially in the early stages.

Implementation Leader is a person in charge of the implementation of the entire Six Sigma idea set up. He/she is typically selected from the bank's upper management or has abundant experience in management and administration. Just like Six Sigma Black Belt Managers, Implementation Leaders have a mandate limited in time. The ultimate goal of the implementation leader is to introduce Six Sigma thinking, tools and customs throughout the entire bank, in order to yield profit and benefits for the clients.

Six Sigma offers challenges and benefits to the employees involved in the project, such as: experience, chance to meet new colleagues, excitement and education.

DMAIC - problem-solving method in Six Sigma concept

The most important link in Six Sigma implementation process are the **teams** for enhancement, problem-solving and process creation. The teams are formed **to solve organizational problems and seize the opportunities**. Team leaders are Black or Green Belt Managers. The teams consist of three to ten members, who are operationally involved in the process which is the subject of the project, which indicates that the teams are varied.

Within the process of formation of such

⁶ Six Sigma instruments are: exchange of ideas, affinity diagram, voting, structure tree, process diagram, process chart, cause and effect diagram (fishbone). Instruments for data collection are: questionnaires, operative definitions, client's voice and tables. Instruments for process and data analysis are: process flow analysis, valuable and non-valuable additional analyses, and charts. Instruments of statistical analysis are: statistical significance test, correlation and regression, and design of experiments. Instruments for process implementation and management are: process management methods, potential problem analysis, failure mode and effects analysis, investors' analysis, force field diagram, process documentation and balanced accounts and processes.

stanovništvom zaposleni na odobravanju stambenih kredita, zaposleni u sektoru za upravljanje rizikom kreditnim poslovima stanovništva i zaposleni u sektoru pozadinskih poslova, odnosno, kreditne administracije.

3. **Postavljanje povelje** - je važan dokument koji predstavlja pisani vodič za problem ili projekat. U povelji se nalazi razlog zašto je projekat važan (zbog kojih klijenata, koje kategorije prihoda, koje kategorije rezervisanja), cilj (skraćanjem procesa odobrenja stambenog kredita koliko se povećavaju prihodi odnosno koliko se smanjuju troškovi banke), osnovni plan (definisati korake vezane za odobrenje stambenog kredita, sagledati koji su koraci internog a koji eksternog karaktera, u kom roku sagledati postojeće stanje i uzroke istog, u kom roku predložiti rešenje, itd.), granice (u procesu odobravanja kredita šta jeste predmet konkretnog projekta, a šta nije), uloge (za šta će koji član tima biti nadležan u toku realizacije projekta) i obaveze (za šta će koji član tima biti odgovoran da bi se projekat realizovao u definisanom roku). Takođe, je bitno naglasiti da se povelja tokom projekta menja.⁸
4. **Uhodavanje tima** - predstavlja zajednički rad na projektu, koji obično traje četiri nedelje (podrazumeva se dnevna komunikacija o razvoju projekta i nedeljni sastanci tima, kako bi se obezbedila realizacija projekta u roku).
5. **Sprovesti DMAIC i implementirati rešenja** - timovi su obavezni da implementiraju

svoja rešenja i da ih predaju grupi u banci koja će nastaviti dalje da vodi računa o uspehu unapređenja predmetnog procesa. Timovi su u obavezi da projektuju planove, organizuju treninge i definišu procedure za svoja rešenja. Takođe, su odgovorni da obezbede njihovo operativno funkcionisanje - mereći i prateći rezultate u toku određenog vremena.

6. **Predaja rešenja** - pošto se rešenje preda grupama u banci koje će isto koristiti, timovi kao takvi prestaju sa radom.⁹

Banka će od primene DMAIC modela za rešavanje problema imati sledeće koristi: kvantifikovanje odnosno merenje problema, fokusiranje na klijenta, verifikacija uzroka, odvikavanje od starih navika, upravljanje rizikom, merenje ostvarenih rezultata i održavanje promena.

Koraci u modelu DMAIC su:

1. **definisanje problema** - postavlja se pitanje šta će biti cilj projekta odnosno šta je to što klijent želi (CTQ).¹⁰ Ovo je ujedno i najveći problem za tim. Tim se susreće sa nizom otvorenih pitanja, kao što su: Šta rade? Zašto rešavaju ovaj problem? Ko je klijent? Koji su zahtevi klijenta? Kako se sada radi - izvodi proces? Kakve bi koristi imale sve zainteresovane strane od korekcije procesa odnosno usluge?
Pošto se odgovori na ova pitanja, DMAIC povelja se može postaviti. Osnovni elementi povelje su: poslovni razlog odnosno svrha, izjava mogućnosti i cilja, ograničenja i pretpostavke, granice projekta, članovi tima i uloge, početni plan.

⁸ Standardno se postupak za odobrenje stambenog kredita sastoji iz sledećih faza: 1. podnošenje zahteva za kredit, 2. razmatranje i obrada kreditnog zahteva, 3. rešenje banke o zahtevu za kredit, 4. zaključivanje kreditnog ugovora, 5. korišćenje kredita, 6. vraćanje kredita i 7. monitoring kredita. Involvirani organizacioni delovi banke u proces odobrenja stambenog kredita su: odeljenje stambenih kredita, odeljenje za upravljanje kreditnim rizikom stanovništva, odeljenje za kreditnu administraciju i odeljenje za praćenje odobrenih stambenih kredita. Vlasnik procesa odobrenja kredita može biti ili odeljenje stambenih kredita ili odeljenje za upravljanje kreditnim rizikom stanovništva (zavisi od banke do banke). Internog karaktera su druga, treća i sedma faza. Eksternog karaktera su prva, peta i šesta faza. Četvrta faza zavisi i od banke i od korisnika stambenog kredita. Banka prvo sagledava šta može da unapredi kod faza internog karaktera (sam postupak i rokovi za isporuku određenog dela usluge, lista dokumentacije, lista pitanja, itd.), a potom kod faza eksternog karaktera u delovima koje proaktivno može preduprediti (npr., dobro edukovano osoblje će pripremiti i prezentovati klijentu listu neophodne dokumentacije i pitanja za odobrenje stambenog kredita pre nego što podnese zahtev za stambeni kredit, čime se drastično skraćuje vreme neophodno za odobrenje stambenog kredita; ukoliko to nije slučaj klijentov zahtev će biti dodatno prolongiran kako bude obrađivan u različitim sektorima jer će se pojaviti dodatna pitanja i dodatna neophodna dokumentacija koje su važne za donošenje odluke o kreditu).

⁹ Primenom Šest sigma *Češka sporitelna banka* iz Praga (lider u domenu projektog finansiranja u Češkoj) je postigla kao standard da odobrava stambene kredite fizičkim licima u roku od tri radna dana (tzv. *Mortgage factory*). Takođe, je omogućila klijentima da dobiju stambeni kredit za jedan radni dan ukoliko plate dodatnu proviziju.

¹⁰ CTQ - *Critical to Quality*

a team, it is important to have a process or a model which is common for all in order for the project to be realized. **DMAIC** is a **flexible process** enabling the implementation of Six Sigma project, and it stands for: **Define, Measure, Analyze, Improve and Control**⁷. **DMAIC team** has its **life cycle**, consisting of the following stages:

- 1. Identifying and selecting the project** - it is important to select important and feasible projects which provide benefits to the bank and to the client. For instance, the selected project may be to shorten and enhance the process of housing loan extension from twenty one to ten working days.
- 2. Forming the team** - selection of team members and team leaders is also very important. If an employee is selected to be a team member, it means that he/she is a conscientious person, strong and willing to contribute to the bank's progress. In the above example, the team members should be from retail department, working on housing loans extension, employees from risk management department, working on retail credit operations, and employees working in back-office, i.e. in credit administration.
- 3. Developing the charter** - charter is an important document representing a written guide through a certain problem or a project. The charter stipulates the reason why a project is important (particular clients, particular category of income, particular category of provisioning), the objective (to which extent does the revenue increase, i.e. to which extent do the bank's costs decrease after the reduction of the housing loan extension process), the basic

plan (define the steps related to the housing loan extension, determine which steps are internal and which external in nature, set the deadlines for reviewing the current position and its causes, set the deadlines for the solution proposal, etc.), the boundaries (what falls within the scope of the concrete project, and what does not, in case of the loan extension process), the roles (what is each team member going to be in charge of during the project implementation process), and duties (what is each team member going to be responsible for so that the project could be implemented within the defined deadline). Also, it is important to underline that the chart may undergo certain changes throughout the course of the project.⁸

- 4. Training the team** - refers to the joint project-related activities, which usually last for four weeks (this implies daily communication concerning the project development and weekly team meetings, with a view to ensuring the timely project implementation).
- 5. Doing DMAIC and implementing solutions** - the teams are bound to implement their solutions and to hand them off to a group in the bank that will further continue to take care about the success of the concerned process advancement. The teams are bound to project plans, organize trainings and define procedures for their solutions. They are also responsible for providing their operational functioning - by measuring and monitoring the results in a certain time span.
- 6. Handing off the solution** - once the solution has been handed off to the groups within the bank that are to use it, the teams, as such,

⁷ DMAIC - Define, Measure, Analyze, Improve and Control

⁸ The standard procedure for housing loan extension consists of the following stages: 1. filing a loan application, 2. consideration and processing of the loan application, 3. the bank's decision on the loan application, 4. conclusion of the loan agreement, 5. loan utilization, 6. loan repayment, and 7. loan monitoring. The bank's organizational parts involved in the housing loan extension process are: housing loans department, retail credit risk management department, loan administration department and extended housing loans monitoring department. The owner of the loan extension process may be either housing loans department or retail credit risk management department (depending on the bank). The second, third and seventh stage are internal. The first, fifth and sixth stage are external. The fourth stage depends both on the bank and the housing loan user. The bank first considers what may be enhanced regarding the internal stages (the procedure itself, deadlines for the delivery of a certain part of the service, documentation list, list of questions, etc.), and then regarding the external stages, in the parts that may be prevented proactively (e.g. well-educated staff will prepare and present to the client the list of necessary documentation and questions concerning the extension of a housing loan before the client files the housing loan application, whereby the time needed for the housing loan extension gets drastically reduced; if that is not the case, the client's application will be additionally prolonged as being processed in various sectors, since the need for additional questions and necessary documentation, relevant for the loan decision-making process, may arise).

Najvažniji zadatak tima je prepoznati ko je klijent: interni ili eksterni. Potom sledi sagledavanje onoga što klijent želi. Ovaj zadatak sadrži glas klijenta (VoC).¹¹ Vrlo često klijenti ne znaju šta žele ili imaju problem da izraze šta žele. Međutim, vrlo dobro znaju da objasne šta ne žele pa tim mora pažljivo saslušati glas klijenta - kupca i prevesti sa jezika klijenta - korisnika usluge na značenje banci.

Timovi bi trebalo da koriste tokom realizacije projekta samo instrumente koji će im pomoći. Takođe, proces bi trebalo što jednostavnije da postave i vode. I ukoliko izabrani instrument ne daje očekivane rezultate, tim bi trebalo da isproba kako neki drugi instrument može da pomogne.

Možemo zaključiti da se definisanje problema sastoji iz tri koraka: izbor zahteva klijenta koji će se rešavati, kreiranje povelje projekta i obezbeđenje procesa (preporuka što jednostavnije).

2. **merenje** - ima dva glavna zadatka:
 - a) prikupiti podatke za proveru i kvantifikovati problem ili priliku,
 - b) testiranje činjenica i brojki koje daju podatke o uzroku problema.Znači, merenje omogućava kvantifikovanje isporuke ili posledica (koji je krajnji rezultat procesa), procesa (faze koji se mogu pratiti i meriti) i ulaganja (resursi koji se ulažu u proces promena da bi se proizvela usluga). Praktično tim mora identifikovati koji je krajnji cilj (output) merljiv, da razvije plan prikupljanja podataka (šta je to što je merljivo) i uspostavi osnovne putanje procesa (kako će ih meriti).
3. **analiza** - se koristi da bi se identifikovao, potvrdio (validacija) i kvantifikovao uzrok problema. Operativno se tim uključuje u procesne detalje, usavršava svoje razumevanje procesa i problema i identifikuje uzrok problema. Neke uobičajene kategorije uzroka problema su: metode, oprema, materijali, merenje i rezultati merenja, prirodne nepogode i zaposleni.

4. **poboljšanje** - pošto je identifikovan uzrok problema, tim pronalazi rešenja. Ova faza obuhvata identifikovanje rešenja, testiranje primene identifikovanih rešenja i razmatranje koliki su troškovi i očekivane koristi od implementacije svakog od predloženih rešenja, kako bi se izabralo najbolje i najpraktičnije rešenje. Pošto se odlučio za odgovarajuće rešenje, tim isto testira kako bi sagledao koji se problemi mogu javiti u daljoj primeni.

Pošto je testiranje uspešno završeno, rešenje se predaje grupi u banci koja učestvuje u izvođenju procesa. Takođe, se nastavlja dalja faza praćenja implementiranog rešenja, kako bi se u budućnosti blagovremeno reagovalo odnosno kako bi kvalitet usluge ostao na zadovoljavajućem nivou za klijenta.

5. **kontrola** - je korak kojim se sprečava povratak procesa na staro, što podrazumeva implementiranje kontrolnih mehanizama, pripremu dokumentacije za preuzimanje projekta i zatvaranje projekta. Operativno to podrazumeva: uspostavljanje adekvatnog procesa praćenja implementiranog projekta, pripremu plana rešenja za moguće probleme koji se mogu pojaviti, uspešnu „prodajnu“ prezentaciju zaposlenima koji će projekt koristiti u svakodnevnom radu, obezbeđenje podrške rukovodstva za implementaciju projekta (svim zaposlenima) i nesmetanog protoka informacija ka rukovodstvu o posledicama i ulaganjima.

Uvažavajući prethodno izneto, možemo dodati da timovi rade po **GRPI modelu**, koji podrazumeva:¹²

- **Ciljeve** - svrha formiranja tima i očekivani rezultati, definisanje projektnih aktivnosti, utvrđivanje potreba klijenata, ciljevi i isporučeni rezultati (šta se očekuje od tima),
- **Uloge** - koju ulogu i odgovornost koji član tima ima odnosno kakav autoritet i autonomiju članovi tima poseduju,
- **Procese** - koji su kritični faktori uspeha, kako su postavljeni planovi i aktivnosti u banci, kakvi su kontrolni mehanizmi i kako

¹¹ VoC - Voice of the Customer

¹² GRPI - Goals, Roles, Processes, Interactions

cease their activities.⁹

The bank will gain the following benefits from the implementation of DMAIC problem-solving model: quantification, i.e. measurement of the problem, focusing on the client, cause verification, breaking of old habits, risk management, measurement of the achieved results and maintenance of changes.

The steps of the DMAIC model are the following:

1. Define the problem - the main question is what the project objective is, i.e. what it is that a client wants (CTQ).¹⁰ At the same time, this is the biggest challenge for the team. The team faces a series of open questions, such as: What are they doing? Why are they solving this problem? Who is the client? What are the client's requests? What is the current procedure for conducting this process? Which benefits would all stakeholders gain from the correction of the process, i.e. service?

Once these questions are answered, DMAIC charter may be developed. The main elements of the charter are: business cause, i.e. purpose, statement of feasibility and objective, limitations and assumptions, project's boundaries, team members and their roles, initial plan.

The most important task of the team is to recognize whether the client is: internal or external. After that, they need to work out what the client wants. This task includes the Voice of the Customer (VoC)¹¹. Frequently the clients do not know what they want or have a problem expressing what it is they want. However, they know very well how to explain what they do not want, hence the team must listen to the voice of the client - buyer very carefully, and translate from the language of the client - service user to the language a bank can understand.

During the project implementation, teams should use only those instruments that may be helpful to them. Also, the process should

be set up and led as simply as possible. Even if a chosen instrument fails to provide the expected results, the team should try if some other instruments are more helpful. We may conclude that problem-definition consists of three steps: selection of the client's request to be solved, development of the project's charter, and securing the process (it is recommended to keep things as simple as possible).

2. Measure - measurement involves two main tasks:

- a) collect the check-up data and quantify the problem or opportunity;
- b) test the facts and numbers that constitute the data on the problem cause.

So, measurement enables quantification of the delivery or consequences (what is the end result of the process), the process (stages that may be monitored and measured), and the investment (resources invested in the change process in order to produce a service). The team practically needs to identify which end goal (output) is measurable, to develop a plan for data collection (which data are measurable) and define the basic paths of the project (how are they going to measure them).

3. Analyze - analysis is used to identify, confirm (validation) and quantify the cause of the problem. The team gets operationally involved with the process details, perfects its understanding of the process and the problem, and identifies the cause of the problem. Some of the common categories of problem causes are: methods, equipment, materials, measurement and measurement results, natural disasters and employees.

4. Improve - once the problem cause has been identified, the team is trying to find the solutions. This stage involves solution identification, testing the implementation of the identified solutions, and consideration of costs and expected benefits from the implementation of each of the proposed

⁹ By implementing Six Sigma concept, Česka sporitelna banka from Prague (leader in project finance in Czech Republic), reached the standard of extending retail housing loans within three working days (the so-called Mortgage Factory). Also, it enabled its clients to obtain a housing loan within one working day if they pay an additional fee.

¹⁰ CTQ - Critical to Quality

¹¹ VoC - Voice of the Customer

funkciniše merenje u okviru kompanije,

- **Međuljudske odnose u timu** - podrazumevaju odgovarajuće operativne sporazume (formalne) između tima i zaposlenih u banci, ali i neformalne relacije koje postoje među njima. Vrlo je bitna energija koja postoji među članovima i trebalo bi da bude konstruktivna i pozitivna, kako bi rezultati bili što bolji.

Na kraju možemo zaključiti, da projekat Šest sigma mora biti fleksibilan i da uspešnost implementacije Šest sigma projekta je u rukama zaposlenih koji će koristiti taj novi proces u svakodnevnom radu.

Zaključak

Banke primenom Šest sigma koncepta na prvo mesto stavljaju poboljšanje zadovoljstva klijenta, što rezultira smanjenjem ciklusa vremena neophodnog da se skoro savršena usluga proizvede i isporuči klijentu. Takođe, unapređuju procese vezane za upravljanje

rizikom banke na svim nivoima što rezultira povećanjem prihoda i smanjenjem troškova.

Osnovni faktori uspeha primene koncepta Šest sigma su: privrženost liderstvu, potpuno angažovanje lidera tima za Šest sigma, integracija sa strategijom top menadžmenta, okviri biznis procesa, inteligentna mreža kupaca i tržišta, realne uštede, prihod i profit, motivacija i podsticaji za sve zaposlene, infrastruktura programa, korporativna kultura, itd.

Uspeh implementacije koncepta Šest sigma zavisi od spremnosti samih zaposlenih da učestvuju u istom. Stoga bi trebalo da: nauče koji su ciljevi Šest sigma (videti „veliku sliku“), se pripreme za kaos, počnu da sagledavaju svoj rad u kontekstu celog procesa isporuke usluge, iskoriste priliku za učenje novih mogućnosti, izbegavaju paranoju, očekuju promene i izazove, prihvate odgovornost za svoje učenje, budu strpljivi i da se ne predaju, i budu spremni na putovanje bez kraja.

Literatura / References

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3. Productivity and Cost Management, Green Belt Six Sigma Training, IBB, 2003.
4. Process and Productivity Management, TOP Black Belt Six Sigma, IBB, 2005.

solutions, so that the best and most practical solution could be selected. Once it has decided on the appropriate solution, the team tests it in order to work out which problems might occur in further implementation.

After the testing is successfully conducted, the solution is handed off to a group in the bank which has been participating in the process. Also, the next stage implies monitoring of the implemented solution, so that in the future the bank could respond in a timely manner, and that the quality of service remains at the level satisfactory for the client.

5. **Control** - this step prevents the relapse of the process into the old position, which requires the implementation of control mechanisms, and preparation of documentation for project take-over and project closure. In operative terms, this implies the following: establishment of an adequate process of implemented project monitoring, preparation of a plan of solutions for the potential problems that might occur, successful 'selling' presentation for the employees who will be using the project in their everyday operations, securing the support of the management for the project implementation (for all employees) and undisturbed flow of information towards the management concerning the consequences and investments.

Taking into account the above mentioned, we may add that teams work according to the **GRPI model**¹², which implies the following:

- **Goals** - purpose of team formation and expected results, definition of project activities, determining the clients' needs, goals and delivered results (what is expected from the team);
- **Roles** - which role and responsibility each team member has, i.e. which authority and autonomy team members enjoy;
- **Processes** - what are critical success factors, in which way are plans and activities organized within a bank, what are control mechanisms like, and how does measurement function within the company;

- **Interactions (interpersonal relations) in the team** - these imply appropriate operative agreements (formal in nature) between the team and bank employees, but also the informal relations existing between them. The energy flowing among the members is rather important, and it should be constructive and positive in order for the results to be as good as possible.

Finally, we may conclude that Six Sigma project needs to be flexible and that the success of Six Sigma project implementation lies in the hands of the employees who will be using this new process in their everyday operations.

Conclusion

By implementing the Six Sigma concept, the banks give the priority to increasing their clients' satisfaction, which, in turn, results in the reduction of time cycle needed for the perfect service to be produced and delivered to the client. Also, they enhance the processes related to the bank's risk management at all levels, resulting in increased profit and reduced costs.

The main factors of successful Six Sigma implementation are: commitment to leadership, full engagement of Six Sigma team leaders, integration with the top management strategy, business process frameworks, intelligent network of clients and markets, real cost reductions, revenue and profit, motivation and incentives to all employees, program infrastructure, corporate culture, etc.

The success of Six Sigma concept implementation depends on the readiness of the employees themselves to participate in it. Therefore, they should: learn about the objectives of Six Sigma (be able to see 'the big picture'), be prepared for the chaos, start viewing their work within the context of the entire service delivery process, seize the opportunity to learn about the new possibilities, avoid paranoia, expect changes and challenges, accept responsibility for their education, be patient, never give up, and be ready to embark on an endless journey.

¹² GRPI - Goals, Roles, Processes, Interactions