

Nataša Krstić

Univerzitet Singidunum,
Fakultet za medije
i komunikacije
natasja.krstic@fmk.edu.rs

Dejan Tešić

Piraeus Banka ad Beograd
dejan.tesic@piraeusbank.rs

DIGITALNA TRANSFORMACIJA BANKARSKOG POSLOVANJA - OPASNOST ILI PRILIKA?

Prevod
obezbedili
autori

Rezime

Ako je prošlu deceniju bankarskog poslovanja obeležila prekomerna kreditna ekspanzija, danas govorimo u deceniji njegove digitalne transformacije. Usled uticaja digitalnih medija, velikih tehnoloških i promena u potrebama potrošača, banke su izložene digitalnom narušavanju svog poslovnog modela spolja i iznutra, što dovodi do inovacija u proizvodima, uslugama, distributivnim i prodajnim kanalima, poslovnim modelima i organizacionoj kulturi. Sektorske analize ukazuju da će buduća dobit sektora biti preusmerena ka onim finansijskim organizacijama koje uspešno koriste digitalne tehnologije za automatizaciju svojih procesa i kao analitička oruđa, kreiraju nove usluge i vrednosti za klijente koji žele da im banka bude uvek i svuda dostupna i transformišu organizacionu kulturu u agilnu i orijentisanu ka inovacijama. Uspešne bankarske strategije zasnovane su na razumevanju kako digitalna transformacija poslovanja može da stvori novu vrednost, tržišnim promena, a koje donose fin-teh inovatori, sveobuhvatnom poznavanju navika i očekivanja klijenata i postavljanju prioriteta prema investicijama u digitalno poslovanje.

Ključne reči: bankarski sektor, banke, digitalna transformacija, elektronsko poslovanje, fin-teh

JEL: G21, O32

UDC 336.71:004.738.5
004.738.5:339

doi: 10.5937/bankarstvo1602012K

original scientific paper

DIGITAL DISRUPTION OF THE BANKING INDUSTRY - THREAT OR OPPORTUNITY?

Nataša Krstić

Singidunum University,
The Faculty of Media and
Communications
natasakrstic@fmk.edu.rs

Dejan Tešić

Piraeus Banka ad Beograd
dejan.tesic@piraeusbank.rs

Translation
provided by
the authors

Summary

If the previous decade in the banking business was marked by excessive credit expansion, today we are talking about a decade of its digital transformation. Under the influence of digital media and tremendous changes in technology and consumer needs, banks are exposed to digital disruption of their business models both from the inside and outside, which all leads to innovations in products, services, sales and distribution channels, business models and ultimately organizational culture. Sector analyses are showing that future profits will be redirected towards those financial organizations which successfully deploy digital technologies for process automation and as analytical tools, create new services and values for their clients who want their bank to be accessible at all places and all times, and which transform their organizational culture to an agile and innovation-oriented one. Successful banking strategies will be based on understanding how digital business transformation can create new value - on market changes brought by fin-tech innovators, on comprehensive understanding of customer habits and expectations, and setting up investments into digital business as the key priority.

Keywords: banking sector, banks, digital disruption, online business, fin-tech

JEL: G21, O32

Uvod

Profesor Univerziteta Harvard i stručnjak iz oblasti inovacija Klajton Kristensen (*Clayton Christensen*) je u svojoj analizi koncepta inovativnosti ukazao na razliku koja postoji između inovacija koje ometaju i narušavaju tradicionalno poslovanje, i onih koje ga unapređuju (1997, str. 144). Inovacije koje narušavaju nastaju uvođenjem novog proizvoda ili usluge na tržište, ciljajući mali segment potrošača. S rastom njihove popularnosti, dobijaju širi prihvat i počinju da ugrožavaju postojeće učesnike na tržištu. Takođe, ometajuće inovacije stvaraju novo tržište i/ili vrednosti, čime narušavaju postojeće tržište i njegove vrednosti postepenim istiskivanjem etabliranih konkurenata i uspostavljenih saveza. Osnovna korist od ometajućih inovacija je što nude jeftinije, brže i jednostavnije proizvode i usluge od tradicionalnih (Christensen i saradnici, 2003).

U današnje vreme, sve veći broj ometajućih inovacija pojavljuje se u oblasti finansijskog poslovanja. Ove inovacije stvaraju tehnološki superiorni alternativni pružaoci finansijskih usluga, koji nastoje da se pozicioniraju kao posrednici u oblastima platnog prometa, kartičarstva, kreditiranja građana i malog biznisa, i depozitnog poslovanja. Za to vreme, tradicionalne banke širom sveta bore se sa ekonomskom nestabilnošću, stagnirajućom dobiti i pooštrenom regulativom. Nakon krize poverenja u svetski bankarski sistem 2008. godine, banke su bile zaštićene od inovacija koje narušavaju poslovanje oštrom regulativom, koja je uvedena da bi sprečila nove udare. Međutim, regulatorni organi širom sveta počeli su da shvataju da preterana usklađenost bankarskog sistema deluje kao ograničavajući faktor za uvođenje promena i inovacija. Posledično, kruta pravila se ublažavaju kako bi stvorile mogućnosti za nove igrače, koji treba da naprave veću konkureniju u oblasti pružanja finansijskih usluga. Velike promene odigrale su se i kod potreba i želja korisnika finansijskih usluga. Primetan je kontinuirani trend porasta elektronskog i mobilnog bankarstva, koji dovodi do automatizovanog i dehumanizovanog odnosa klijent - banka. Vreme u kome su klijenti birali banku na osnovu lokacije ili ljubaznih službenika je prošlost, što dovodi do uvećanog

pritska na bankarske kamate i naknade. Kao rezultat, Velika Britanija se suočava sa velikim padom poseta bankarskih ekspozitura - oko 30% za poslednje tri godine (BBA, 2015), dok je u Americi došlo do značajnog pada obima šalterskih transakcija za čak 45% (u periodu 1992-2013, FDIC, 2014, str. 42). Na domaćem tržištu je takođe primetan trend smanjenja broja zaposlenih i poslovnih jedinica usled kombinovanog dejstva gašenja nesolventnih banaka, ekonomske krize i porasta broja elektronskih transakcija, gde se iz kvartala u kvartal beleži stabilan rast elektronskog i mobilnog bankarstva (NBS, 2015).

Većina tradicionalnih banaka u današnje vreme ne koristi dovoljno tehnologiju koja im je na raspolaganju, kako bi izvršila modernizaciju i transformaciju svog poslovanja (Deloitte, 2014). Za to vreme, tehnološki napredni konkurenti prepoznali su da savremeno poslovanje mora da bude digitalizovano i počeli da se pozicioniraju kao finansijske organizacije budućnosti. Kompanije koje svoje poslovanje isključivo zasnivaju na elektronskom i/ili mobilnom prisustvu, privukle su klijente koji su izgubili poverenje u tradicionalne finansijske institucije tokom krize i/ili danas zahtevaju drugačiju bankarsku uslugu - personalizovanu, interaktivnu, sa više sluha za njihove svakodnevne potrebe. Inovativna britanska onlajn banka Fidor zadovoljava potrebe klijenata oslanjajući se isključivo na nove digitalne tehnologije, a pre svega društvene mreže. Njihov besplatni tekući račun *Fidor Smart Account* nudi atraktivne kamatne stope koje se formiraju na osnovu lajkova na Fejsbuk nalagu banke. Klijenti banke, tzv. *Fidor Smart Community*, dobijaju pristup ka elektronskoj platformi na kojoj mogu otvoreno da diskutuju o svojim finansijskim odlukama, bankarskom iskustvu i da za svoju aktivnost budu nagrađeni.

Iz svega navedenog, evidentno je da se bankarski sektor današnjice suočava sa puno pretnji (ibid):

- pojavljuju se novi, agilni i još uvek neregulisani igrači koji narušavaju poslovanje tradicionalnih banaka;
- bankarska regulativa otežava proces inovacija i razvoja;
- strategija zasnovana na postojećoj tradiciji,

Introduction

Professor at Harvard University and an expert in the innovation field, Clayton Christensen, in his analysis of innovation concepts, pointed out to a difference among those innovations that obstruct and disrupt traditional business, and those that are improving it (1997, p. 144). Disrupting innovations emerge when new products or services are introduced to a market, targeting a small customer segment. With a growth of popularity, they gain wider acceptance and start to jeopardize the existing market participants. Likewise, disrupting innovations create the new market and/or values, by violating the existing ones, by gradually squeezing out the established competitors and alliances. The major benefit coming from disrupting innovations is that they offer less expensive, faster and simplified products and services than the traditional ones (Christensen et. al, 2003).

Nowadays, an increasing number of disrupting innovations are appearing in the financial sector. These innovations are frequently created by technologically superior alternative financial services providers, who aim to position themselves as intermediaries in the area of payments, cards, consumer and small business lending, and deposits. At the same time, traditional banks around the globe are struggling with economic instability, stagnating revenues and stricter regulations. Following the crisis of confidence in the financial system in 2008, banks were protected from disrupting innovations through very strict regulations, introduced to prevent further shocks to the system. However, global and national regulators have started to realize that overregulated banking systems pose a limiting factor towards changes and innovations. Consequently, strict rules are being softened with the aim of creating opportunities for new players, supposed to increase competition in the area of financial services. Huge changes have also occurred in the needs and desires of financial service users. The continuous upward trend in online and mobile banking usage, which leads to automated and dehumanized client-bank relationship is clearly noticeable. The times when clients were choosing their bank due to its location or friendly staff have passed, putting

increased pressure on interest margins and fees. As a result, Great Britain has faced a sizeable slump in bank branches visits - by around 30% in the last three years (BBA, 2015), while the USA has recorded a drop of cashier transactions by as much as 45% (in the period 1992-2013, FDIC, 2014, p. 42). In the domestic market, we can see the decreasing trend in the number of bank employees and branches due to the combined effects of insolvent banks' closures, economic crisis and growth in online transactions, leading to a stable increase of online and mobile banking quarter by quarter (NBS, 2015).

Nowadays, the majority of traditional banks are not using available technologies in a sufficient manner in order to modernize and transform their operations (Deloitte, 2014). During that time, technologically advanced competitors have recognized that modern business has to be digitalized, starting to position themselves as financial institutions of the future. Companies who base their business on online and/or mobile presence exclusively have attracted clients who lost their confidence in traditional financial institutions during the crisis and/or clients who demand different banking services - personalized, interactive, with better understanding for the client's daily needs. Innovative British online bank Fidor serves its clients' needs through digital technologies exclusively, led by social networks. Their cost-free current account *Fidor Smart Account* offers attractive interest rates priced based on the Bank's Facebook page likes. Bank clients, named *Fidor Smart Community*, gain access to the online platform where they can discuss their financial needs, their experience with the banks and even get awarded for their activity.

From all the above mentioned, it is evident that banking sector nowadays faces a number of threats (*ibid*):

- Emergence of new, agile and still unregulated players who disrupt traditional banking business;
- Current banking regulations pose constraints on innovations and development;
- Strategies based on heritage, operational infrastructure and old-fashion management styles prevent banks from responding aggressively to the observed threats;
- Digital technology and behavioral changes

- operativnoj infrastrukturi i načinu rukovođenja sprečava banke da agresivno reaguju na uočene opasnosti,
- digitalna tehnologija i promene u potrebama i ponašanju korisnika finansijskih usluga zahtevaju bankarsko-finansijsku ponudu koja je drugačija od univerzalnog bankarskog modela, ograničenog na proizvode i usluge koji se distribuiraju kroz fizičko prisustvo, pretežno putem bankarskih ekspositura.

Procena je da će na tržištu Severne Amerike univerzalne banke izgubiti oko 35% svog tržišnog udela do 2020. godine od finansijsko-tehnoloških konkurenata (fin-teh, novi tržišni učesnici koji koriste internet i mobilne tehnologije kako bi kreirali nove ili superiornije bankarske proizvode i usluge) ukoliko ne inoviraju svoj dosadašnji poslovni model (Accenture, 2013, str. 3, The Economist, 2015, str. 2). Suočeni sa promenama u okruženju, čelnici vodećih banaka u svetu sve više su svesni da su digitalna tehnologija i operativni modeli zasnovani na „lakoj aktiviji“ (engl. *asset-light*), elektronskom i mobilnom poslovanju, naprednoj analitici elektronskim bazama podataka (eCRM) i interakcijama sa klijentima putem društvenih mreža ključ za očuvanje i odbranu profitabilnosti, postojeće tržišne pozicije, postizanje boljih odnosa s klijentima, uz niže troškove (AtKearney, 2014).

Pozitivne promene koje nastaju digitalnom transformacijom

Progresivno dejstvo od digitalne transformacije tradicionalnog modela bankarskog poslovanja nastaje iz tri najbitnije promene, navedene u nastavku (Moreno i saradnici, 2014; AT Kearney, 2014):

1. Operativno efikasniji poslovni modeli

Pojava mobilnih telefona i interneta krajem 20. veka i njihov masovni prihvat u 21. veku tražili su hitnu promenu u načinu pružanja finansijskih usluga: tehnologija je davala udobnost naspram čekanja u redovima i zamarajuće birokratije. Paralelno, ubrzani tehnološki razvoj povećao je očekivanja bankarskih klijenata u pogledu pristupačnosti, ujednačenog višekanalnog korisničkog iskustva i trenutnog zadovoljenja potreba - to po nižim

troškovima. Pojedine banke reagovali su na ovu promenu objedinjavanjem distributivnih kanala (engl. *multichannel integration*), unapređenjem korisničkog iskustva (engl. *customer experience*), forsiranjem elektronskog i mobilnog bankarstva i sveobuhvatnom analitikom baza podataka o klijenatima radi pružanja personalizovane usluge, uz istovremeno sniženje operativnih troškova poslovanja (Capgemini, 2012, str. 7). Ekspositure kao kanali prodaje i odnosi s klijentima unapređeni su mrežom različitih veličina i formata filijala (npr. kombinacija velikih, centralnih, tehnološki opremljenih ekspositura po izložbenom principu sa malim ispostavama, sa ili bez blagajnika), mobilnim asistentima i besplatnim internetom, sa namerom da umanjuje trošak po usluzi za 20% (engl. *cost to serve*; ibid, str. 3). Paralelno, banke su vršile prilagođavanje korisničkog iskustva u eksposituri (engl. *branch experience*) uvođenjem opcije za zakazivanje sastanka sa službenikom putem mobilnog telefona, veb-sajta ili mobilne aplikacije i samousluživanja, što omogućava zaposlenima u eksposituri da se bave uslugom umesto transakcionim poslovanjem. U Srbiji, pionirsku ulogu među tradicionalnim bankama odigrao je Sosijet Ženeral (*Societe Générale*), koji je u 2015. godini otvorio prvu onlajn eksposиту, uveo video razgovor sa bankarom, upotrebu digitalnog potpisa za elektronsko podizanje keš kredita i otvaranje štednog računa. Malezijska banka RHB promovisala je tehnološki osnaženu mrežu filijala - Izi (*Easy*), koja je 15% jeftinija za izgradnju i poslovanje od tradicionalnih ekspositura, jednostavnija i agilnija, i koja je trebala da privuče klijente sa nižim prihodima. Pokazalo se da poslovni model Easy brže stiže do pozitivne nule i da dvostruko brže ostvaruje dobit iz poslovanja od tradicionalnih ekspositura (Moreno i saradnici, 2014, str. 6). Posledično, digitalni distributivni kanali smanjuju operativne troškove poslovanja (Olanrewaju i saradnici, 2014), gde se izdvajaju automatizacija procesa pružanja i isporučivanja usluge (engl. *automation of servicing and fulfillment processes*) i migracija frontalnih, transakcionih

of the financial services users demand banking/financial offers different than the universal banking model limited to products and services distributed through physical presence (mainly via branches).

It is estimated that in the North American market only, universal banks will lose about 35% of their market share by 2020 to technology competitors (fin-tech, new market players who use the Internet and mobile technologies to create new, more superior banking products and services) in case they fail to modernize their existing business model (Accenture, 2013, p. 3; The Economist, 2015, p. 2). Faced with changes in the environment, the executives of the leading world banks are becoming increasingly aware that digital technology and operating models based on "light assets", online and mobile business, advanced database analytics (eCRM) and client engagement via social networks, are key to preservation and guarding of their profitability, current market position, achievement of better client relations, and lower costs (AT Kearney, 2014).

Positive Changes Arising from Digital Transformation

Progressive influence of digital transformation on the traditional banking business model comes from three important changes (Moreno et al, 2014; AT Kearney, 2014):

1. Operationally more efficient models

Emergence of smartphone devices and the Internet at the end of the 20th century and their massive acceptance in the 21st century required a sudden change in financial servicing: technology was providing comfort as opposed to queueing and cumbersome bureaucracy. In parallel, the accelerated technological development raised banking clients' expectations when it comes to accessibility, seamless multichannel user experience and instant gratification - all at a lower cost. Some banks responded to this change with multichannel integration and improvement of customer experience, by forcing online and mobile banking, and by comprehensive customer data analytics in order to provide personalized service, along with the simultaneous reduction of operating

costs (Capgemini, 2012, p. 7). Branches as channels for sales and customer relations have been enhanced by the creation of retail networks consisting of outlets of different sizes and layouts (for example, combination of large, central, high-tech show room branches, with small kiosks with or without cashiers), mobile assistants and free Wi-Fi, with the aim to reduce cost to serve by 20% (*ibid*, p. 3). In parallel, banks adjusted their branch experience by introducing the option to schedule a meeting with the relationship manager via mobile device, web or mobile application and self-servicing, which allows branch staff to be focused on service rather than transactional banking. In Serbia, the pioneer role amongst traditional banks played *Societe Generale*, which opened its first online branch in 2015, introduced video calls with a banker, usage of digital signature for e-loan applications and savings accounts opening. Malaysian bank RHB has promoted the technologically empowered branch network named *Easy*, which is 15% less expensive for construction and operations than their traditional branches, simpler and more agile, aimed to attract low-income customers. It turned out that the business model „Easy“ achieves break-even point much faster and that it makes profits twice as fast opposed to traditional branches (Moreno et al, 2014, p. 6). Consequently, digital distribution channels lower the operating costs (Olanrewaju et al, 2014) with the automation of servicing and fulfillment processes and migration of front-desk, transactional activities towards the digital channels (iPad forms instead of paper ones, specialized video-advisory), thus improving staff productivity and customer experience (Olanrewaju, McKinsey, 2014). For example, the average cost to serve a client in the branch equals to 4 USD per visit, 48 cents via cash point, and by using online and mobile channels only 4 cents (Arnold, 2014).

2. Capture of new client segments, penetration to new markets

By optimally using the available capabilities for decreasing cost-to-serve, provided by technology transformed business processes and distribution channels, banks can attract

aktivnosti ka digitalnim kanalima (iPad formulari umesto papirnih, specijalističko video-savetovanje), čime se uvećava produktivnost zaposlenih i korisničko iskustvo (Olanrewaju, McKinsey, 2014). Na primer, prosečan trošak usluživanja klijenta u ekspozituri iznosi 4 dolara po poseti, putem ATM uređaja (engl. *cash point*) 48 centi, a korišćenjem elektronskih i mobilnih kanala svega 4 centa (Arnold, 2014).

2. Osvajanje novih segmenata klijenata, prodiranje na nova tržišta

Optimalnim korišćenjem raspoloživih mogućnosti za sniženje troška po usluzi (engl. *cost-to-serve*), koje pružaju tehnološki transformacioni procesi u poslovnim aktivnostima i distributivnim kanalima, banke mogu da pridobiju nove klijente, na novim tržištima. Tamo gde infrastruktura ne pogoduje velikim, univerzalnim bankama, mobilno bankarstvo beleži visoke stope rasta, gde dominiraju telekomunikacione kompanije sa svojom rasprostranjenom distributivnom mrežom. U Keniji, uslugu mobilnog bankarstva Safaricom (*Safaricom*) - m-PESA, danas koristi polovina punoletnih građana. U Srbiji, Telenor banka omogućava da se proces otvaranja računa odvija isključivo putem mobilne ili veb aplikacije. Usled brzog prihvata mobilnog bankarstva, pojedine inovativne banke odlučile su se za partnerski odnos s telekomunikacionim kompanijama (engl. *telco-bank partnership*), poput Kaiše, Santandera i Telefonike (*CaixaBank, Santander, Telefónica*, 2013).

3. Nove usluge prave nove izvore prihoda

Umesto dosadašnjeg transakcionog pristupa vođenog proizvodima, banke moraju da razviju sveobuhvatni pogled na svoje klijente kako bi imale uvid u njihove nove potrebe i očekivanja, i aktivno učestvovale u svim fazama korisničkog ciklusa (engl. *customer journey*), poput kupovine nekretnina,

vozila, propratnih usluga oko putovanja i godišnjih odmora, zdravstvene nege. Barkliz (Barclays) obučava decu kako da kodiraju, a Santander banka (Banco Santander) nudi uslugu u oblaku (engl. *cloud*) za svoje poslovne klijente. Stručno prikupljanje, korišćenje i analiza velike količine podataka koje proizvodi i procesira bankarsko poslovanje u digitalnom dobu i sve veća upotreba digitalnih kanala komunikacija kod klijenata, može da ukaže na nove izvore prihoda, potrebu za novim uslugama, oblasti gde se može ostvariti ušteda na troškovima i da podrži bolje upravljanje rizicima. Na primer, banke mogu da koriste podatke dobijene iz društvenih mreža kako bi došle do korisnih saznanja o stavovima korisnika o novim proizvodima i uslugama, preprekama kod pružanja usluga i kvalitetu korisničkog servisa. MasterCard je 2013. godine sproveo globalnu analizu o mobilnim plaćanjima nazvanu „šablon za razgovor“ (engl. *Conversation suite*), sa ciljem da bolje razume stanje na tržištu kartičarstva i pozicionira se prema uočenim potrebama. Analiza je obuhvatila 85.000 pominjanja platnih kartica na društvenim mrežama (Fejsbuk, Triter, blogovi, forumi) u periodu od šest meseci, kako bi se procenilo koliko su korisnici otvoreni prema usluzi mobilnog plaćanja. Na osnovu dobijenog rezultata koji je ukazao da je pozitivno raspoloženje kod ranih prihvatilaca bilo na nižem nivou naspram korisnika koji još uvek nisu koristili ovu uslugu, MasterCard je izvršio poboljšanje svoje Master-Pass usluge elektronskog plaćanja. Do 2018. godine, banke u Skandinaviji, Velikoj Britaniji i Zapadnoj Evropi procenjuju da će više od polovine njihovih novih prihoda poticati iz prodaje koja se ostvaruje putem elektronskih /digitalnih kanala (grafikon 1).

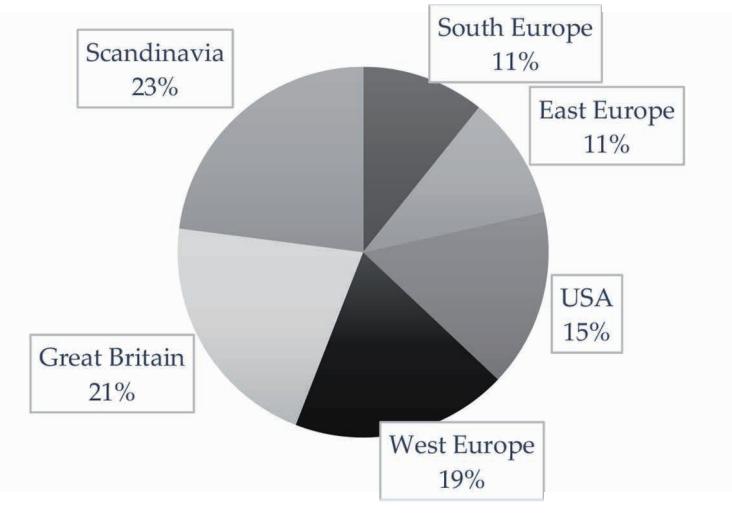
new clients and penetrate new markets. In the regions where infrastructure does not favor large universal banks, mobile banking records high growth rates, dominated by telecommunication companies with their widespread distribution networks. In Kenya, *Safaricom* mobile banking service M-Pesa, is used by half of the adult population. In Serbia, Telenor bank facilitates the possibility to open bank accounts through mobile or web application exclusively. Thanks to the fast adoption of mobile banking, some innovative banks have opted for telco-bank partnership, like CaixaBank, Santander, Telefónica (2013).

3. New services generate new sources of revenue

Instead of the former transactional approach steered by products, banks have to develop a comprehensive view of their clients in order to get insight into their needs and expectations, and take active participation in the entire customer journey, e.g. purchase of properties, cars, add-on services related to travelling and vacation, or healthcare. Barclays bank educates children on how to make a program code, while Banco Santander offers cloud services for their business clients. Proficient collection, usage and analysis of large amounts of data generated and processed through banking business in the digital age, and increased usage of digital communication channels by clients, could lead to new sources of revenue, demand for new services, achievement of cost savings and better risk management support. For example, banks could use data collected from social networks to get valuable insight into the

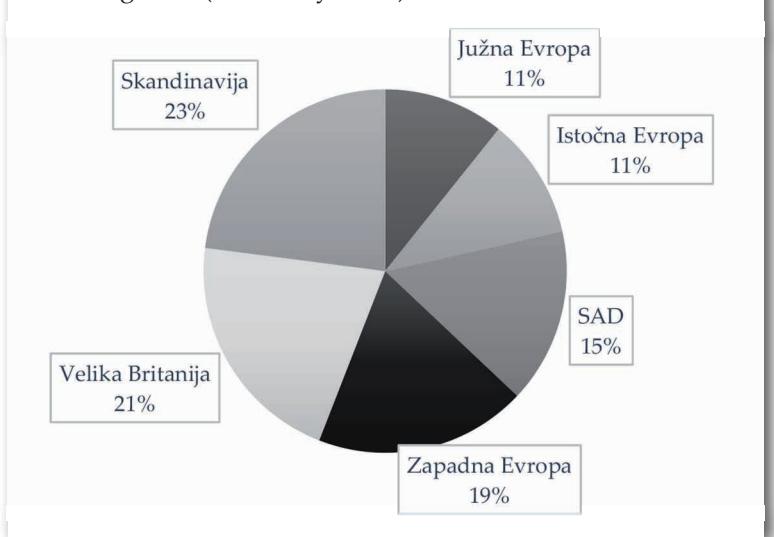
clients' attitudes towards new products and services, barriers in servicing and customer service quality. In 2013 MasterCard conducted global analysis about mobile payments named "*Conversation suite*", with the aim to better understand the state of the card business market and position it better in relation to the observed needs. Analysis encompassed 85.000 mentions of payment cards on social networks (Facebook, Twitter, blogs, forums) in the period of six months, in order to assess how open clients are towards mobile payments. Based on the findings that pointed to lower positive impressions of early adopters than those who have not used the service yet, MasterCard has improved its Master-Pass e-payment service. Banks in Scandinavia, Great Britain and Western Europe forecast that by 2018 more than a half of the new revenues will be generated from online/digital channels (Graph 1).

Graph 1: Share of new revenues from digital sales in 2018
(McKinsey, 2015)



Also, for banks who are late and slow to adopt the new products, services and technologies, up to 36% of profits will be under threat in the next period, while early adopters have a chance to increase their profits by as much as 45% (Graph 2).

Grafikon 1: Udeo novih prihoda iz digitalne prodaje u 2018. godini (McKinsey, 2015)



Ujedno, kod banaka koje čine kasnu većinu i trome prihvatioci novih proizvoda, usluga i tehnologija, čak 36% dobiti će biti ugroženo u nastupajućem periodu, dok rani prihvatioci promena u bankarskom sektoru imaju priliku da uvećaju svoju dobit za čak 45% (grafikon 2).

Grafikon 2: Efekat digitalne transformacije poslovanja sa stanovništvom, izražen kao procenat od neto dobiti (Broeders & Khanna, 2015)

Potencijalne opasnosti		Potencijalne prilike		
inovativne ponude koje dolaze od novih konkurenata	-13	+5	uvećani prihodi iz inovativnih, novih ponuda i promene poslovnog modela	
pritisak na stezanje marži	-16	+10	uvećani prihodi od novih proizvoda, usluga, digitalizovane prodaje i distribucije, i od korišćenja procesuiranih podataka za unakrsnu i prodaju na više (engl. x-sell, up-sell)	
povećani operativni rizici	-6	+30	niži operativni troškovi usled automatizacije i migracije frontalnih transakcija	
Ukupni zbir	-36	+45	Ukupni zbir	

Novi konkurenti narušavaju dosadašnji model bankarskog poslovanja

Nikad do sada tradicionalno bankarsko poslovanje nije bilo toliko narušeno od tehnoloških konkurenata koji imaju veliki potencijal da izvrši radikalne promene čitavog finansijskog sektora, tzv. fin-teh kompanija. Primeri novih igrača u pružanju usluge platnog prometa, kartičarstva i mikro finansiranja, sa agresivnom cenovnom politikom i jednostavnim korisničkim iskustvom

su već pominjana usluga M-Pesa za mobilni transfer novca i mikrokreditiranje u Istočnoj Africi, Zopa koji povezuje zajmotražioce koji žele niže kamate sa kreditorima zainteresovanim za više stope prinosa, platforma za finansiranje preduzetničkih projekata Kikstarter (*Kickstarter*), usluga plaćanja Gugl novčanik (*Google Wallet*), rešenje za procesuiranje kreditnih kartica Skver (*Square*), Fandboks (*Fundbox*) mikro-kreditiranje, beskontaktno plaćanje za vlasnike Epl telefona (*Apple Pay*), itd. Najveći rast nove konkurenциje zabeležen je kod

pružanja usluge plaćanja, zbog činjenice da platni promet kod banaka nosi visoke troškove i pretežno negativno korisničko iskustvo usled komplikovanih i neefikasnih poslovnih procesa. Kompanija Pejpal (*Paypal*) jedan je od pionira u oblasti elektronskog platnog prometa i danas broji

više od 180 miliona aktivnih računa širom sveta (Statista, 2016). Jak potencijal za rast beleže i elektronske platforme za mikro-kreditiranje i prikupljanje osnivačkog kapitala (engl. *crowdfunding*). Ciljajući ogromnu mrežu svojih dobavljača iz segmenta malih i srednjih preduzeća, Amazon je ponudio

uslugu kreditiranja (*Amazon Lending*) pod povoljnijim uslovima od klasičnih bankarskih kredita, usled činjenice da je većinu kompanija sa kojima posluje dobro upoznao, i da može bolje da proceni njihovu kreditnu sposobnost. Kompanija Pejpal takođe nudi uslugu kreditiranja obrtnog kapitala za mala i srednja preduzeća (*PayPal Working Capital*). Ovaj trend od skoro je pojačan i uslugom uzajamnog kreditiranja (skraćeno P2P od engleskog pojma *peer-to-peer lending*), sve popularnije prakse pozajmljivanja novca među nepovezanim pojedincima, fizičkim

Graph 2: Effects of digital transformation on retail banking, expressed as percentage of net profits (Broeders & Khanna, 2015)

Potential threats		Potential opportunities	
Innovative offers from new competitors	-13	+5	Increased revenues from innovative new offerings and changes of business models
Pressure on margins	-16	+10	Increased revenues coming from new products, services, digitalized sales and distribution channels, and from data analytics used for x-sell and up-sell
Increased operational risk	-6	+30	Lower operational costs due to automation and migration of front-end transactions
Total	-36	+45	Total

New Competitors Disrupt The Current Banking Business Model

Never in the past was traditional banking business so disrupted by technology competitors (so called fin-tech companies), who have a huge potential to make radical changes on the whole financial sector. Examples of new players in providing of payment services, card business and micro financing, with aggressive pricing policies and simplified customer experience are the already mentioned services *M-Pesa* for mobile money transfers and micro-lending in East Africa, *Zopa* - that connects borrowers seeking lower interest rates with lenders, e-platform for start-ups *Kickstarter*, payment service *Google Wallet*, credit card processing solution *Square*, *Fundbox* micro-lending, contactless payments for iPhone users *Apple Pay*, etc. The highest growth of new competition is recorded in the area of payment services, mainly because of the fact that banking payment services bear high costs and usually negative customer experience caused by bureaucratic and non-efficient processes. Company *PayPal* is one of the pioneers in the area of online payments and today has more than 180 million active accounts all over the world (Statista, 2016). Great potential is also recorded with online platforms for crowd-funding. By targeting a huge network of its suppliers from the SME segment, Amazon has offered its own lending service - *Amazon Lending* under more favorable conditions than standard banking loans, based on the fact that it is well acquainted with the companies it works with, and that it can assess their creditworthiness

better. Company *PayPal* also offers SMEs working capital loans - *PayPal Working Capital*. This trend has recently been emphasized with new peer-to-peer lending services (P2P), increasingly popular practice of money borrowing among non-related individuals and

legal entities, where direct connection is made between borrowers and creditors by means of an electronic platform (Moenninghoff & Wieandt, 2012). Resulting from the fact that P2P companies operate exclusively online, they are not burdened with high costs and can offer their services with more beneficial costs than traditional banks. In such a way, creditors can score higher returns on their assets as compared with interest yields on termed deposits or investment products offered by banks, while debtors, even after adding up the electronic platform fees and credit history checks, could borrow money at lower interest rates. As a result, investments into newly established, innovative fin-tech companies have been growing significantly - from 4 billion USD in 2013, to 12,2 billion in 2014 (Skan et al, Accenture, 2015, p. 2). Therefore, more and more banks decide to set-up their own investment subsidiaries for the purpose of investing into the newly established fin-tech companies; the banks BBVA, Sberbank and Santander have allocated 100 million dollars each into own special funds aimed at fin-tech acquisitions (*ibid*, p. 10).

Digital Banking Transformation - Outside And Inside

The major challenge for traditional banks is to find an ideal balance amongst financial regulations and financial innovations, i.e. between market stability and efficiency. In addition, banks who want to innovate and transform their business model by means of technology and digital communications are facing the following problems:

i pravnim licima, gde dolazi do direktnog spajanja potencijalnog korisnika kredita sa potencijalnim kreditorom posredstvom elektronskih platformi (Moenninghoff & Wieandt, 2012). Kao rezultat činjenice da P2P kompanije posluju isključivo elektronskim putem, nisu opterećene visokim troškovima i mogu da ponude svoju uslugu znatno povoljnije od tradicionalnih banaka. Samim tim, kreditori mogu da zarade veći povraćaj na uložena sredstva u poređenju sa kamatom na depozite i prinosom na investicione proizvode koje nude banke, dok dužnici, čak i nakon dodavanja naknade za vođenje elektronske platforme i provere kreditne istorije mogu da pozajmili novac po nižim kamatnim stopama. Posledično, ulaganja u novoosnovane, inovativne fin-teh kompanije značajno rastu - sa 4 milijarde dolara u 2013. na 12,2 milijarde dolara u 2014. godini (Skan i saradnici, Accenture, 2015, str. 2). Zbog toga se sve više banaka odlučuje da osnuje sopstvene investicione podružnice za ulaganje u novoosnovane fin-teh kompanije; banke BBVA, Sberbanka (*Sberbank*) i Santander izdvojile su po 100 miliona dolara specijalni fond namenjen za fin-teh akvizicije (*ibid*, str. 10).

Digitalna transformacija banaka - spolja i iznutra

Osnovni izazov tradicionalnih banaka je u pronalaženju idealne ravnoteže između finansijske regulative i finansijskih inovacija, tj. između tržišne stabilnosti i efikasnosti. Pored toga, banke koje žele da inoviraju i transformišu svoj poslovni model korišćenjem tehnologija i digitalnih kanala komunikacija, suočavaju se sa sledećim problemima:

- za inovacije je zadužen inovacioni tim (npr. za razvoj novih proizvoda, usluga, procesa) koji je odvojen od ostatka banke;
 - proces sporog i/ili birokratskog donošenja odluka usled preglomazne organizacione strukture;
 - procena učinka ili koristi od inovacije zasnovana je na zastarem kriterijumima poput povraćaja na uložena sredstva ili neto sadašnje vrednosti, umesto npr. obračuna vrednosti novog klijenta tokom ukupnog trajanja komercijalnog odnosa sa bankom (engl. *life-time value*);
 - nespremnost za preuzimanjem rizika, stav
 - da je sve što je novo je i riskantno;
 - propust da se kod analize konkurenčije, pored direktnih uzmu u obzir i indirektni konkurenti (alternativni pružaoci finansijskih usluga).
- U savladavanju pomenutih izazova, banke moraju da budu agilnije od kompanija koje im narušavaju poslovanje, ali i sposobne da se transformišu iznutra (grafikon 3). Superiorne tehnološke kompanije poput Pejpala, Amazona i Epla brzo stvaraju, unapređuju i modifikuju finansijske usluge, i pred banke se stavlja opcija narušavanja svog poslovnog modela kroz partnerstvo s kompanijama čija je osnovna delatnost izvan finansijskog sektora, stvarajući nove prilike za rast. Kada je reč o unutarnjoj transformaciji poslovanja, banke treba da razmotre digitalne strategije prema:
- klijentima; korisnicima finansijskih usluga treba pružiti objedinjeno višekanalno iskustvo (engl. *omnichannel experience*) kod kog će moći da biraju kada, gde i preko kog uređaja će stupiti u interakciju sa svojom bankom. Ujedno, potrošački ciklus (engl. *customer journey*) treba da bude zasnovan na kombinaciji personalizovane usluge, brzog i jednostavnog korišćenja svih procesa poput apliciranja i odobrenja kredita, otvaranja računa i plaćanja.
 - načinu poslovanja; banke moraju da evoluiraju kako bi postale dominantno digitalne organizacije, uključujući digitalizovane procese i procedure, alate i organizacionu kulturu.
 - postojećoj tehnologiji; prelaz na mnogo fleksibilniju informacionu tehnologiju koja podržava proces digitalne transformacije, sa otvorenom arhitekturom koja omogućava integraciju sa spoljnjim partnerima, brzo eksperimentisanje i agilni razvoj.
 - prikupljanju, analizi i korišćenju podataka iz poslovanja i iz digitalnih kanala komunikacija u procesu donošenja odluka. Pomenuto se postiže elektronskim sistemima za upravljanje odnosima s klijentima (eCRM), korišćenjem podataka u sadašnjem vremenu i naprednim analitičkim platformama sposobnim da procesuiraju veliku količinu podataka, radi dobijanja uvida o tome koji je potencijalni proizvod ili usluga potreban klijentu, ili kao podrška modelima za procenu rizika.

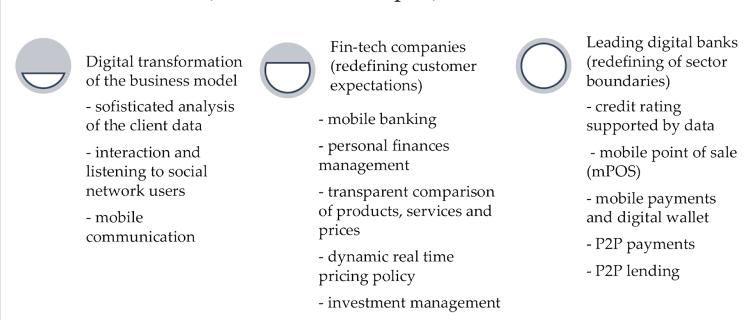
- Innovations are tasked to a separate innovation team (i.e. product, service and process development team) detached from the bank's front line;
- Too slow and/or bureaucratic decision making process due to the oversized organizational structure;
- Assessment of the effects and benefits from innovations based on the outdated criteria, such as return on investment (ROI) or net present value (NPV), instead of the calculation of *life-time value per new customer (LTV)*;
- Risk aversion, based on the position that every novelty is risky;
- Omitting to map not only direct, but indirect competitors when making competition analysis (i.e. alternative financial services providers).

In mastering the above-mentioned challenges, banks have to be more agile than companies who disrupt their business, at the same time being capable to transform themselves from the inside (Graph 3). Superior tech-companies such as PayPal, Amazon and Apple quickly create, improve and modify financial offerings, and the banks are faced with disruption of their business model through partnerships with companies whose core business is outside the financial sector, creating in such a way new opportunities for growth. Talking about internal transformation of business, banks have to take into consideration digital strategies directed to:

- Customers; financial clients have to be provided with Omni channel experience where they will be in a position to choose when, where and through which device they will start interacting with their bank. At the same time, customer journey shall be based on combination of personalized service, fast and simple usage of all processes, like loan application and disbursement, account opening and payments.
- Operating model; banks have to evolve to become dominantly digital organizations, including digitalized processes and procedures, tools and organizational culture.

- Existing technology; transition to more flexible IT which supports digital transformation, with open architecture enabling the integration with external partners, quick experimenting and agile development.
- Collection, analysis and usage of business and data from digital channels during the decision making process. It can be achieved through usage of electronic systems for customer relationship management (eCRM), using of real time data and advanced analytical platforms capable of processing big data, in order to generate insight about which products or services are needed, or as a support for risk management models.

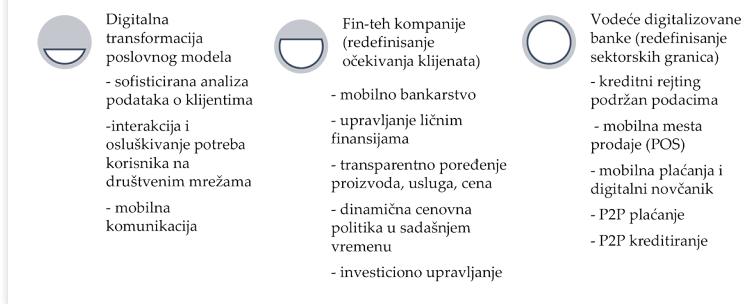
Graph 3: Organizational forms evolving from digital banking transformation (Accenture, 2015, p. 6)



Digital Transformation Demands A New Type Of Bank Executives

The focal point of the digital transformation of the banking business is the executive management which takes the leading role in changing the organizational culture. Effective and successful execution of the needed digital transformation asks for a new type of bank executive who clearly assigns roles to support technology changes during the transformation process, disrupts the existing business models and puts in focus the activities, needs and wishes of the digitalized consumers. Bank executives assigned to these roles have to cooperate in creating the digital vision, to carefully choose the initiatives, define the development strategy of the organization's digital capacities and direct the long-term transformation of the bank with a view to implementing innovations into its business. In mastering these challenges, bank executives have to possess the following skills (A.T. Kearney, 2014, p. 8):

Grafikon 3: Organizacione forme koje nastaju iz digitalne transformacije bankarstva (Accenture, 2015, str. 6)



Digitalna transformacija zahteva novi tip bankarskog rukovodioca

Centralna tačka digitalne transformacije bankarskog poslovanja je najviše izvršno rukovodstvo koje preduzima rukovodeću ulogu u preobražaju organizacione kulture. Efikasno i uspešno sprovođenje potrebne digitalne transformacije zahteva novi tip bankarskog rukovodioca koji vrši jasnu podelu uloga koje podržavaju tehnološke promene u procesu transformacije, narušavaju postojeći poslovni model i stavljuju u centar aktivnosti potrebe i želje digitalnih potrošača. Bankarski rukovodioci zaduženi za ove uloge moraju uzajamno da sarađuju u postavljanju digitalne vizije, pažljivo odaberu inicijative koje će pokrenuti, definišu strategiju razvoja digitalnih kapaciteta organizacije i usmeravaju dugoročnu transformaciju banke kako bi primenila inovacije u svom poslovanju. U savladavanju ovih izazova, neophodno je da rukovodioci poseduju sledeće veštine (A. T. Kearney, 2014, str. 8):

- smatraju digitalno okruženje svojim prirodnim okruženjem, promovišući digitalno poslovanje unutar i izvan bankarske organizacije;
- prave ravnotežu između redovnog poslovanja i potrebe za njegovim digitalnim narušavanjem;
- vrše svakodnevnu integraciju i sinhronizaciju između potreba milenijumske generacije (rođenih posle 1980. godine) i tradicionalnih klijenata;
- osnivaju inovacione odbore koji modernizuju sektore za poslovanje sa stanovništvom;
- uspostavljaju i osnažuju mešovite funkcionalne timove, npr. između marketinga, prodaje i IT;

- vrše prilagođavanje upravljačkog modela kako bi podržao digitalnu transformaciju prodaje, marketinga, komunikacija, distribucije i IT.

Posledično, neophodno je i intenzivno praćenje tržišnih prilika; primene novih digitalnih alata i aktivnosti fin-teh inovatora, kako bi se prepoznale promene koje mogu narušiti dosadašnje poslovanje i ugroziti marže. U tu svrhu, prate se matrice u ponašanju klijenata i ulagača u novo-osnovane firme (engl. *venture capitalists*) i istraživanja uglednih konsultantskih firmi koje se bave sektorom finansija. Shodno tome, pred savremene bankarske rukovodioce postavlja se šest dilema u procesu digitalne transformacije poslovanja (Hirt & Willmott, 2015; Accenture, 2015; Downes & Nunes, 2013) oko pitanja budućeg strateškog pozicioniranja putem „ignorisanja - akvizicije - partnerstva - konkurentske borbe“ (The Economist, 2015):

1. Potpuni prelazak na digitalno poslovanje ili odbrana postojećeg poslovog modela?
Potpuni prelazak na digitalno poslovanje je najbolja opcija kada banka ima malo toga da izgubi na određenom geografskom području ili u uslužnom segmentu. Primer su onlajn banka iz Poljske - mBank i njen osnivač BRE Bank u vlasništvu nemačke Komercbanke (Commerzbank), koji je odlučio da se zbog velikog uspeha svoje digitalne podružnice u potpunosti u nju utopi (Lachowski, 2012, str. 159). S druge strane, strategija odbrane je bolja opcija za sprečavanje smanjenja bankarskih marži koje nastaje kod elektronske prodaje. Zahteva velika ulaganja u najnovije bankarske tehnologije, digitalne kanale komunikacije i stručnjake za analitiku podataka, uz istovremenu inovaciju tradicionalnih kanala prodaje i distribucije sa novim formatima poslovne mreže; strategija koju je primenila brazilska banka Itau Unibank (Itaú Unibanco, ibid, str. 6)
2. Saradnja sa fin-teh kompanijama ili konkurentska borba sa njima?
Partnerstvo između banaka i fin-teh je najbolji i najbrži način za pristup novim klijentima i/ili unapređenje ponude ka postojećim sa inovativnim proizvodima

- to consider digital environment as their natural environment, promoting digital business inside and outside the bank's organization;
- to create a balance between the regular business and the need for its digital disruption;
- to perform the daily integration and synchronization between the needs of the Millennials and traditional clients;
- to set up innovation boards that modernize retail banking sectors;
- to set up and strengthen the mixed functional teams, for example: marketing, sales and IT; and
- to perform adjustments of the managerial model to support digital transformation of sales, marketing, communication, distribution and IT.

As a consequence, it is necessary to intensely follow the market conditions, as well as the applications of the new digital tools and activities of fin-tech innovators, in order to recognize the changes that can disrupt the current business and endanger margins. For that sake, the behavior patterns of clients and venture capitalists are to be monitored, along with the studies of respectable consulting companies in the financial sector. Accordingly, modern bank executives are facing six dilemmas in the digital transformation process (Hirt & Willmott, 2015; Accenture, 2015; Downes & Nunes, 2013), all related to future strategic positioning via "ignoring - acquisition - partnership - competition" (The Economist, 2015):

1. Full transition to digital business, or defending of the existing business model?
Full transition to digital business is the best option when bank has little to lose in certain geographic area or business segment. Examples are the Polish online bank - mBank and its shareholder BRE Bank owned by German Commerzbank, which decided to fully merge with its digital subsidiary after its major success (Lachowski, 2012, p. 159). On the other hand, the defensive strategy is a better option for preventing the reduction of margins occurring due to online channels. It requires significant investments into the latest banking technologies, digital communication channels and data scientists, alongside the innovation of traditional sales

and distribution channels with new branch network layouts; this strategy was applied by the Brazilian Itaú Unibanco (*ibid*, p. 6).

2. Cooperating with fin-tech companies, or competing against them?

Partnership between banks and fin-tech is the best and fastest option to access new clients and/or improve the current offer from the existing to innovative products and services. On the other side, in case the bank has a wide client base and has already made certain investments into new tech-infrastructure, it may decide to jump on the bandwagon with innovators. Turkish GarantiBank has opposed *Google Wallet* service by offering its proprietary wallet for payment services - „iGaranti“ (Fjord). Unlike them, Citibank has chosen to set up direct cooperation with Google related to the mentioned service (Citi blog, 2011).

3. Portfolio diversification or additional investments into areas that pay-off?

In the situation when economy is less and less cyclical, but increasingly turbulent and uncertain, the possession of a diversified portfolio is of vital importance (Downes & Nunes, 2013). The portfolio of digital initiatives could lower the risks through diversification, although it requires time, investments and support of the executive management. Therefore, in practice, banks very often invest into a number of digital initiatives, and then increase investments in those which show results. The Australian bank Westpac (Westpac, 2012) defined its mobile strategy as a result of several small projects, and based on that consolidated all other digital investments.

4. Separated or integrated digital business?

Integration of digital and traditional activities relatively quickly provides multi-channel options to the existing customers. Lloyds has decided to integrate digital and traditional business through the specialized Digital Banking Hub, which supports the rest of the group in the attempt to adopt new technologies for customer experience improvement. Other banks have decided to completely separate their digital business; Portuguese Millennium bcp bank had set up Activobank as a standalone and independent subsidiary.

i uslugama. Suprotno, ukoliko banka raspolaže velikom bazom klijenata i već je izvršila određena ulaganja u novu tehnološku infrastrukturu, može odlučiti da „izađe na crtu“ inovatorima. Turska Garanti banka (GarantiBank) suprotstavila se usluzi „Gugle novčanik“ (*Google Wallet*) ponudom sopstvenog elektronskog novčanika za uslugu plaćanja - „iGaranti“ (Fjord). Suprotno, Sitibanka (Citibank) se odlučila da uspostavi direktnu saradnju sa Guglom oko pomenute usluge (Citi blog, 2011).

3. Diverzifikacija portfolija ili dodatno ulaganje u oblasti koje daju rezultate?

U situaciji kada privreda postaje sve manje ciklična, a sve više krizna i nestalna, posedovanje raznovrsnog portfolija je od vitalnog značaja (Downes & Nunes, 2013). Portfolio digitalnih inicijativa može da umanji rizik kroz diverzifikaciju, iako zahteva vreme, ulaganja i podršku izvršnog rukovodstva. Zbog toga se u praksi često dešava da banke ulazu u više digitalnih inicijativa, a da potom podižu investiciju u one koje pokažu rezultate. Australijska banka Vestpac (Westpac, 2012) definisala je svoju mobilnu strategiju kao rezultat više malih projekata, a potom na osnovu nje konsolidovala ostale digitalne investicije.

4. Odvojeno ili objedinjeno digitalno poslovanje?

Objedinjavanje digitalnih i tradicionalnih aktivnosti postojećim klijentima relativno brzo stavlja na raspolaganje više-kanalne mogućnosti. Lojds (Lloyds) se odlučio za strategiju objedinjavanja digitalnog poslovanja sa tradicionalnim uz izdvojeni digitalni centar (engl. *Digital Banking Hub*), koji podržava ostatak grupacije u nastojanju da usvoji nove tehnologije za unapređenje korisničkog iskustva. Druge banke odlučile su se da potpuno odvoje svoje digitalno poslovanje; portugalska banka Milenijum Bi-si-pi (Millennium bcp) osnovala je Aktivo banku (ActivoBank) kao zasebnu i nezavisnu digitalnu podružnicu.

5. Digitalna transformacija koja dolazi iz poslovanja ili iz transformisanih operacija i IT podrške?

Sve više banaka odlučuje se da osnuje sopstvene inovacione timove i programe za

digitalnu transformaciju. Uspeh digitalne strategije koja dolazi iz poslovanja zavisi od toga da li ima aktivnu podršku izvršnog rukovodstva. Suprotno, argentinska banka BBVA (Banco Bilbao Vizcaya Argentaria) započela je svoju digitalnu transformaciju razvojem najnovije IT podržane poslovним operacijama, na osnovu kojih je potom uspešno transformisano celokupno poslovanje (González, 2014).

6. Kupovina ili prodaja određenih oblasti poslovanja ili portfolija?

Da li je bankama potrebna usluga platnog prometa sa preduzećima i malim preduzećima u situaciji kada kompanije poput Skvera i Pejpala imaju sve veći prihvat? Ili, da li ima smisla držati masivnu poslovnu mrežu kada raste korišćenje elektronskog i mobilnog bankarstva? Usled smanjenja prihoda iz određenih oblasti poslovanja i/ili depresijacije njihove vrednosti, banke se odlučuju na prodaju dela poslovanja ili portfolija. Banka Aj-en-dži (ING) prodala je svoju investicionu podružnicu u Centralnoj i Istočnoj Evropi Sitibanci, umesto da ulaže u njenu automatizaciju i transformaciju. Suprotno, pojedine banke odlučuju se da izvrše transformaciju svog poslovanja putem akvizicija. Španska banka BBVA preuzeila je tehnološkog lidera Simpl (Simple) sa ciljem da dođe do talentovane radne snage određenih profila i iskoristi njegov onlajn poslovni model za unapređenje marketinške funkcije i organizacione kulture. Kao rezultat uspešnosti ove inicijative, BBVA je odlučio da osnuje investicioni fond BBVA Venčrs (BBVA Ventures) koji je uložio sredstva u druge novo-osnovane kompanije, poput Sam-apa (SumUp) za mobilna plaćanja, Radijusa (Radius) za upravljanje odnosima s kupcima i Taulije (Taulia) za finansiranje lanca nabavke.

Strategije za odbranu od digitalnog narušavanja u bankarskom poslovanju

Rezultati studije koju je sprovela konsultantska firma Ejtikerni (A. T. Kearney) u 2014. godini o digitalnoj transformaciji poslova sa stanovništvom, pokazala je da jedna četvrtina vodećih svetskih banaka

5. Digital transformation that comes from business or transformed operations and IT? More and more banks decide to set up own innovations teams and programs for digital transformation. The success of digital strategy that comes from business depends on the top management active support. On the other hand, BBVA (Banco Bilbao Vizcaya Argentaria) started its digital transformation through developing a new IT platform supported by operational teams, based on which the entire business was transformed (González, 2014).

6. Purchase or sale of certain business areas and portfolios?

Do the banks need payment services with entrepreneurs and small businesses when companies such as Square or PayPal record an increasingly high acceptance? Or, is it feasible to maintain a massive business network when electronic and mobile banking usage is growing? Due to a decrease in business revenues from certain businesses and/or depreciation of their value, banks are deciding to sell parts of their business or

business model for the improvement of marketing function and organization culture. As a result of the initiative, BBVA decided to set up the investment fund BBVA Ventures who invested in other newly established companies, such as SumUp for mobile payments, Radius for relationship management with buyers and Taulia for purchase chain financing.

Digital disruption defense strategies in the banking sector

The results of the research conducted by A.T. Kearney consulting company in 2014 concerning the digital transformation of retail business, has shown that one quarter of the leading world banks see digital transformation on a project basis and not as a future pillar. Additionally, a more advanced group of about 42% of banks treat digital transformation as an integral part of their business, while 32% of the banks have founded a separate business unit within their organization and fully adopted the digital organization culture (Table 1).

Table 1: Three approaches to retail digital transformation (A.T. Kearney, 2014, p. 4)

Trailer banks (26%), digital transformation on a project basis	Advanced banks (42%), digital transformation as integral part of business	Banks that use „enhanced approach“ (32%), digital transformation as key value
<ul style="list-style-type: none">- separate ad hoc and non-integrated projects- gradual implementation of innovations- long term planning- risk aversion	<ul style="list-style-type: none">- clear, long term vision oriented to clients and open to innovations- cross functional teams (distribution channels, IT, sales, marketing)- „test and learn“ approach: several options are tested simultaneously, best are applied to whole business- flexible and agile execution, with semi-annual control- lean on internal communication with employees	<ul style="list-style-type: none">- fully digitalized business model- use of separate business units for additional acceleration of digital transformation- comprehensive extension of digital business model inside the bank, within organizational culture and towards innovations- dedicated IT specialists team which works with low IT costs or use leased technology of strategic partners- fully digitalized products and services (online, paperless)

portfolios. ING bank has sold its investment subsidiary in Central and Eastern Europe to Citibank, instead of investing into its automation and transformation. On the other hand, some banks decided to transform their business through acquisitions. Spanish BBVA has taken over the technology leader Simple with the aim to acquire talented staff of certain profiles and use its online

All kinds of transformation are characterized by the (gradual) adoption of the digital way of thinking and organizational culture. Digital transformation requires the reassessment of all current practices in the banking business towards the increasingly digitalized clients, but towards the employees as well. Namely, changes in the internal processes and procedures, transition to contextual engagement (banks who know

transformaciju posmatra samo na projektnoj osnovi ne kao stožer budućnosti. Potom, naprednija grupa koju čini 42% banaka tretira digitalnu transformaciju kao sastavni deo svog poslovanja, dok je 32% banaka osnovalo zasebnu poslovnu jedinicu unutar organizacije i usvojilo digitalnu organizacionu kulturu (tabela 1).

će morati da demonstriraju „digitalni način razmišljanja“, kroz usklađivanje digitalne tehnologije za unapređenje interakcija sa klijentima sa unapređenjem sveukupnog korisničkog iskustva. To pre svega obuhvata bolje razumevanje puta koji dovodi do kupovine (potrošačkog ciklusa), poželjnih kanala distribucije, uticaja mobilnih tehnologija

Tabela 1: Tri pristupa digitalnoj transformaciji poslovanja sa stanovništвом (A. T. Kearney, 2014, str. 4)

Banke - pratioci (26%), digitalna transformacija na projektnoj osnovi	Napredne banke (42%), digitalna transformacija kao sastavni deo poslovanja	Banke koje koriste „pojačani pristup“ (32%), digitalna transformacija kao ključna vrednost
<ul style="list-style-type: none"> - zasebni ad-hoc i među sobom neobjedinjeni projekti - postepena primena inovacija u poslovanju - dugoročno planiranje - averzija ka riziku 	<ul style="list-style-type: none"> - jasna, dugoročna vizija usmerena ka klijentima i otvorena ka inovacijama - unakrsni funkcionalni timovi (distributivni kanali, IT, prodaja, marketing) - pristup „testiraj i nauči“: paralelno se testira više mogućnosti, najbolji se primenjuju na čitavo poslovanje - fleksibilno i agilno izvršenje, sa šestomesečnom kontrolom - oslanjanje na internu komunikaciju ka zaposlenima 	<ul style="list-style-type: none"> - potpuno digitalizovani poslovni model - korišćenje zasebnih poslovnih jedinica radi dodatnog ubrzanja digitalne transformacije - svestrano širenje digitalnog poslovnog modela unutar banke, u organizacionoj kulturi i prema inovacijama - posvećeni tim IT stručnjaka koji radi sa niskim fiksnim tehnološkim troškovima ili koristi ustupljenu tehnologiju strateških partnera - potpuno digitalizovani proizvodi i usluge (elektronski, bez papira)

Za sve vidove transformacije karakteristično je i (postepeno) usvajanje digitalnog načina razmišljanja i organizacione kulture. Digitalna transformacija zahteva preispitivanje svih dosadašnjih načina bankarskog poslovanja, prema rastuće digitalizovanim klijentima, ali i prema zaposlenima. Naime, promena unutarnjih procesa i procedura, prelazak na kontekstualno angažovanje (engl. *contextual engagement*, situacija kada klijent stupa u kontakt s bankom koja sveobuhvatno poznaće istorijat dosadašnjeg komercijalnog odnosa bez obzira na odabrani kanal - mobilna aplikacija, veb-sajt, korisnički servis) i poslovanje u sadašnjem vremenu za većinu banaka i dalje predstavlja nepoznanicu. Samim tim, bitna unutarnja promena obuhvata i povećano korišćenje podataka i analitike, kojim se inicira i podržava donošenje odluka. Jedan od vodećih prioriteta je i privlačenje i zadržavanje talentovane radne snage obučene u novim digitalnim tehnologijama, koja će podržati promenu unutarnje organizacione kulture; 61% banaka iz pomenutog istraživanja smatra nestašicu digitalnih talenata na tržištu rada glavnim izazovom u procesu transformacije (ibid, str. 12). U spoljašnjem okruženju, banke

na korišćenje bankarskih proizvoda i usluga, i načina kako društvene mreže utiču na proces donošenja odluka.

Zaključak

Većina banaka deklarativno želi da postane lider u digitalnom bankarstvu, jer se tu nalaze klijenti. Postati i poslovati kao digitalna bankarska organizacija više ne predstavlja priliku, već nužnost usled procene da će trećina bankarskih prihoda do 2020. godine biti ugrožena digitalnim narušavanjem (Accenture, 2013, str. 3). Potencijal za narušavanje je veoma jak u celokupnom lancu vrednosti bankarske industrije, a posebno kod kreditiranja, platnog prometa, finansijskog savetovanja i kartičarstva. Pa ipak, finansijski sektor još uvek nije osetio snažnije posledice digitalnog narušavanja koje se dogodilo medijima i hotelskoj industriji. Uticaj interneta, mobilnih uređaja, društvenih mreža i narasnih mogućnosti za skladištenje i obradu velike količine podataka neminovno će ugroziti banke. Kriza iz 2008. godine privremeno je zaštitila finansijski sektor od digitalnog narušavanja - povećani regulatorni nadzor onemogućio je nastanak novih tržišnih

the history of all commercial relations and transactions, regardless of the channel selected by the customer - mobile application, website, customer service) and real time operation, for most of the banks are still an uncharted territory. Hence, the significant internal change includes both increased usage of data and analytics that initiate and support decision making. One of the leading priorities is attraction and retention of talented workforce skilled in new digital technologies, who will support the transformation of the organizational culture; 61% of the banks involved in research consider lack of digital talents at the labor market as the main challenge in transformation process (*ibid*, p. 12). In the external environment, banks will have to demonstrate the „digital way of thinking“, through the adoption of digital technology for the improvement of customer engagement which leads to the overall customer experience improvement. Before all, it includes a better understanding of the customer journey, desired distribution channels, impact of mobile technologies on the usage of banking products and services, and the ways how social networks influence decision making.

Conclusion

Most of the banks declaratively want to become leaders in digital banking, because that is where the clients are. To become a digital banking organization and operate as one is not an opportunity anymore, but a must, bearing in mind the estimate that one third of the banking revenues will be endangered by digital disruption by 2020 (Accenture, 2013, p. 3). The disruption potential is very strong in the whole value chain of the banking industry, especially in lending, payments, financial consulting and card business. And yet, the financial sector has not experienced heavier consequences of digital disruption than the ones occurring to the media and hotel industry. The influence of the Internet, mobile devices, social networks and increased capabilities for big data storage will ultimately endanger banks. The 2008 financial crisis has temporarily protected the financial sector from digital disruption - increased regulatory monitoring and control prevented the emergence of new market and organizational forms, at the same time limiting innovations in universal banks.



i organizacionih formi i istovremeno ograničio inovativnost kod poslovnih banaka. Od nedavno, regulatori su shvatili da moraju da uvedu veću konkureniju u sektoru, gde je tehnologija jedini odgovor na potrebu za sniženjem barijera za ulazak. Banke i dalje kontrolišu globalni protok novca, ali trendovi poput bitkoina ukazuju da čak i kod valuta tehnologija može da ponudi alternativu. Danas svako može da uoči da tradicionalne banke ne poseduju poslovni model koji može u potpunosti da podrži elektronske i mobilne usluge. Do 2020. godine više korisnika će upotrebljavati mobilne uređaje (telefone, tablete) kao instrument plaćanja, nego platne kartice (ibid). Pored toga, nedostatak jasne digitalne strategije, organizaciona kultura koja je neprilagođena za brze promene i nemogućnost da se privuku vrhunski digitalni talenti su izazovi s kojima će se boriti velika većina današnjih banaka (The Economist, 2015, str. 4).

Koje će finansijske organizacije osvojiti nove klijente i ugroženi tržišni ideo u budućnosti? Digitalno orijentisani narušivači koji su agilni i inovativni: novi fin-teh tržišni učesnici i sadašnje univerzalne banke koje su

uspešno digitalno transformisale svoj model modernizacijom poslovnih operacija i koje ne zavise od složenog i skupog nasleđa robustne informacione tehnologije. Digitalizovane finansijske organizacije budućnosti biće mnogo više orijentisane ka klijentima i organizovaće svoje poslovanje oko potrošačkih segmenata, pre nego kategorija proizvoda. Paralelno s tim, kako bi privukle generaciju rođenu u eri interneta, tehnološke banke će morati da diferenciraju svoje standardizovane proizvode i usluge putem ulaganja u tehnologiju za prikupljanje, skladištenje i analizu podataka. To će im dati mogućnost da značajno povećaju uvid u potrebe, želje i navike svojih klijenata, na osnovu kojih će moći da im isporuče personalizovanu uslugu. Velika prednost koju imaju današnje bankarske organizacije je upravo ogromna količina podataka koja se prikuplja i procesira iz poslovanja. Pored većeg osećaja sigurnosti, način korišćenja pomenutih podataka za predviđanje budućih trendova i potreba korisnika finansijskih usluga je ključni činilac u opstanku i borbi tradicionalnih banaka protiv novih fin-teh konkurenata.

But recently, regulators came to understanding that they have to increase the competition in the sector where technology makes the only answer to the need for lowering the entrance barrier. Banks still control global money flows, but trends such as *Bitcoin* show that even with currencies, technology can offer an alternative. Nowadays, everyone can notice that traditional banks do not possess a business model which fully supports online and mobile services. By 2020, more customers will use mobile devices as payment instruments than payment cards (*ibid*). Furthermore, the lack of a clear digital strategy, organizational culture that is not adjusted to quick changes and inability to attract top digital talents are the challenges that will burden most of modern banks (The Economist, 2015, p. 4).

Which financial organizations will win new clients and distressed market shares in the future? Digitally oriented disruptors who are agile and innovative: new fin-tech players and existing universal banks who have successfully transformed their business models through modernization of operations and who are not dependent on complex and expensive robust IT legacy. Digitalized financial organizations of the future will be much more oriented towards the clients and will organize their operations around customer segments rather than product categories. In parallel, in order to attract generations born in the Internet era, technology banks will have to differentiate their standardized products and services through investments into technology for collection, storage and analysis of big data. It will give them the opportunity to significantly increase the insight into needs, wishes and habits of their customers, placing them in a position to deliver personalized service. The biggest advantage today's banking organizations have is exactly the big data which are collected and processed through regular business. Besides the feeling of safety, the way of using the mentioned data for forecasting future trends and needs of financial services users will be the key factor in the survival and battle of traditional banks against the new fin-tech competitors.

Literatura / References

1. Accenture. 2013. Banking 2020: As the Storm Abates, North American Banks Must Chart a New Course to Capture Emerging Opportunities. <http://www.accenture.com/us-en/Pages/insight-capturing-emerging-opportunities-banking-summary.aspx>. (pristup 5.2.2016)
2. Accenture Strategy. 2015. Being digital: Digital strategy execution drives a new era of banking. https://www.accenture.com/t20150721T131239_w/_us-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_18/Accenture-New-Era-Banking-Strategy.pdf#zoom=50 (pristup 29.1.2016)
3. Amazon. 2014. The Amazon Lending team, <https://youtu.be/2kyeV2fxqdQ> (pristup 6.2.2016)
4. Apple Pay. <http://www.apple.com/apple-pay/> (pristup 5.2.2016)
5. Arnold, M. 2014. Banks must cut costs but remember what their customers want. Financial Times: Inside Business. <http://www.ft.com/intl/cms/s/0/a3fbfd2e-5873-11e4-942f-00144feab7de.html#axzz3z5z1A1GZ> (pristup 3.2.2016)
6. AT Kearney; Efma. 2014. Going Digital: The Banking Transformation Road Map. <https://www.atkearney.com/documents/10192/5264096/Going+Digital+-+The+Banking+Transformation+Road+Map.pdf/60705e64-94bc-44e8-9417-652ab318b233> (pristup 28.1.2016)
7. Baidu Wallet. <https://www.baifubao.com/> (pristup 5.2.2016)
8. Barklays. Digital Eagles: Barclays Code Playground. <http://www.barclays.co.uk/DigitalEagles/BarclaysCodePlayground/P1242686640999> (pristup 30.1.2016)
9. British Banking Association. 2015. Digital Disruption: UK Banking Report. BBA & Accenture. <https://www.bba.org.uk/news/reports/digital-disruption-uk-banking-report/#.Vri3fVgrLIW> (pristup 29.12.2015)
10. BBVA Compass, <https://www.bbvacompass.com/> (pristup 1.2.2016.).

Nastavak sa strane 31

11. Broeders, H.; Khanna, S. 2015. Strategic choices for banks in the digital age. McKinsey&Company. http://www.mckinsey.com/insights/financial_services/strategic_choices_for_banks_in_the_digital_age (pristup 21.12.2015)
12. Christensen, C.; Raynor, M. E.; McDonald, R. 2015. What Is Disruptive Innovation? Boston: Harvard Business Review. <https://hbr.org/2015/12/what-is-disruptive-innovation> (pristup 6.1.2016)
13. Citi blog. 2011. Introducing Google Wallet. <http://blog.citigroup.com/2011/09/introducing-google-wallet> (pristup 31.1.2015)
14. Deloitte. 2014. Banking disrupted: How technology is threatening the traditional European retail banking model. <http://www2.deloitte.com/content/dam/Deloitte/pt/Documents/financial-services/dttl-fsi-uk-Banking-Disrupted-2014-06.pdf> (pristup 9.2.2016)
15. Deloitte. 2014. Digital disruption. Threats and opportunities for retail financial services. <http://www2.deloitte.com/global/en/pages/financial-services/articles/digital-disruption-in-fsi.html> (pristup: 15.1.2016)
16. Downes, L.; Nunes, P. 2013. Big Bang Disruption. Harvard Business Review. March, 2013: 44-56.
17. Federal Deposit Insurance Corporation. 2014. Brick-and-Mortar Banking Remains Prevalent in an Increasingly Virtual World. FDIC Quarterly 9, (1): 37-51. FDI https://www.fdic.gov/bank/analytical/quarterly/2015_vol9_1/FDIC_4Q2014_v9n1_BrickAndMortar.pdf (pristup 25.1.2016)
18. Fidor, iGaranti: Putting people in control, re-envisioning mobile banking. <https://www.fidorbanks.uk/> (pristup 28.1.2016)
19. Fjord, <https://www.fjordnet.com/workdetail/igaranti/> (pristup 5.2.2016)
20. Fundbox, <https://fundbox.com/> (pristup 5.2.2016)
21. González, F. 2014. Transforming an Analog Company into a Digital Company: The Case of BBVA. BBVA. <https://www.bbvaopenmind.com/wp-content/uploads/2015/01/OpenMind-Transforming-an-Analog-Company-into-a-Digital-Company-The-Case-of-BBVA.pdf> (pristup 9.2.2016)
22. Hirt, M; Willmott. P. 2015. Strategic choices for banks in the digital age. McKinsey & Company. <http://www.inseit.nl/ziw/wp-content/uploads/2015/01/20150130-McKinsey-Strategic-choices-for-banks-in-the-digital-age.pdf> (pristup 31.1.2016)
23. ING. 2013. ING to sell custody services in 7 European countries to Citi. <http://www.ing.com/Newsroom/All-news/Press-releases/PR/ING-to-sell-custody-services-in-7-European-countries-to-Citi-1.htm> (pristup 8.2.2016)
24. Kickstarter. <https://www.kickstarter.com/> (pristup 5.2.2016)
25. Lachowski, S. 2012. *Disruptive Innovation in Banking: A Business Case in Low Cost Finance*. Warsaw: Studio Emka
26. Kanchan, A. 2012. Trends in Retail Banking Channels: Improving Client Service and Operating Costs. Capgemini. https://www.capgemini.com/resource-file-access/resource/pdf/Trends_in_Retail_Banking_Channels__Improving_Client_Service_and_Operating_Costs.pdf (pristup 28.1.2016)
27. Brett King. <http://brettking.com/> (pristup 9.2.2016)
28. Lloyds Banking Group. <http://lloydsbankinggroupdigital.com/about/> (pristup 30.12.2015)
29. MasterCard. 2013. MasterCard Conversation Suite: Future of Payments through Social Listening. <http://newsroom.mastercard.com/videos/mastercard-conversation-suite-video/> (pristup 5.2.2016)
30. Millennium bcp. 2013. New ActivoBank will simplify day-to-day banking. <http://ind.millenniumbcmpt/en/Institutional/imprensa/Pages/comunicadosEN/2010/20100318.aspx> (pristup 10.2.2016)
31. Moenninghoff, S. C.; Wieandt, A. 2012. The Future of Peer-to-Peer Finance. Zeitschrift für Betriebswirtschaftliche Forschung, August/September 2013: 466-487
32. Moreno, J. P.; Pichler, A.; Starrs, A. 2014. The digital disruptors: How banking got agile. Accenture. No. 1 issue of Outlook. <https://www.accenture.com/hu-en/insight-outlook-digital-disruptors-how-banking-got-agile> (pristup 30.1.2016)

33. Narodna banka Srbije. Broj klijenata po vrstama pojedinih platnih usluga (30.9.2015).
34. Olanrewaju, T. 2014. The rise of the digital bank. McKinsey Insights. http://www.mckinsey.com/insights/business_technology/the_rise_of_the_digital_bank (pristup 31. 01. 2016)
35. Olanrewaju, T.; Smaje, K; Willmott, P. 2014. The seven traits of effective digital enterprises. McKinsey Insights. http://www.mckinsey.com/insights/organization/the_seven_traits_of_effective_digital_enterprises (pristup 1.2.2016)
36. PayPal. Merchant Working Capital. <https://www.paypal.com/webapps/mpp/merchant-working-capital> (pristup 5.2.2016)
37. Rosenbaum, E. 2015. Retail bank branch is doomed, and banks don't know it. CNBC. <http://www.cnbc.com/2015/06/02/retail-bank-branch-is-doomed-and-banks-dont-know-it.html> (pristup 10.2.2016)
38. Safaricom. Lives Transformed. <http://www.safaricom.co.ke/about-us> (pristup 3.2.2016)
39. Santander. Options for cloud computing. <https://www.santandercb.co.uk/knowledge-hub/options-cloud-computing> (pristup 30.1.2016)
40. Santander. 2013. CaixaBank, Santander and Telefónica to create first joint venture between banks and telecom operators in Europe to develop new digital businesses. http://www.santander.com/csgs/Satellite?appID=santander.wc.CFWCSancomQP01&canal=CSCORP&cid=1278689613504&empr=CFWCSancomQP01&leng=en_GB&pagename=CFWCSancomQP01%2FGSNoticia%2FCFQP01_GSNoticiaDetalleMultimedia_PT18 (pristup 10.2.2016)
41. Simple. The Next Chapter. <https://www.simple.com/the-next-chapter> (pristup 10.2.2016)
42. Skan, J.; Dickerson, J.; Masood, S; 2015. The Future of Fintech and Banking: Digitally disrupted or reimagined? Accenture. <http://www fintechinnovationlablondon.co.uk/media/730274/Accenture-The-Future-of-Fintech-and-Banking-digitallydisrupted-or-reima-.pdf> (pristup 4.2.2016)
43. Societe Generale Srbija. ebanking. <http://ebanking.societegenerale.rs/> (pristup 12.2.2016)
44. Square. <https://squareup.com/global/en/register> (pristup 6.2.2016.)
45. Statista. Number of PayPal's total active registered user accounts from 1st quarter 2010 to 4th quarter 2015 (in millions). <http://www.statista.com/statistics/218493/paypals-total-active-registered-accounts-from-2010/> (pristup 6.2.2016)
46. Telenor banka. <http://www.telenorbanka.rs/> (pristup 9.2.2016)
47. Tenpay. http://global.tenpay.com/about_us/overview.shtml (pristup 16.2.2016)
48. The Economist Intelligence Unit. 2015. The disruption of banking.
49. Vodafone mPesa. <https://www.mpesa.in/portal/> (pristup 6.2.2016)
50. Walker, A. 2014. Banking without banks: Exploring the disruptive effects of converging technologies that will shape the future of banking. Journal of Securities Operations & Custody 7, (1): 69-80.
51. Westpac. 2012. Westpac unveils next generation of mobile banking. <http://www.westpac.com.au/about-westpac/media/media-releases/2012/23-july> (pristup 31.1.2016)
52. Zopa, <http://www.zopa.com/> (pristup 6.2.2016)