E-business and Digital Transformation in Client to Bookkeeping Communications: Longitudinal Case Study

E-poslovanje i digitalna transformacija u komunikaciji od klijenta do knjigovodstva: Longitudinalna studija slučaja

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Abstract. *This paper is a continuation of the research into the issue of digital transformation (DT) of bookkeeping agencies (BA) by improving e-business systems based on application of web services (WS). WS allows clients 24/7 online access to their business data stored in the BA database, thus greatly contributing to the efficiency of BA. The research of the referential BA was conducted before and after implementation of WS, over the period of three years. The aim was to carry out a quantitative and qualitative analysis of WS application and the issues relating to digital transformation of BA.*

Keywords. Bookkeeping agencies, clients, information system, web service, digital transformation

Sažetak. *Ovaj rad predstavlja nastavak istraživanja problematike digitalne transformacije (DT) knjigovodstvenih servisa (KS), kroz unaprjeđenje sustava e-poslovanja temeljenog na primjeni web servisa (WS). WS omogućava klijentima pristup vlastitim poslovnim podacima iz baze KS-a putem Interneta, 24/7, čime se poboljšava djelotvornost rada KS-a. Istraživanje je provedeno nad referentnim KS-om prije uvođenja i u toku tri godine nakon uvođenja WS-a s ciljem provedbe kvantitativne i kvalitativne analize primjene WS-a te problematike digitalne transformacije KS-a..*

Ključne riječi. Knjigovodstveni servis, klijenti, informacijski sustav, web servis, digitalna transformacija

1 Introduction

The development of science and technology, the ever-accelerating business processes, and the global growth of the digital business has been the cause of significant organizational changes. These rapid changes, along with the implementation of new technologies, has led to changes of business models, innovations of products and services and, consequently, to a new, modern trend – digital transformation (DT). Given that the sustainability of business operations depends on permanent improvements of and adjustments to current market trends and adoption of state-of-the-art technologies, there is a growing need for innovative activities aimed at changing the existing business models and digitalization of business operations.

1 Uvod

Uzročnici mnogih organizacijskih promjena u današnje vrijeme su: razvoj znanosti i tehnologije, sve brže poslovanje te globalni razvoj digitalnog poslovanja. Navedeno nameće brži tempo organizacijskih promjena, koje popraćene primjenom novih tehnologija, uzrokuju promjene poslovnih modela te inovacije proizvoda i usluga zajedno čineći novi suvremeni trend digitalnu transformaciju (DT). Budući da održivost poslovanja ovisi o kontinuiranom poboljšanju i prilagodbi aktualnim tržišnim trendovima te usvajanju suvremenih tehnologija, na tržištu se javlja potreba za inovacijskim aktivnostima koje su usmjerene na promjenu poslovnih modela i digitalizaciju poslovanja.

Organizations across industries are not immune to the changes brought about by digital transformation, and the industry that provides bookkeeping services is no exception (Sellhorn, 2020). Traditional ways of doing business in bookkeeping agencies have become the subject of discussions (Sordi Schiavi et al., 2019), focusing on the readiness to adopt new business models supported by various technological solutions and levels of digital data exchange (Pihir, 2019). Some bookkeeping agencies have recognized new technologies (such as cloud computing, mobile computing, artificial intelligence, blockchain technology, internet of things, etc.) whose adoption is a great challenge for all modern organizations (Kutnjak & Pihir, 2019), including BA. Improvements are made possible by implementing new digital technologies (Pihir, 2019) that may replace traditional bookkeeping activities (Supardianto, Ferdiana & Sulistyo, 2019), (Sellhorn, 2020), and thus contribute to increased flexibility, faster delivery of services, less errors, automation and cost savings (Mosteanu & Faccia, 2020). Similar effects can also be seen in the implementation of information systems to optimize distribution of workload (Vidačić, Pihir & Brodar, 2009) or web systems to support the sales processes (Pihir, Konecki & Vidačić. 2016).

The management of technological innovations in BA calls for investment into digital skills of the workforce (Marshall & Lambert, 2018). BA employees will have to improve their current skills with new technological knowledge (Mosteanu & Faccia, 2020) that will result in the creation of new services, but also in new benefits for clients. Of course, the human capital should be equally ready to accept and experiment with the new technologies (Diller, Asen & Späth, 2020). Just as much BA employees should be ready for changes, so should be the users of their services, since the success of digital transformation of BA depends on their adjustment to new possibilities. It will enable BA to make a step forward to improving the efficiency of its own business and providing its clients with faster and better services available 24/7.

This paper is a continuation of the research 'Towards e-Business in Bookkeeping Agencies: Perceptions, Problems and Efficiency' (Vidačić & Pihir, 2015). The aim of the research presented in the paper was to confirm the assumption that the application of the web technology and e-business is acceptable and beneficial for both the clients and the BA. The paper presented process models and defined functionalities related to the project of web applications for the bookkeeping services (author: S. Vidačić). The application was developed and implemented in late 2016 and launched into production in early 2017 with the aim to advance e business operations, raise the quality of bookkeeping

Organizacije iz različitih industrijskih grana ne ostaju imune na promjene koje donosi digitalna transformacija pa tako izuzetak ne predstavlja ni industrija koja se bavi pružanjem knjigovodstvenih usluga (Sellhorn, 2020). Tradicionalni načini odvijanja poslovanja u knjigovodstvenim servisima (KS) postaju predmet rasprave (Sordi Schiavi i sur., 2019), pri čemu se razmatra spremnost za usvajanjem novih poslovnih modela podržanih različitim tehnološkim rješenjima i razinom digitalne razmjene podataka (Pihir, 2019). Neki knjigovodstveni servisi prepoznali su suvremene tehnologije (kao što su cloud computing, mobile computing, artificial intelligence, blockchain technology, internet of things, itd.) čije usvajanje predstavlja značajan izazov za sve suvremene organizacije (Kutnjak i Pihir, 2019) pa tako i KS-ove. Unapređenja su omogućena primjenom novih digitalnih tehnologija (Pihir, 2019) koje mogu zamijeniti rutinske knjigovodstvene aktivnosti (Supardianto, Ferdiana i Sulistyo, 2019), (Sellhorn, 2020), a time i utjecati na povećanje fleksibilnosti, brzinu isporuke aktivnosti, smanjenje pogrešaka, automatizaciju te uštedu troškova (Mosteanu i Faccia, 2020). Slični učinci se vide i kod primjene informacijskih sustava za optimizaciju raspodjele radnog opterećenja (Vidačić, Pihir i Brodar, 2009) ili primjene web sustava u potpori procesima prodaje (Pihir, Konecki i Vidačić, 2016).

Da bi upravljanje tehnološkim inovacijama unutar knjigovodstvenih servisa bilo moguće, potrebno je ulaganje u digitalne vještine radne snage (Marshall i Lambert, 2018). Zaposlenici u knjigovodstvenim servisima svoje trenutne vještine morat će oplemeniti novim informatičkim znanjima (Mosteanu i Faccia, 2020) koja će omogućiti stvaranje novih usluga, ali i novih vrijednosti za klijente. Zasigurno, ljudski kapital mora u jednakoj mjeri biti spreman na prihvaćanje i eksperimentiranje s novim tehnologijama (Diller, Asen i Späth, 2020). Kao što se ta spremnost odnosi na zaposlenike KS-a tako bi se trebala odnositi i na njihove korisnike o čijoj prilagodbi novim mogućnostima ovisi uspjeh digitalne transformacije KS-a. Na taj način KS će biti korak naprijed ka poboljšanju učinkovitosti vlastitog poslovanja, a klijentima će se omogućiti brža i kvalitetnija usluga, dostupna 24/7.

Ovaj rad nastavak je istraživanja objavljenog 2015. pod naslovom 'Towards e-business in bookkeeping agencies: perceptions, problems and efficiency' (Vidačić i Pihir, 2015). Cilj istraživanja prezentiranog u tom radu bio je potvrda hipoteze da je primjena web tehnologije i e poslovanja obostrano prihvatljiva te donosi učinke i klijentima i KS-u. U navedenom radu prezentirani su procesni modeli i definirane funkcionalnosti prema projektu web aplikacije za knjigovodstvene servise (autor: S. Vidačić). Aplikacija je razvijena i implementirana krajem 2016. godine i stavljena u produkciju početkom 2017. godine, s ciljem podizanja e

services in BA to a higher level and significantly increase their productivity.

This paper presents a part of the new research conducted in late 2020 and early 2021, focused on the analysis of implementation of web services in business years 2017-2019, so as to identify and analyse implementation and effects of e-business in a given time. The aim of the paper is to present the developed models of causal links within the information system (IS) of the selected referential BA, using the System Dynamics methodology. Also, analysed were quantitative and qualitative indicators of implementation of web service (WS) on the part of BA clients over a three-year period of active use, monitoring at the same time the digital transformation of BA's business operations.

The paper is structured as follows: it begins with the description of the research methodology and sources of data, followed by an overview of causal links in the implementation of IT technology in BA and the structure of the process model. The next chapter provides a quantitative analysis of BA WS implementation on the part of the client. It is followed by a comparative analysis of the BA workload in relation to the WS implementation by the client. The paper ends with a conclusion and some ideas that could be used in the future researches.

2 Methodology and data

This research includes quantitative and qualitative analyses of implementation of web service in the selected bookkeeping agency. It was conducted as a case study of a referential bookkeeping agency. This BA has 20 employees and provides services for some 240 enterprises: joint-stock companies, LLCs, associations, public institutions, schools, kindergartens and other for-profit and non-profit organizations. Given the diversity of users (including craftsmen) and the wide range of business activities and legal forms, we found the selected BA suitable for referential BA. The analyzed data is original and it was taken over from the production-related WS database of the BA in question. The users' data are coded. Gathering of and access to data were approved by the BA. The data is shown either in aggregated or coded form.

The quantitative analysis is based on the implementation of WS in the BA over the period of three business years (2017, 2018, 2019). The qualitative analysis includes identification of problems with the BA information system in the course of digital transformation, and also optimal methods of its implementation. The paper seeks to investigate (i) implementation of web service through access to business data stored in the database of the BA, and as such available to clients, and (ii) how can BA best manage business data available

poslovanja i kvalitete usluge KS-a na višu razinu i značajnijeg povećanja produktivnosti KS-a.

U ovom radu prikazan je dio novog istraživanja provedenog krajem 2020. i početkom 2021. godine, s ciljem analize primjene web servisa kroz razdoblje od 2017. do 2019. (za cijele poslovne godine) tako da se može prepoznati i analizirati primjena i učinci e poslovanja kroz vrijeme. Cilj rada je prezentirati razvijene modele uzročno-posljedičnih veza unutar informacijskog sustava (IS) odabranog referentnog KS-a prema metodologiji Sustavske dinamike. Osim navedenog, izvršit će se analiza kvantitativnih i kvalitativnih pokazatelja primjene web servisa (WS) od strane klijenata KS-a u razdoblju od 3 godine njene aktivne primjene, čime se KS kreće u smjeru digitalne transformacije svog poslovanja.

Rad je strukturiran kako slijedi. Na početku je definirana istraživačka metodologija i izvori podataka, nakon čega slijedi prikaz uzročno-posljedičnih veza primjene IT tehnologije u KS-u te prikaz modela procesa. U sljedećem poglavlju napravljena je kvantitativna analiza primjene WS-a KS-a od strane klijenata. Nakon toga slijedi usporedna analiza knjigovodstvenog opterećenja KS-a i primjene WS-a od strane klijenata, dok na kraju rad završava sa zaključkom i idejama za buduća istraživanja.

2 Metodologija i podaci

Ovo istraživanje obuhvaća kvantitativnu i kvalitativnu analizu primjene web servisa odabranog knjigovodstvenog servisa. Istraživanje je provedeno na referentnom knjigovodstvenom servisu koji je uzet kao studija slučaja. Servis ima 20 zaposlenika i pruža usluge cca 240 poduzeća: d.d., d.o.o., udruga, javnih ustanova, škola, vrtića i drugih vrsta profitnih ili neprofitnih korisnika. Korisnici su najrazličitijih profila, a KS podržava i obrtnike što je široki spektar djelatnosti i pravnih oblika zbog čega smatramo da isti može predstavljati referentni KS. Podaci koji se analiziraju su izvorni i preuzeti su iz produkcijske baze podataka WS-a predmetnog referentnog KS-a. Podaci korisnika su kodirani dok je njihovo prikupljanje i pristup odobreno od strane KS, a podaci su prikazani ili sumarno ili kodirano.

Kvantitativna analiza temelji se na primjeni web servisa unutar KS-a, a promatrana je kroz tri razdoblja pune poslovne godine (2017., 2018. i 2019.). Kvalitativna analiza odnosi se na identifikaciju problematike informacijskih sustava KS-a pri poduzimanju inicijativa vezanih uz digitalnu transformaciju te identifikaciju optimalne metodike za provođenje iste. Rad nastoji istražiti (i) primjenu web servisa kroz pristup poslovnim podacima koji se nalaze u bazi podataka KS-a i kao takvi su dostupni klijentima te (ii) način upravljanja online dostupnim poslovnim podacima od strane KS-

online so as to reduce the workload in the traditional BA - client communication.

3 Investigation into causal links in implementation of IT technology in bookkeeping agencies

The use of new technologies in business operations starts with upgrading or combining of the existing technologies with the new technological concepts that will enable improvement of business operations (Tomičić Furjan, Pihir & Tomičić-Pupek, 2019). In view of the above, the first step that a bookkeeping agency should take is to clearly set out the concept of business improvement that is aimed at creating new business models or added value through new services provided to clients. The choice of business concept intended to improve business operations is fundamental for the choice of technology to support it. Thus selected technology, combined with the currently available technology used by BA and described in (Vidačić & Dobrović, 2006), will result in increased efficacy. As regards DT of bookkeeping agencies, higher level of digital transformation contributes to saving time, work hours of employees, materials and other financial expenses in BA operation (Pihir, 2019).

Below is a comparative description of traditional and e-business processes in the BA, in the form of a structural system-dynamics (SD) diagram of causal links (Wolstenholme & Coyle, 2017), (Rosenberg, Riasanow & Krcmar, 2015), illustrating the effects expected once the WS technology is implemented.

The SD diagram in Fig. 1 shows the positive feedback loop between the two key resources within the BA IS, i.e. clients and employees. It is hard to maintain a balanced relationship between them in real time in terms of required and delivered bookkeeping services (there is a problem of the number of clients vs. number of BA employees available to deal with clients' requests).

As the number of clients grows, so does the number of requests for information (in other words, there is more client - BA communication), which results in the lesser availability of the staff. Increased amount of communication requires increased amount of time needed to respond to clients' inquiries. Given lesser availability of staff, clients wait longer for the information they requested. This in turn has a negative impact on the level of quality and the speed of service, and may reduce the number of satisfied BA clients (and consequently their number).

a sa svrhom smanjenja opterećenja klasične komunikacije na relaciji KS – klijent.

3 Istraživanje uzročno-posljedičnih veza primjene IT tehnologija u knjigovodstvenim servisima

Upotreba novih tehnologija u poslovanju polazi od nadogradnje ili kombiniranja postojeće tehnologije s novim tehnološkim konceptima koji će omogućiti implementaciju poslovnih poboljšanja (Tomičić Furjan, Pihir i Tomičić-Pupek, 2019). U skladu s navedenim, u prvom koraku, knjigovodstveni servisi trebali bi jasno razgraničiti ideju poboljšanja poslovanja sa svrhom kreiranja novih poslovnih modela ili stvaranja dodane vrijednosti kroz nove usluge koje će pružati svojim klijentima. Odabir poslovnog koncepta za poboljšanje poslovanja bazna je aktivnost za odabir tehnologije koja će pripomoći u unapređenju. Tako odabrana tehnologija, zajedno sa trenutnim tehnološkim mogućnostima KS-a opisanim u (Vidačić i Dobrović, 2006), dovest će do povećanja učinkovitosti. Kad govorimo o DT knjigovodstvenih servisa, viša razina digitalne transformacije doprinosi uštedama: vremena, radnih sati zaposlenika, materijala i drugih financijskih troškova unutar poslovanja KS-a (Pihir, 2019).

U nastavku rada slijedi usporedni prikaz klasičnog i e-poslovanja KS-a pomoću strukturno sustavsko-dinamičkih (SD) dijagrama uzročno-posljedičnih veza (Wolstenholme i Coyle, 2017), (Rosenberg, Riasanow i Krcmar, 2015), a koji ilustriraju efekte koji se očekuju uvođenjem tehnologije WS-a.

Na SD dijagramu na Slici 1. uočavamo pozitivnu povratnu petlju između dva ključna resursa u okviru IS-a KS-a, a to su klijenti i zaposlenici KS-a. Između njih se u realnom vremenu teško održava uravnoteženi odnos na razini traženih i realiziranih knjigovodstvenih usluga (problem broja klijenata nasuprot raspoloživosti zaposlenika KS-a za rješavanje klijentskih zahtjeva).

Naime, povećanjem broja klijenata KS-a raste i broj zahtjeva za informacijama (odnosno više je komunikacije klijenata prema KS-u) što smanjuje raspoloživost zaposlenika KS-a. Povećanjem komunikacije raste vrijeme potrebno za odgovor na upite klijenata. Budući da su zaposlenici KS-a manje raspoloživi duže se čeka na povrat traženih informacija od strane klijenata. To povratno loše utječe na razinu kvalitete i brzinu usluga KS-a i potencijalno smanjuje broj zadovoljnih klijenata KS-a (a posljedično i njihov broj).
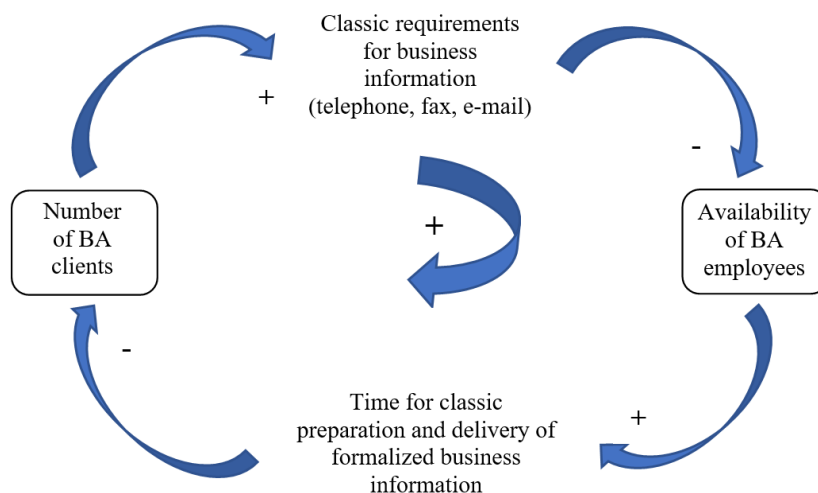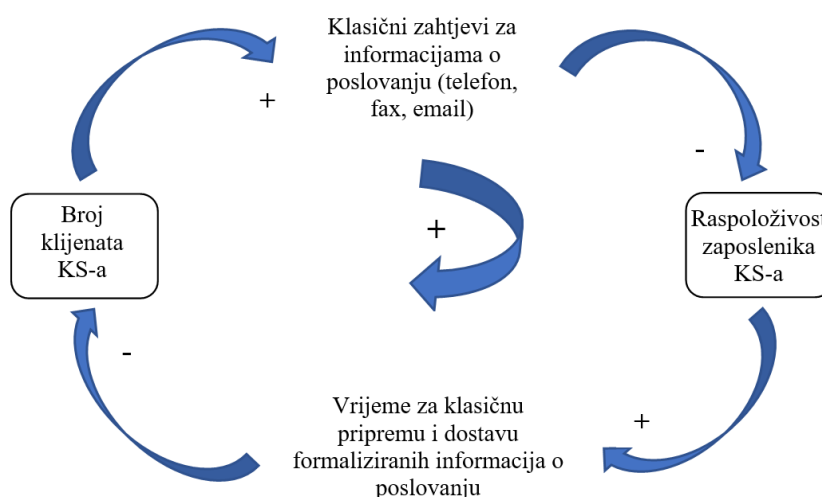
Figure 1. SD diagram of BA traditional business system

Slika 1. SD dijagram sustava klasičnog poslovanja KS-a

The structural system-dynamics (SD) diagram of causal links within a BA IS in the context of e-business (new TO BE situation) is shown in Fig. 2. The SD diagram shows the negative feedback loop between the two key resources within the BA IS, i.e. the number of BA's clients and the availability of BA employees.

The relationship between clients and employees in real time is balanced, orchestrated and successfully maintained (Vidačić, Pihir & Tomičić-Pupek, 2015) in terms of requested and delivered bookkeeping sevices. The WS system and implementation of e-business process serve as a regulator and deal with more requests with less BA resources.

Strukturni sustavsko-dinamički (SD) dijagram uzročno posljedičnih veza unutar IS-a KS-a u kontekstu e-poslovanja (novo TO BE stanje) prikazan je na Slici 2. Na SD dijagramu uočavamo negativnu povratnu petlju između dva ključna resursa u okviru IS-a KS-a, a to su broj klijenata KS-A i raspoloživosti zaposlenika KS-a.

Između klijenata i zaposlenika se u realnom vremenu uspješno održava uravnoteženi orkestrirani odnos (Vidačić, Pihir i Tomičić-Pupek, 2015) na razini traženih i realiziranih knjigovodstvenih usluga. Sustav WS i primjena e-poslovanja služi kao regulator i omogućava rješavanje većeg broja zahtjeva uz manju upotrebu resursa KS-a.
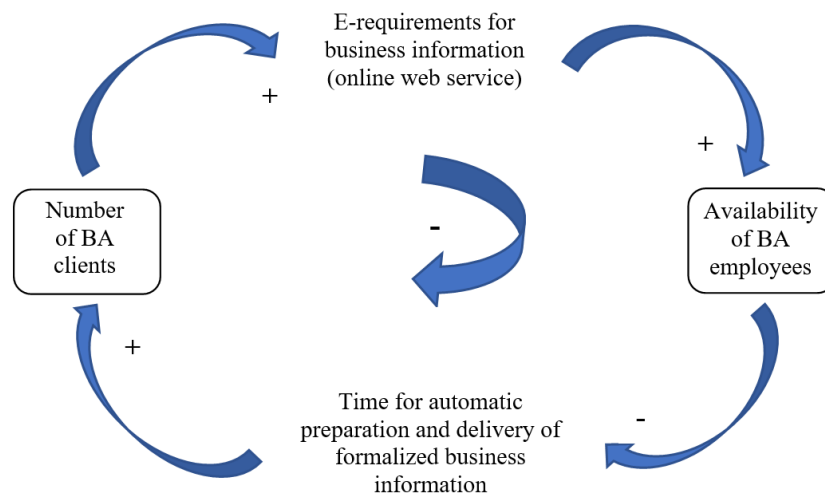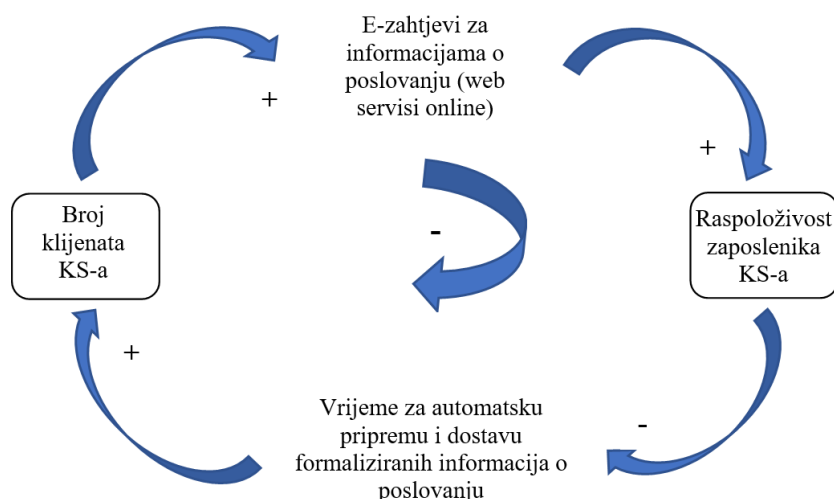
Figure 2. SD diagram of the BA e-business system

Slika 2. SD dijagram sustava e-poslovanja KS-a

Digital transformation of part of BA services makes it possible to serve more clients so that their number can grow. Consequently, there will be more requests for information (to which clients can have access 24/7 via e-business without burdening BA employees). As a result, BA employees will be available for other jobs and new clients, and the time needed to access the required information, prepare reports (specific requests, consulting, etc.) will be reduced. Reduced time needed to deliver feedback information, means more satisfaction to clients and, given the freed BA resources, the number of new clients may thus grow. This brings multiple benefits to both clients of BA and BA employees and, ultimately to BA owners.

For better understanding, the TO BE process model (Fig. 3), developed and presented in paper (Vidačić & Pihir, 2015), shows future state (implemented already three years). It was developed using collaborative e-business modelling methods (Hoyer, 2008), and BPMN standards (Silver, 2011), (OMG, 2011) with BizAgi tools (2021).

Digitalnom transformacijom dijela usluge KS-a moguće je posluživanje više klijenata pa im broj može rasti. Time će posljedično rasti i broj zahtjeva za informacijama (koje primjenom e-poslovanj mogu sami dohvatiti 24/7 bez opterećivanja zaposlenika KS-a). Posljedično raste raspoloživost zaposlenika KS a za druge poslove ili nove klijente, a smanjuje se vrijeme za dohvat traženih informacija te pripremu izvještaja, (specifični zahtjevi, konzalting i dr.). Smanjenjem vremena za dobivanje povratne informacije raste i zadovoljstvo klijenata uslugom KS-a, a s obzirom na oslobođene resurse KS-a može rasti i broj novih klijenata KS-a. Koristi su višestruke i za klijente KS-a i za zaposlenike KS-a, posljedično vlasnike KS-a.

Radi detaljnog razumijevanja razvijen je i TO BE model procesa (Slika 3), preuzet iz rada (Vidačić i Pihir, 2015), koji prikazuje buduće stanje (trenutno u primjeni već 3 godine). Razvijen je prema metodama kolaborativnog modeliranja e-poslovanja (Hoyer, 2008), primjenom BPMN standarda (Silver, 2011), (OMG, 2011) u alatu BizAgi (2021).
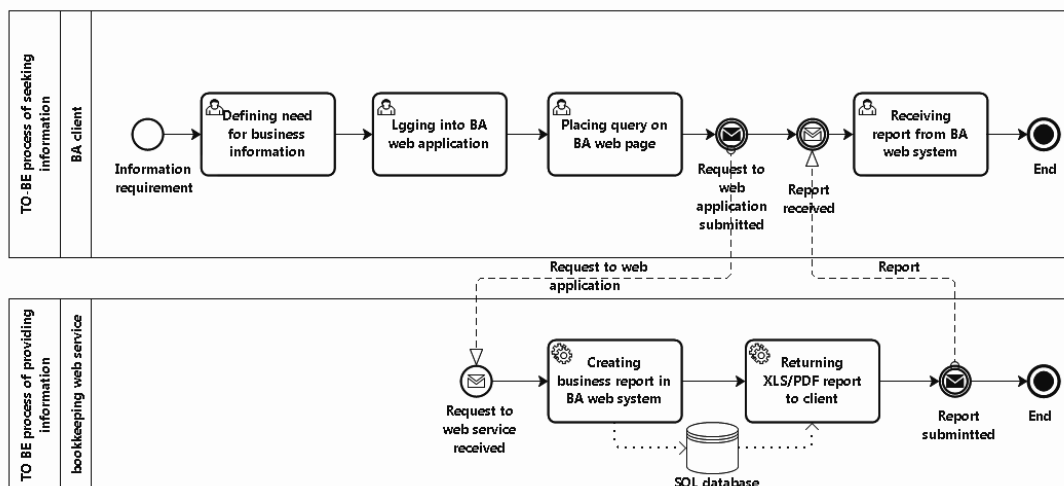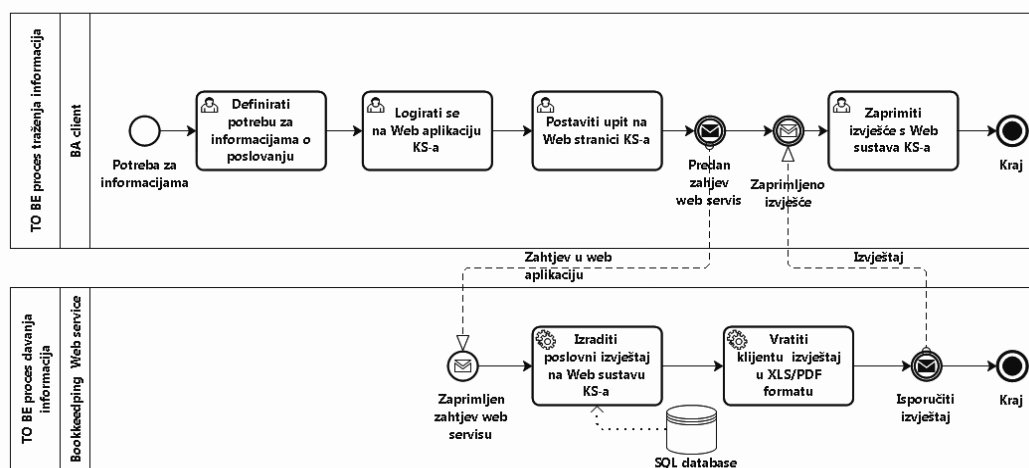
Figure 3. TO BE process models on the provider side and on the user side (Vidačić & Pihir, 2015)

Slika 3. TO BE modeli procesa na strani KS-a i na strani klijenta (Vidačić i Pihir, 2015)

TO BE process model presented in Fig. 3 shows the process of communication between the client and BA. Clients start searching business information by logging into BA web service (application) and placing inquiry which is then automatically submitted. Having received the inquiry, web service searches the database and, by way of created algorithm, provides response and delivers it in a requested format (xls, pdf) to the BA user. Upon client's receipt of the requested report, the BA - client communication is completed.

TO-BE procesni model, prikazan na Slici 3, pokazuje način komunikacije na relaciji klijenti i KS. Klijenti KS-a započinju proces traženja poslovnih informacija logirajući se u web servis (aplikaciju) KS-a, postavljajući upit na web servis KS-a. Upit se automatizmom podnosi web servisu gdje isti temeljem pretrage baze podataka i kreiranim algoritmima definira odgovor na postavljen upit i dostavlja ga u traženom formatu (xls, pdf) korisniku KS-a. Zaprimanjem traženog izvještaja od strane klijenta KS-a završava komunikacija na KS - klijent.

4 Quantitative analysis of BA WS implementation on client side

In keeping with the concept of functionality of the web service (WS) for the needs of client's online access to BA, envisaged and described in (Vidačić & Pihir, 2015), a set of services – modules were expanded and implemented within the WS. Actually,

4 Kvantitativna analiza primjene WS-a KS-a od strane klijenata

Sukladno konceptu funkcionalnosti web servisa (WS) za potrebe online pristupa klijenata KS-a, koji je inicijalno bio predviđen i opisan u (Vidačić i Pihir, 2015), u okviru WS-a razvijen je i implementiran prošireni skup servisa - modula za online dohvate

these are reports on the following: 1) buyers' open accounts; 2) analytical cards B/S; 3) VAT reports; 4) supplier's open accounts; 5) statements on outstanding balances; 6) reminders; 7) compensations.

Fig. 4 shows the total number of active BA clients over years and of WS potential users in the period relevant for the analysis. It can be seen from the graph in Fig. 4 that the number of active clients increased over the analyzed years (2017- 2019). On the other hand, the number of WS users varies over the years, depending on whether they continued or stopped using WS services or BA services in general. Thus, in 2017 there were 213 active users (the share of WS users 23% N=49), in 2018. godine 239 (the share of WS users 15% N=37), and in 2019 243 (the share of WS users 13% N=33).

So, in contrast to the growing number of active BA clients, the number of WS users tended to decline in the same period.
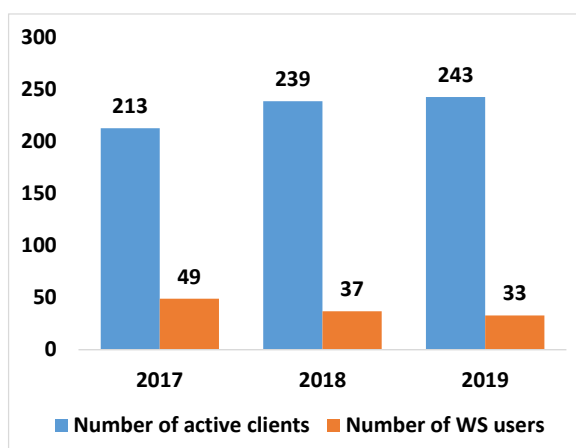
podataka - izvještaje koji su navedeni u nastavku: 1) otvoreni računi kupaca; 2) analitičke kartice K/D; 3) PDV prijava; 4) otvoreni računi dobavljača; 5) izvodi otvorenih stavaka; 6) opomene; 7) kompenzacije.

Slika 4 prikazuje ukupan broj aktivnih klijenata KS-a kroz godine te potencijalnih korisnika WS-a u razdoblju analize. Iz grafičkog prikaza (Slika 4) vidljivo je da ukupni broj aktivnih klijenata KS-a raste u periodu promatranih godina (2017.-2019.). S druge strane broj korisnika programa varira od godine do godine u ovisnosti o uključenju u sustav WS-a ili prestanku korištenja usluge WS ili usluge KS-a općenito. Tako je 2017. godine broj aktivnih klijenata bio 213 (udio korisnika WS-a 23% N=49), 2018. godine 239 (udio korisnika WS-a 15% N=37), dok je 2019. godine, aktivnih klijenata KS-a bilo 243 (udio korisnika WS-a 13% N=33).

Dakle, za razliku od rastućeg broja aktivnih klijenata KS-a, broj korisnika WS-a ima tendenciju pada kroz razdoblje analize.

Figure 4. Number of active clients and WS users per years

Slika 4. Broj aktivnih klijenata i broj korisnika WS-a po godinama

An overview of the total number of clients' online accesses to particular BA WS services for the whole analyzed period (2017, 2018, 2019) is shown in Table 1.
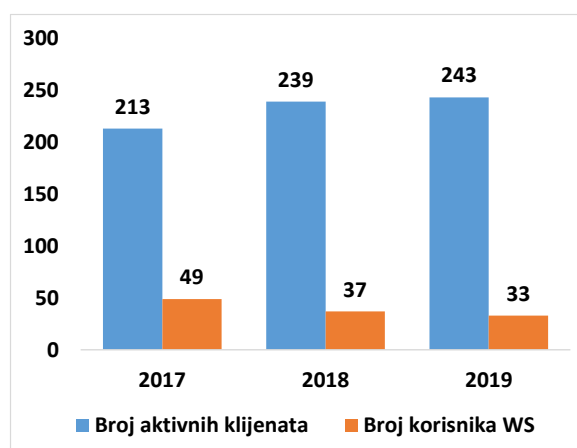
Pregled ukupnog broja online pristupa pojedinim servisima WS-a od strane aktivnih klijenata KS-a za ukupno razdoblje analize (2017., 2018., 2019.) prikazan je u Tablici 1.

Table 1. Total number of accesses to WS

No.	Service - module	Number of accesses
1.	Buyers' open accounts	13836
2.	Analytical cards B/S	10061
3.	VAT report	9169
4.	Suppliers' open accounts	6412
5.	Statements on outstanding balances	4581
6.	Reminders	1273
7.	Compensations	984
	TOTAL:	46316

Tablica 1. Pregled ukupnog broja pristupa WS-u

Rbr.	Naziv servisa - modula	Broj pristupa
1.	Otvoreni računi kupaca	13836
2.	Analitičke kartice K/D	10061
3.	PDV prijava	9169
4.	Otvoreni računi dobavljača	6412
5.	Izvodi otvorenih stavaka	4581
6.	Opomene	1273
7.	Kompenzacije	984
	UKUPNO:	46316

Table 1 indicates which WS module was most frequently accessed over the period of three years and how many calls clients made towards WS in total. Table 2 shows BA clients who actively used WS online services in the analyzed period, with the total number of those who used them at least once being 57 (not all of them were using services in each year). The complete table is provided in Appendix 1.

U Tablici 1. može se uočiti koji od modula WS-a je u razdoblju od tri godine bio najfrekventniji i koliki je ukupni broj online poziva prema WS-u realiziran od strane klijenata KS-a. U Tablici 2. prikazani su klijenti KS-a koji su aktivno koristili servise WS-a u analiziranom razdoblju, pri čemu ukupan broj koji su ikad koristili WS iznosi 57 (nisu svi koristili u svim godinama). Cijela Tablica 2. nalazi se u Prilogu 1.

Table 2. Number of BA clients' accesses to WS services

No.	Name of BA client	Year 2017	Year 2018	Year 2019	Total number of online accesses
1.	CLIENT - 1	4931	5586	562	11079
2.	CLIENT – 2	2277	1369	1435	5081
3.	CLIENT – 3	1191	1596	1331	4118
4.	CLIENT – 4	907	913	1010	2830
5.	CLIENT – 5	0	1036	1713	2749
…	…	…	…	…	…
57.	CLIENT – 57	1	0	0	1

Tablica 2. Broj pristupa klijenata KS-a servisima WS-a

Rbr.	Naziv klijenta KS-a	Godina 2017	Godina 2018	Godina 2019	Ukupni broj online pristupa
1.	KLIJENT - 1	4931	5586	562	11079
2.	KLIJENT – 2	2277	1369	1435	5081
3.	KLIJENT – 3	1191	1596	1331	4118
4.	KLIJENT – 4	907	913	1010	2830
5.	KLIJENT – 5	0	1036	1713	2749
…	…	…	…	…	…
57.	KLIJENT – 57	1	0	0	1

By comparing the data in Fig. 4 and in Table 2, it can be sean that the average number of BA clients over three years amounted to 232, and that 57 out of that number or 24.56% accessed online access to WS at least in one business year.

Further analysis of data provided in Table 2 (Appendix 1) leads to a conclusion that some 30, or 12.93% BA clients used online WS services more frequently than the average number of active clients.

The reason why this percentage was not higher probably lies in the fact that the BA did not in any way set conditions to their clients for usage of new online options that WS offered, and failed to raise their communication with clients during the analyzed period to the level of causal links shown in the SD diagram in Fig. 2. A survey of the total number of online accesses to WS services by active BA clients per years is given in Fig. 5.

Usporedbom podataka sa Slike 4. i Tablice 2. vidi se da je prosječni broj aktivnih klijenata KS-a tijekom razdoblja od tri godine bio 232, a da je od tog broja klijenata njih 57, odnosno 24,56% koristilo online pristup WS-u barem u jednoj poslovnoj godini.

Daljnjom analizom podataka iz Tablice 2. (Prilog 1) može se uočiti kako je broj klijenata KS-a koji su značajnije koristili online servise WS-a oko 30 ili 12,93% od prosječnog broja aktivnih klijenata.

Odgovor na pitanje zašto navedeni postotak nije bio veći najvjerojatnije je u tome što KS svojim klijentima nije ni na koji način uvjetovao korištenje novih online mogućnosti koje nudi WS te u promatranom razdoblju nije uspio poslovnu komunikaciju s klijentima podići na razinu uzročno posljedičnih veza koje prikazuje SD dijagram na Slici 2. Pregled ukupnog broja online pristupa pojedinim servisima WS-a od strane aktivnih klijenata KS-a po godinama prikazan je na Slici 5.
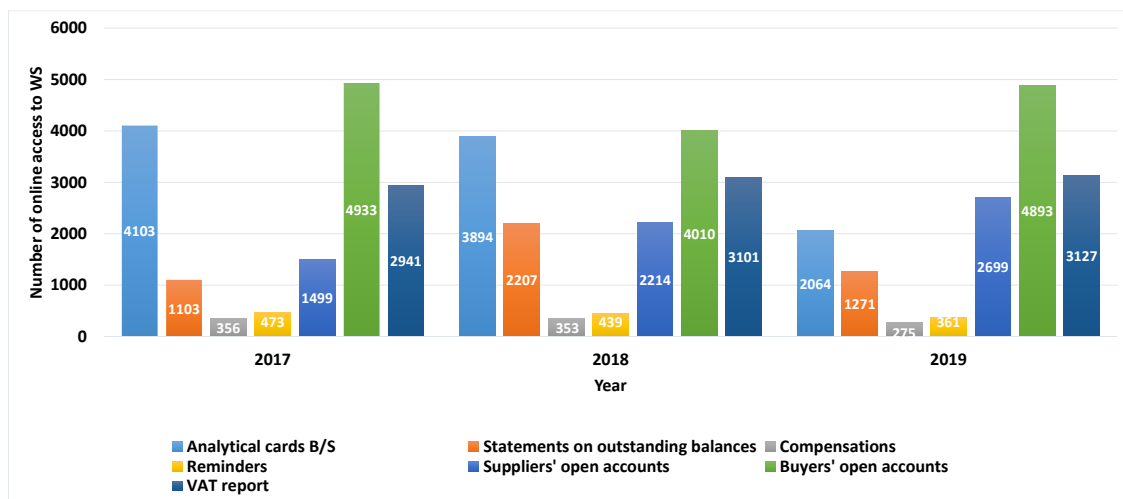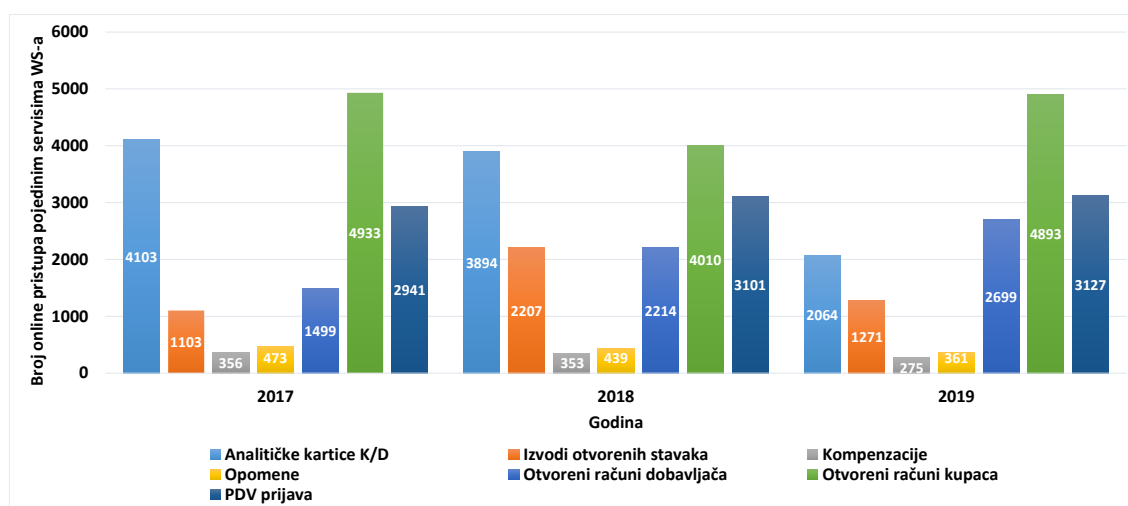
Figure 5. Total number of accesses to WS services per years

Slika 5. Pregled ukupnog broja pristupa servisima WS-a po godinama

Previous research on the communication between users and BA employees found that the average duration of traditional communication with respect to any of the reports specified in Fig. 5, which a BA employee delivers to his client (establishing contact, verbal or e-mailed inquiry, preparation and delivery of response – report) amounts to approx. eleven minutes per request. Only 24.56% of active BA clients accessed WS (Table 1), and each access did not take even a single minute from BA employee's working hours. If each online access is measured against the eleven minutes of BA employee's work time, we get a total of 43,316 accesses/requests of clients (over three years) * 11 minutes / 60 = 7,941 work hours or 993 work days or 330 work days a year or more than one year per employee. This would save five percent (1/20 employees) of workforce per year, and that is a significant untapped potential for a BA in terms of time and human resorces.

Prethodnim istraživanjima problematike komunikacije između korisnika i zaposlenika KS-a, utvrđeno je da prosječno vrijeme trajanja klasične komunikacije po pitanju bilo kojeg od izvještaja sa Slike 5. koju djelatnik KS-a isporučuje klijentu (uspostava veze, verbalni ili email upit, priprema i isporuka odgovora – izvještaja) iznosi oko 11 minuta po zahtjevu. Ukupni broj poziva servisima WS-a iz Tablice 1. realiziralo je svega 24,56% aktivnih klijenata KS-a, pri čemu svaki pristup nije uzeo niti jedne jedine minute radnog vremena zaposlenika knjigovodstvenog servisa. Ako se svaki online poziv izmjeri utroškom od samo 11 minuta radnog vremena zaposlenika KS-a, tada dolazimo do podatka od oko 43.316 pristupa/zahtjeva klijenata (u toku 3 godine) * 11 minuta / 60 iznosi = 7.941 radnih sati ili 993 radna dana. Na godišnjoj razini to je 330 radnih dana, odnosno više od jedne godine rada jednog zaposlenika KS-a. Time bi se godišnje uštedjelo 5% (1/20 zaposlenika) radnog resursa što predstavlja značajan neiskorišteni potencijal KS-a koji se odnosi na ljudske i vremenske resurse.

5 Comparative analysis of BA workload and use of WS

Table 3 (Appendix 2) and Fig. 6 show a selected group of 25 BA clients that placed the highest number of calls to WS. Based on this data, a comparative analysis was made, including the following variables:

- X_1 – total number of calls by BA clients to WS;
- X_2 – number of employees in the companies that placed calls, i.e. BA clients (indicating their complexity);
- X_3 – ratio between the number of client's employees and the number of calls they placed to WS ($X_3 = X_1 / X_2$) (indicating client employees' inclination to implementation of WS – assuming that more employees mean bigger company and, consequently, more use of WS);
- X_4 – number of financial vouchers pertaining to all business documents operatively entered by BA employees (indicating amount of work involved in dealing with a client);
- X_5 – ratio between BA workload and client's inclination to implement WS ($X_5 = X_4 / X_3$).

The data provided in Table 3 is classified on the basis of indicator X_5.

5 Usporedna analiza opterećenja KS-a i primjene WS-a

U Tablici 3. (Prilog 2) i na Slici 6. prikazan je odabrani skup od 25 klijenata KS-a koji su u 2019. godini imali najveći broj poziva WS-a. Temeljem tih podataka izvršena je usporedna analiza kroz narednih pet varijabli:

- X_1 - ukupni broj poziva WS-a od strane klijenata KS-a;
- X_2 - broj zaposlenih u tvrtkama klijentima KS-a (Indikator složenosti tvrtke klijenta KS-a.);
- X_3 - omjer broja zaposlenih u tvrtki klijenta i broja poziva WS-a od strane klijenta ($X_3 = X_1 / X_2$) (indikator orijentiranosti klijenta prema primjeni WS-a – pretpostavka više zaposlenih veća firma, više korištenja WS-a);
- X_4 - broj financijskih temeljnica iz svih vrsta poslovnih dokumenata klijenata koje operativno knjiže zaposlenici KS-a (Indikator opterećenja zaposlenika KS-a poslom za klijenta);
- X_5 - omjer knjigovodstvenog opterećenja KS-a i indikatora orijentiranosti klijenata KS-a prema primjeni WS-a ($X_5 = X_4 / X_3$).

Podaci u tablici 3. sortirani su prema indikatoru X_5

Table 3. Comparative analysis of BA workload and implementation of WS

No.	Client's name	X_1	X_2	X_3	X_4	X_5
1.	CLIENT - 25	65	39	1,67	4322	2588,02
2.	CLIENT - 28	36	19	1,89	3517	1860,85
3.	CLIENT - 11	472	12	39,33	9120	231,88
4.	CLIENT - 17	169	16	10,56	2041	193,28
5.	CLIENT - 15	211	7	30,14	4858	161,18
…	…	…	…	…	…	…
25.	CLIENT - 19	172	1	172	485	2,82

Tablica 3. Usporedna analiza knjigovodstvenog opterećenja KS-a i primjene WS-a

Rbr.	Naziv klijenta	X_1	X_2	X_3	X_4	X_5
1.	KLIJENT - 25	65	39	1,67	4322	2588,02
2.	KLIJENT - 28	36	19	1,89	3517	1860,85
3.	KLIJENT - 11	472	12	39,33	9120	231,88
4.	KLIJENT - 17	169	16	10,56	2041	193,28
5.	KLIJENT - 15	211	7	30,14	4858	161,18
…	…	…	…	…	…	…
25.	KLIJENT - 19	172	1	172	485	2,82

Figure 6. Comparative analysis of BA workload and implementation of WS (indicator X_5)

Slika 6. Usporedna analiza knjigovodstvenog opterećenja KS-a i primjene WS-a (indikator X_5)

Table 3 and Fig. 6 show that the lower indicator X5 is, the client's inclination towards implementation of WS is better balanced as regards the amount of work required to process clien's data, and vice versa. High level of indicator X5 suggests that clients use WS insufficiently. The use of WS should therefore intensify in order to make better use of available BA workforce capacities and thus raise communication to a higher level in terms of organizational and IT

U Tablici 3. i na Slici 6. može se uočiti da što je indikator X5 manji, orijentiranost klijenta prema primjeni WS-a je bolje uravnotežena u odnosu na opterećenja KS-a obradom podataka klijenta i obratno. Klijenti kod kojih je indikator X5 velik, nedovoljno koriste WS i to korištenje je nužno povećati da bi se raspoloživi kapaciteti zaposlenika KS-a mogli bolje iskoristiti, čime bi se i komunikacija s organizacijsko-informacijskog

standpoint. Of course, this can be achieved by changing the relationship between BA and clients and by imposing certain conditions with regard to the use of WS.

6 Conclusion

The paper provides a quantitative and qualitative analysis of application of implemented online web service system, developed after the concept originally presented by authors of this paper in (Vidačić & Pihir, 2015). The WS system is used for client's external 24/7 retrieval of business data, from the business database of the selected reference bookkeeping agency, selected by the client. The analysis was based on the data gathered over a period of three business years (2017, 2018, 2019), and was not in any way impacted by the developments caused by COVID-19 pandemic.

The quantitative analysis presented in chapter 4 concludes that out of the average number of active BA clients a total of 24.56% used, to some extent, the online web service to retrieve formalized data on their business operations. Only 12.93% of clients used it more frequently, mainly for the purpose of spontaneous and non-conditional implementation. Accessibility and speed of delivery of information related to the bookkeeping content were not attractive enough to ensure wider use on the part of the clients, although the service was offered free of charge.

In the qualitative analysis presented in chapters 3 and 4 certain conclusions were drawn based on SD model and TO BE process model, and on the analysis of time-saving on the part of BA. Additionally, the analysis of the ratio between bookkeeping workload and indicators of clients' inclination towards the use of BA suggests trends that should be used to intensify promotion, stimulation and possibly conditioning of WS implementation. Also, it was concluded that WS implementation does not generate significant savings for the client, but only shortens wait time for feedback from BA. Obviously, that was not enough motivation for clients to implement WS. It might be a good thing to offer some reward instead of just providing access.

In view of the BA's goal defined in the conceptual SD diagram and presented in Fig. 2 (showing implementation of web technology and e-business system between BA and client), it is necessary for the BA as a service company with many clients, to carry out digital transformation and thus resolve years old „Mini-Max" problem (how to serve maximum number of clients with minimum number of employees) and achieve savings on resources that are significant in this example as well.

Digital transformation of BA implies shifts and changes both on the part of BA and its clients in all of the abovementioned aspects. These shifts must be

stajališta mogla podići na višu razinu. Navedeno je naravno moguće postići promjenom odnosa KS-a i klijenata u smislu određenog uvjetovanja primjene WS-a.

6 Zaključak

Cilj ovog rada bila je provedba kvantitativne i kvalitativne analize primjene implementiranog sustava online web servisa, razvijenog prema konceptu koji je bio izvorno prezentiran od strane autora ovog rada (Vidačić i Pihir, 2015). Sustav WS služi za eksterni 24/7 dohvat podataka o poslovanju, iz poslovne baze odabranog referentnog knjigovod-stvenog servisa, od strane klijenata knjigovod-stvenog servisa, a analiza je provedena temeljem podataka u razdoblju od tri poslovne godine (2017., 2018. i 2019.) tako da naknadno razdoblje pandemije COVID-19 nema nikakvog utjecaja na predmetnu analizu.

U kvantitativnoj analizi prikazanoj u poglavlju 4, istaknuto je kako je od prosječnog broja aktivnih klijenata KS-a u predmetnom razdoblju njih 24,56% koristilo u određenoj mjeri online web servis u svrhu dohvata formaliziranih podataka o svom poslovanju. Tek 12,93% klijenata je sustav koristilo intenzivnije, uglavnom iz razloga dobrovoljne i ničim uvjetovane primjene. Pretpostavke o dostupnosti i brzini isporuke informacija knjigovodstvenog sadržaja nisu bile dovoljan mamac za veću primjenu na strani klijenata KS-a iako je usluga bila besplatna odnosno nije se dodatno naplaćivala.

U kvalitativnoj analizi prikazanoj u poglavlju 3 i 4, izvedeni su određeni zaključci na temelju SD modela i TO BE modela procesa te analize ušteda vremena na strani KS-a. Dodatno, analizom omjera knjigovodstvenog opterećenja KS-a i indikatora orijentiranosti klijenata KS-a prema primjeni WS-a pokazane su tendencije koje treba iskoristiti u jačoj promociji, poticanju i eventualnoj uvjetovanosti primjene WS-a. Zaključeno je također da primjena klijentima ne izaziva posebne uštede već samo skraćuje vrijeme u kojem mogu dobiti povratnu informaciju od KS-a što očito nije bio dovoljan motivator za primjenu. Predlaže se da bi bilo dobro uvesti i neki poticaj, a ne samo omogućiti pristup.

Ako se uzme u obzir postavljeni cilj KS-a zadan konceptualnim SD dijagramom na Slici 2., (a koji prikazuje uvođenje web tehnologije i uspostavu sustava e-poslovanja između KS-a i klijenata), KS kao uslužno poduzeće s velikim brojem klijenata nužno treba provesti digitalnu transformaciju. Time si omogućuje rješenje klasičnog „Mini – Max" problema (kako sa što manjim brojem zaposlenika posluživati što veći broj klijenata) te ostvarenje ušteda u resursima koje su i na ovom primjeru značajne.

Digitalna transformacija KS-a pretpostavlja pomake i promjene kako na strani KS-a tako i na

clearly defined, formalized and, to some extent, conditioned and/or rewarded in order to be adopted in practice. In that sense, digital transformation of bookkeeping services should be further researched so as to identify optimal methods of digital transformation in this service industry.

strani klijenata po svim navedenim aspektima gdje pomaci moraju biti jasno definirani, formalizirani i u određenoj mjeri uvjetovani i/ili nagrađeni da bi bili usvojeni u praksi. U navedenom smislu problematika digitalne transformacije knjigovodstvenih servisa iziskuje daljnja istraživanja, s ciljem definiranja optimalne metodike DT-a za ovu uslužnu djelatnost.

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Appendix 1

Table 2. Number of BA clients' accesses to WS services

No.	Name of BA client	Year 2017	Year 2018	Year 2019	Total number of online accesses
1.	CLIENT - 1	4931	5586	562	11079
2.	CLIENT – 2	2277	1369	1435	5081
3.	CLIENT – 3	1191	1596	1331	4118
4.	CLIENT – 4	907	913	1010	2830
5.	CLIENT – 5	0	1036	1713	2749
6.	CLIENT – 6	351	577	1383	2311
7.	CLIENT – 7	670	703	774	2147
8.	CLIENT – 8	964	752	386	2102
9.	CLIENT – 9	0	576	1377	1953
10.	CLIENT – 10	0	0	1473	1473
11.	CLIENT – 11	489	339	472	1300
12.	CLIENT – 12	486	232	500	1218
13.	CLIENT – 13	376	386	241	1003
14.	CLIENT – 14	256	306	420	982
15.	CLIENT – 15	260	287	211	758
16.	CLIENT – 16	236	345	149	730
17.	CLIENT – 17	387	136	169	692
18.	CLIENT – 18	217	185	211	613
19.	CLIENT – 19	112	157	172	441
20.	CLIENT – 20	187	155	50	392
21.	CLIENT – 21	107	4	111	222
22.	CLIENT – 22	100	88	28	216
23.	CLIENT – 23	70	137	0	207
24.	CLIENT – 24	0	25	169	194
25.	CLIENT – 25	111	8	65	184
26.	CLIENT – 26	123	27	17	167
27.	CLIENT – 27	0	73	77	150
28.	CLIENT – 28	97	17	36	150
29.	CLIENT – 29	21	40	57	118
30.	CLIENT – 30	53	60	0	113
31.	CLIENT – 31	89	10	2	101
32.	CLIENT – 32	0	22	74	96
33.	CLIENT – 33	75	0	0	75
34.	CLIENT – 34	46	23	0	69
35.	CLIENT – 35	38	0	0	38
36.	CLIENT – 36	4	27	0	31
37.	CLIENT – 37	21	0	0	21
38.	CLIENT – 38	8	11	0	19
39.	CLIENT – 39	18	0	0	18
40.	CLIENT – 40	17	0	0	17
41.	CLIENT – 41	10	5	0	15
42.	CLIENT – 42	14	0	0	14
43.	CLIENT – 43	14	0	0	14

44.	CLIENT – 44	13	0	0	13
45.	CLIENT - 45	0	0	12	12
46.	CLIENT – 46	10	0	0	10
47.	CLIENT – 47	9	0	0	9
48.	CLIENT – 48	9	0	0	9
49.	CLIENT – 49	8	0	0	8
50.	CLIENT – 50	3	2	2	7
51.	CLIENT – 51	7	0	0	7
52.	CLIENT – 52	6	0	0	6
53.	CLIENT – 53	6	0	0	6
54.	CLIENT – 54	1	3	0	4
55.	CLIENT – 55	2	0	0	2
56.	CLIENT – 56	0	0	1	1
57.	CLIENT – 57	1	0	0	1

Prilog 1

Tablica 2. Broj pristupa klijenata KS-a servisima WS-a

Rbr.	Naziv klijenta KS-a	Godina 2017	Godina 2018	Godina 2019	Ukupni broj online pristupa
1.	KLIJENT - 1	4931	5586	562	11079
2.	KLIJENT – 2	2277	1369	1435	5081
3.	KLIJENT – 3	1191	1596	1331	4118
4.	KLIJENT – 4	907	913	1010	2830
5.	KLIJENT – 5	0	1036	1713	2749
6.	KLIJENT – 6	351	577	1383	2311
7.	KLIJENT – 7	670	703	774	2147
8.	KLIJENT – 8	964	752	386	2102
9.	KLIJENT – 9	0	576	1377	1953
10.	KLIJENT – 10	0	0	1473	1473
11.	KLIJENT – 11	489	339	472	1300
12.	KLIJENT – 12	486	232	500	1218
13.	KLIJENT – 13	376	386	241	1003
14.	KLIJENT – 14	256	306	420	982
15.	KLIJENT – 15	260	287	211	758
16.	KLIJENT – 16	236	345	149	730
17.	KLIJENT – 17	387	136	169	692
18.	KLIJENT – 18	217	185	211	613
19.	KLIJENT – 19	112	157	172	441
20.	KLIJENT – 20	187	155	50	392
21.	KLIJENT – 21	107	4	111	222
22.	KLIJENT – 22	100	88	28	216
23.	KLIJENT – 23	70	137	0	207
24.	KLIJENT – 24	0	25	169	194
25.	KLIJENT – 25	111	8	65	184
26.	KLIJENT – 26	123	27	17	167
27.	KLIJENT – 27	0	73	77	150
28.	KLIJENT – 28	97	17	36	150

29.	KLIJENT – 29	21	40	57	118
30.	KLIJENT – 30	53	60	0	113
31.	KLIJENT – 31	89	10	2	101
32.	KLIJENT – 32	0	22	74	96
33.	KLIJENT – 33	75	0	0	75
34.	KLIJENT – 34	46	23	0	69
35.	KLIJENT – 35	38	0	0	38
36.	KLIJENT – 36	4	27	0	31
37.	KLIJENT – 37	21	0	0	21
38.	KLIJENT – 38	8	11	0	19
39.	KLIJENT – 39	18	0	0	18
40.	KLIJENT – 40	17	0	0	17
41.	KLIJENT – 41	10	5	0	15
42.	KLIJENT – 42	14	0	0	14
43.	KLIJENT – 43	14	0	0	14
44.	KLIJENT – 44	13	0	0	13
45.	KLIJENT - 45	0	0	12	12
46.	KLIJENT – 46	10	0	0	10
47.	KLIJENT – 47	9	0	0	9
48.	KLIJENT – 48	9	0	0	9
49.	KLIJENT – 49	8	0	0	8
50.	KLIJENT – 50	3	2	2	7
51.	KLIJENT – 51	7	0	0	7
52.	KLIJENT – 52	6	0	0	6
53.	KLIJENT – 53	6	0	0	6
54.	KLIJENT – 54	1	3	0	4
55.	KLIJENT – 55	2	0	0	2
56.	KLIJENT – 56	0	0	1	1
57.	KLIJENT – 57	1	0	0	1

Appendix 2

Table 3. Comparative analysis of BA workload and implementation of WS

No.	Client's name	X_1	X_2	X_3	X_4	X_5
1	CLIENT - 25	65	39	1,67	4322	2588,02
2	CLIENT - 28	36	19	1,89	3517	1860,85
3	CLIENT - 11	472	12	39,33	9120	231,88
4	CLIENT - 17	169	16	10,56	2041	193,28
5	CLIENT - 15	211	7	30,14	4858	161,18
6	CLIENT - 13	241	7	34,43	5309	154,2
7	CLIENT - 16	149	7	21,29	2124	99,77
8	CLIENT - 21	111	3	37	2434	65,78
9	CLIENT - 4	1010	12	84,17	3407	40,48
10	CLIENT - 32	74	1	74	2706	36,57
11	CLIENT - 3	1331	5	266,2	9155	34,39
12	CLIENT - 18	211	5	42,2	1307	30,97

13	CLIENT - 9	1377	9	153	4468	29,2
14	CLIENT - 12	500	17	29,41	802	27,27
15	CLIENT - 2	1435	8	179,38	4267	23,79
16	CLIENT - 24	169	4	42,25	976	23,1
17	CLIENT - 7	774	5	154,8	3570	23,06
18	CLIENT - 6	1383	7	197,57	2796	14,15
19	CLIENT - 27	77	3	25,67	340	13,25
20	CLIENT - 10	1473	6	245,5	2687	10,95
21	CLIENT - 5	1713	9	190,33	2024	10,63
22	CLIENT - 14	420	2	210	2022	9,63
23	CLIENT - 8	386	2	193	1768	9,16
24	CLIENT - 29	57	1	57	371	6,51
25	CLIENT - 19	172	1	172	485	2,82

Prilog 2

Tablica 3. Usporedna analiza knjigovodstvenog opterećenja KS-a i primjene WS-a

Rbr.	Naziv klijenta	X_1	X_2	X_3	X_4	X_5
1	KLIJENT - 25	65	39	1,67	4322	2588,02
2	KLIJENT - 28	36	19	1,89	3517	1860,85
3	KLIJENT - 11	472	12	39,33	9120	231,88
4	KLIJENT - 17	169	16	10,56	2041	193,28
5	KLIJENT - 15	211	7	30,14	4858	161,18
6	KLIJENT - 13	241	7	34,43	5309	154,2
7	KLIJENT - 16	149	7	21,29	2124	99,77
8	KLIJENT - 21	111	3	37	2434	65,78
9	KLIJENT - 4	1010	12	84,17	3407	40,48
10	KLIJENT - 32	74	1	74	2706	36,57
11	KLIJENT - 3	1331	5	266,2	9155	34,39
12	KLIJENT - 18	211	5	42,2	1307	30,97
13	KLIJENT - 9	1377	9	153	4468	29,2
14	KLIJENT - 12	500	17	29,41	802	27,27
15	KLIJENT - 2	1435	8	179,38	4267	23,79
16	KLIJENT - 24	169	4	42,25	976	23,1
17	KLIJENT - 7	774	5	154,8	3570	23,06
18	KLIJENT - 6	1383	7	197,57	2796	14,15
19	KLIJENT - 27	77	3	25,67	340	13,25
20	KLIJENT - 10	1473	6	245,5	2687	10,95
21	KLIJENT - 5	1713	9	190,33	2024	10,63
22	KLIJENT - 14	420	2	210	2022	9,63
23	KLIJENT - 8	386	2	193	1768	9,16
24	KLIJENT - 29	57	1	57	371	6,51
25	KLIJENT - 19	172	1	172	485	2,82