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# Strategic management

International Journal of  
Strategic Management and  
Decision Support Systems  
in Strategic Management

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# The Profitability Puzzle: Integrating Sales and Product Development Improves Management's Ability to Control Future Profitability

**Christopher R. Schmidt**

University of Pécs, Pécs, Hungary

**Ferenc Farkas**

University of Pécs, Pécs, Hungary

## Abstract

Manufacturers today have sales teams that span the globe and are negotiating contracts today that will constitute the firm's forward revenue stream, and profitability, for the next decade. Meanwhile, even larger teams of engineers and designers are working in product development refining and changing the product design that was specified in the contract. Controlling the profitability of hundreds of time-varying customer contracts, on a global basis, for products that are years away from production, and whose pricing and cost parameters are in constant flux, is a significant challenge inside the global manufacturer. This complex "Profitability Puzzle" of maintaining accurate profitability estimates for several years prior to production is an integration task that firms Enterprise Resource Planning (ERP) implementations fall short of. The integration of Product Lifecycle Management (PLM), Sales Forecasting, Cost Estimating and Quoting and Enterprise Resource Planning (ERP) applications now allows global manufacturers to solve the Profitability Puzzle and tightly control the profitability of their future product pipeline. Evidence is presented that integrating the strategic planning process with the sales and the product development disciplines can help manufacturers achieve higher returns. Market valuations of publicly listed global manufacturers that are known to have pursued the integration of long-term strategic planning with operational information are compared to their peers. Although the sample set is small, evidence suggests that implementers of these integration projects return far greater valuation growth than their competitors.

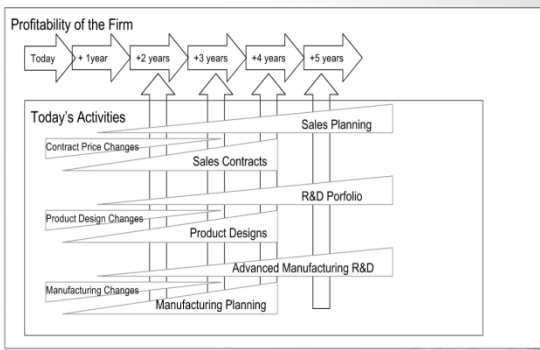
## Keywords

Controlling, profitability controlling, product lifecycle management, PLM, ERP, manufacturing, product development.

## Introduction

Global manufacturers engaged in product spaces with long design cycles (2-3 years) such as the automotive industry, have thousands of highly educated knowledge workers actively engaged in the processes of product design and sales contracts that will constitute the firm's forward revenue stream, and profitability, for the next decade. Manufacturers have long been provided far more services and value-add than just "building" or producing a final product and now with the preva-

lence of outsourced production in low-cost countries, product design and development functions bear a more significant portion of the manufacturer's direct cost of a product. Further, the design and development functions are processes that happen years before the first product starts production. Understanding costs and negotiating profitability years in advance has been a persistent challenge to these industries and constitutes what this paper calls "The Profitability Puzzle" as represented visually in picture 1.



**Picture 1** Today's Functional Activities Define the Firms Future Profitability  
**Source:** The authors

The firm must record and maintain the information related to all transactions, negotiations, and agreements that impact customer agreements. This process of recording, analyzing and archiving this must include all product design changes handled by the Product Development area, all changes in the manufacturing processes, and all changes in procurement and finance assumptions. Capturing all of this information across large global cross-sections of functional areas is an integration task that firms ERP system fall short of - causing organisations to revert to manual processes and oversimplifications. Firms that are global in scope and provide high complexity product and service portfolios to hundreds of multinational customers often struggle to understand with sufficient accuracy, the sheer number of products being developed and produced, are missing accurate and timely life-cycle plans, and in some cases have inconsistent or missing profitability targets for their business contracts. Systems used in the Product Development area such as Product Lifecycle Management (PLM) tools which contain product and process designs that make up the future product portfolio, along with current product change information critical in the Cost Estimating process, can now be integrated with the product pricing information contained in the Sales organization. The Sales Organization focuses on preparing, monitoring, and controlling Pricing Quoting processes and integrating them into the Strategic Planning and Sales Forecasting processes for the long term and with the Enterprise Resource Planning (ERP) system for the short term now allows manufacturers to tightly control the profitability of their future product pipeline.

The ability to capture strategic plans in an integrated fashion and monitor their profitability throughout the manufacturing lifetime has impor-

tance which extends to the national and global level, as Pisano & Shih (2009), who argue that if America, or any nation, wants to undertake a strategic improvement initiative in the fundamental competitiveness, it must be based in the areas of research and development. This focus on the importance of research and development reinforces the importance of efficiency and expertise in the areas of product development and long-range planning that are crucial, as are the tools that will automate and streamline these processes. Pisano & Shih emphasize this through the counterpoint of the loss of these capabilities with the actual example and trend that first manufacturing was moved offshore and the engineering and design know-how soon followed, resulting in the loss of the full competency and competitiveness. Government and industry must partner together to re-establish these competencies, establishing manufacturing and technology "hubs" which they call "commons" as an essential strategic component. Pisano and Shih point out that universities can be centres of these initiatives such as Stanford and UC Berkeley have demonstrated, and an effective conduit for government funding to support such "commons". This is the basis for a new national industrial policy which has gained real traction in entrepreneurial veins. Dobrai and Farkas (2009) look at knowledge intensive organizations and processes of the modern economy and emphasize the importance of the capture, share, and transfer of knowledge throughout the larger enterprise. Further, working with Poor et al. (2014) the fundamental challenges that are facing multinationals with the skill and human resource development challenges in Central and Eastern Europe, the importance of knowledge transfer support technology is essential.

In line with Pisano and Shih (2009), Porter & Rivkin (2012) also talk about macro perspectives influencing the foundation of a nation's competitiveness and ultimately its potential for growth or decline. They look specifically at the US and use several sources, including a Harvard Business School survey of 10,000 alumni, where 71% of the respondents felt that the US was weakening as a marketplace. Porter and Rivkin cite a complex combination of indicators of the decline: Manager's outlook (negative), Productivity trends (stalled or declining), Wage trends (stagnant with substantial disparity), and international trade and investment (falling FDI). They also present the causes of the declining influence and competitiveness: competition from emerging markets and

transition economies, short-term focus of government and corporations; wage disparity and the struggle to replace outsourced manufacturing jobs with higher value-add activities; weakened government through excessive debt, ineffective tax codes, and inability to focus on long-term investment; and finally the vicious circles of reinforced decline that each of these causes generate as their effects are combined. It is essential for firms when trying to reverse declining productivity and wage trends to identify higher value-add activities in a well-planned long-term research and development and business portfolio. Integrated long-term profitability planning that forces executives and staffs to look 5 and 10 years into the future is a prerequisite to being able to achieve these challenging goals.

Hammer (2004) in "Deep Change" argues for the benefits of transformative internal change that ERP, CRM, and SCM technologies can deliver. This paper takes things one step further, where ERP typically means "integrated finance and inventory systems, including orders, invoicing, payments, and deliver" and CRM means "keeping track of customer contact information and standardizes customer relations" and SCM focuses on supply chain management and systemic inventory efficiencies, nowhere is the topic of integrated planning and product development discussed. This is the new realm of integrated Planning and Product Development technologies.

Fisher (1997) looks at the benefits of understanding the customer's demand model and matching the supply chain accordingly. Creating a categorization of product lifecycle (short or long) and supply chains (responsive or efficient) he presents examples of where optimizing or matching of customer demand to the supply chain, and vice versa matching the supply chain to the customer demand can eliminate efficiencies. The case of Campbell's soup promotional policy disrupting their efficient supply chain was discussed as well as the case of Sport Obermeyer's apparel business where cycles of overproduction and underproduction were minimized by an optimizing ordering and demand forecasting via a consensus forecast. Better long-term planning and more accurate demand forecasting can drive efficiencies in both the supply chain and capacity planning. Savings can be found in early, timely sourcing decisions, timely warning on capacity utilization issues - allowing for timely construction of new facilities, or consolidation of production in specific regions. In an earlier paper published together with Walter

Obermeyer of Sport Obermeyer, Fisher, Hammond, Obermeyer and Raman (1994) describe the operational benefits of accurate demand planning in their analysis of the apparel producer Sport Obermeyer. Sport Obermeyer was able to make refinements in their consensus forecasting process to provide substantial operational benefits, including a better match of supply to demand, minimizing or optimizing excess inventories, and better meeting customers' style and colour needs by adapting production and planning dynamically and where possible, in real time.

Automotive suppliers, computer, and cell phone manufacturers, spend as much or more time designing and developing their products than actually manufacturing them. These companies are all enormous and long-lived, having amassed substantial assets and, as discussed by Collis and Montgomery (2008), have specific strategic competitive advantages, supporting the concept of path dependency to explain the accumulated mass of unique capabilities and resources that these firms can offer. Collis and Montgomery (2008) describe the 5 characteristics of the historically competitively valuable advantages:

1. Difficult to copy
2. Depreciate slowly
3. Your company – not employees, customers or suppliers – controls their value
4. Can't be easily substituted
5. Superior to similar resources your competitors own

Several, or all, of these historical competitive advantages are under greater threat for global long-lived manufacturers, as the speed of technology is destroying barriers to entry and products and processes are ever easier to copy, greatly accelerating the rate of depreciation, can often be easily substituted, with employee bases that are highly mobile and transient, it is ever more challenging to show superior resources. Better efficiency and planning enabled by integration technologies in the product development area is a key strength that can be a differentiator. With a consolidated and more standardized supply base, weaknesses in these areas can lead to enormous liability via mass recall actions due to poor design, development, or manufacture, as discussed in Roland Berger Lazard's 2013 Global Automotive Supplier Study (Roland Berger, Lazard, 2013).

## 1. The profitability puzzle

### 1.1. Strategic planning

In an MIT working paper, Bitran and Tirupati (1989) identify the first step in the process of Product Planning as Strategic Planning in which they identify the importance of long-term planning and executive decision making. Kaplan & Norton (1995) argue, as is a common and widespread criticism of the American enterprise that management has focused solely on stock-market quarterly earnings performance – very short near-term performance, and have overlooked long-term performance. This trend has reversed itself in a few manufacturers who are the subject of this study, and have invested in technologies to better understand the long-term profitability of their enterprise in a fashion that is commensurate with the best-practicable technologies today, and are using those tools to outperform the market.

Hayes and Pisano (1994) in their article “Beyond World Class” argue that firms need flexibility in their strategies in order to stay relevant in turbulent environments, and absolutely need to go beyond the “best practice” copycat strategies that were pervasive in the ‘80s. Hayes-Pisano argues that identifying strategic capabilities is a key shift that firms need to make that will affect all operational decisions. Decisions such as outsourcing, offshoring, and investing in new capabilities are now framed as enabling and improving strategic capabilities. This lays the foundation for Pisano and Shih’s later works discussed earlier, where this lack of strategic planning has resulted in the disappearance of certain strategic capabilities from developed nations such as the US. This strategic planning and monitoring of key capabilities is where the integration of long-term forecasting tools and product development systems are used to capture more scenarios, more simulations, and more variations of outcomes, enabling better strategic decision making.

Vörös (2006) and other papers focus on the analysis of Total Quality Management (TQM) and show strong respect and interest in the Toyota success in exceptional quality and exceptional profitability. What is less often discussed is the strategic plan and leadership that drives the deliberate growth of Toyota from a domestic manufacturer of excellent quality and profitability into a global leader in all markets and segments. This strategic direction was not only employed by Toyota and Honda, but most recently by South Korean Chaebol, which have challenged the Japa-

nese dominance driven by strong strategic growth plan and global expansion. Excellent quality and efficiency in itself do not make a global leader; growth on a global scale in these institutions was driven, planned and executed on.

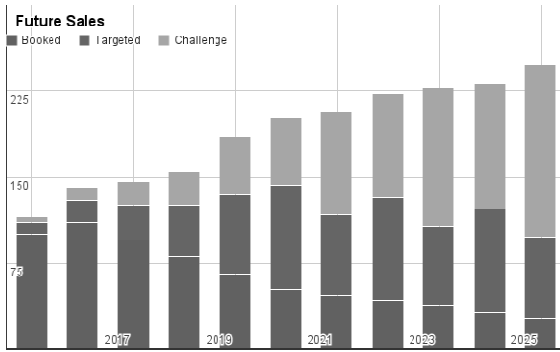
Kaplan & Norton (2008) discuss a closed loop system to link strategy and operations, and the importance of maintaining a strategic focus. They define a multi-stage closed loop system and 4 perspectives of strategy as critical components of management discipline to maintain the strategic link to operations. The stages of the closed loop are defined as: develop the strategy, translate the strategy, plan operations, execute, monitor & learn, and adapt the strategy. The four perspectives are defined as: learning and growth perspective, process perspective, customer perspective and the financial perspective. In addition to the implementation tools provided in the article to help managers implement the closed loop approach, technology can and must assist in quantifying, monitoring and controlling the anticipated value add of all of the strategic and tactical actions, and ensure that their cumulative value will fulfil the long-term profitability goals of the enterprise.

Once long-term strategy has been determined, management focus must turn to execution – pursuing sales, contracting with customers, executing on the design and manufacturing processes the end products. This is where the dynamics of controlling are essential.

### 1.2. The dynamic mechanism of controlling forward profitability

The numerous challenges of planning, calculating, and controlling future profitability are predicated upon the critical topic of strategic planning. Once strategy is defined, strategies and tactics can be captured into financial models of the firm. The strategic plan provides management with clearly actionable and assigned responsibilities for achieving specific targets which must be quantified. These actions make up the future sales and profitability growth plan of the enterprise, which is shown in Picture 2 and shows the difference between what is known as existing “Booked” business, “Targeted” likely growth business, and “Challenge” which constitutes new segments, new conquests with higher risk and uncertainty, capturing and quantifying the results of the strategic plan.





**Picture 2** Future Sales Pipeline by Confidence  
Source: The authors

This initial financial model of the strategic plan and tactics constitutes a static model of profitability until the point of execution and the monitoring and controlling phase of execution is achieved. As implementation and execution of tactics begins, the dynamic process of implementing and controlling forward profitability on a regular, timely basis follows. Picture 3 shows the evolution of the level of activity over the course of the product development cycle, which can span decades, and consists the entire lifecycle of the product that is to be analyzed and monitored as a component of the firm's future profitability model.



**Picture 3** Learning Curve of Profitability Controlling  
Source: The authors

The calculation of forward profitability relies on the proper calculation of cost measures which are in constant flux in the years and months that separate the initial contract award date and the actual start of production and delivery of goods. Once the Revenue Forecast scenarios are built, and macro overlays are established which reflect the business cycle and monetary and tax policies of national markets, and the entire portfolio of individual national business cycles are integrated into the long-term profitability plan of the forward thinking manufacturer. Secondly the product costs, direct product costs and overhead general and administrative expenses are incorporated. This is a substantial exercise inside of the multinational that consumes significant resources when not automated or inaccuracies when abstractions are made to allow manual processes to capture complex activities. Often the product view of

profitability is lost and obscured in these aggregations, leaving management challenged to know the true current profitability of any given product.

Once the static model is completed, it is, perhaps even before completion, out-of-date and full of inaccuracies. Causes for this are the following:

- Changes in Revenue related contracts
- Changes in volumes
- Changes in cost side measures (manufacturing cost, product design, raw material, labour costs, overhead changes)

And where these changes have occurred, tracking and capturing them for future periods - such as by year for the next 5 to 10 years, is an expertise and capability that few firms have undertaken. Some of the elements that are required to maintain the dynamic, integrated long-term profitability model are:

- Pricing and Discount Changes, Amendments, Wins and Losses in Revenue related contracts
- Changes in volumes of actual contracts over the long term forecast period
- Changes in cost side measures (manufacturing cost, product design, raw material, labour costs, overhead changes)
- Plant process change information
- Product change information
- Raw material economics and changes
- Labour and Overhead long-term models

In the case of the global durable goods manufacturer, with a presence in many nations and numerous facilities per country, each with its own teams of sales and engineering staff, it is a monumental task to accumulate the values contained in sales contracts, product designs and definitions, manufacturing processes and definitions. Capturing and aggregating this information has been the domain of the traditional ERP application and almost always focusing on managing business for the current year, and focusing on location and tax jurisdiction level financial reporting.

**2. Evidence that integration improves returns**

In a forthcoming publication by CIMData, data shows that one global manufacturer included in this study closed the repeatable gap on sales forecast variance by a factor of 5 from 10% to 2%. This improvement in accuracy helps improve the

firm's performance, provides management a much more reliable picture of sales performance, and allows them to take action where necessary, and was previously not possible, for the 8% of the business that was inaccurately forecast previously.

In the Harvard Case Study "Scharffen Berger" Snow, Wheelwright and Wagonfeld (2005), the example of capacity optimization is an exercise entirely based on the anticipated future growth in product demand. The certainty and level of product and customer detail on how that growth would be achieved is something that would certainly help in the determination of the appropriate level of investment required to meet future demand, especially if the demand growth was anticipated to be sustainable the longer term, or not - would be crucial information in the capital allocation process.

Focusing on the financial benefits of improved operations after a sales contract has been awarded and long after a product has been designed and the manufacturing process defined is the focus of Hendricks and Singhal (1997) who studied the financial benefit of TQM programs using stock market returns and varied windows of performance to identify evidence of improvement in financial returns. The execution of firm and its efficiency at fulfilling the completed contract has been the primary focus of many similar efforts, as cited by Hendricks & Singhal, and they show that focusing on total quality and efficiency initiatives provide clear operational and financial benefits. In the following sections, I use a similar approach to find evidence that firms that have invested in and implemented Future Profitability Management (FPM) technologies are performing better than their peers and the marketplace, by enabling management and the firm to work more efficiently upstream from the manufacturing process by better managing the sales portfolio and analyzing profitability at the micro- level, years in advance.

Data from seven global automotive parts suppliers that are known to have pursued technology projects that focused on integrating data from sales and product development into their financial planning and modelling is reviewed to see if these projects have provided financial performance advantages when compared to their peers. For this analysis, the long-term financial performance and the market value of the firms is estimated via data that is publicly available from the leading stock exchanges. The seven firms under study and the approximate dates of their project starts are shown in Table 1.

**Table 1** Publicly listed manufacturers and their Implementation dates

Manufacturer	Listing exchange	2013 Annual sales (millions) (1)	Market valuation (2)	Industry ranking (3)	Implementation quarter - year (4)
Firm "L"	Toronto SE	4,090	5,110	80	Q4 2011
Firm "D"	NYSE	6,660	3830	26	Q1 2010
Firm "M"	NYSE	862	1,500	n/a	Q2 2008
Firm "L"	NYSE	503	508	n/a	Q3 2006

Source: the authors based on Bloomberg L.P., 2016a, 2016b; Crain Communications, 2013

Of course implementation times and implementation rigor vary on each project; improvements are not instantaneous; nor is the implementation of such tools the only factor driving fluctuations in market value over time, or relative ranking in industry comparisons. This paper concedes that these implementations may be a proxy for intelligent management that is both aggressive about leveraging technology and insisting on a high value from their technology projects and firms.

## 2.1. Estimating changes in market capitalization

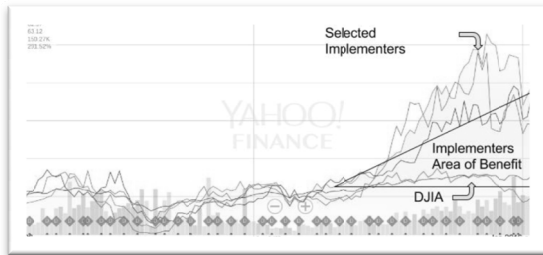
For the four firms considered in this study, where financial data was available, Table 2 shows that these firms have outperformed the NYSE/DJIA industry average over the last 10 years by nearly a factor of 3. The firm's estimated change in market capitalization since implementation start was a 217% increase, compared to the NYSE/DJIA 10 year performance of 66% growth.

**Table 2** Publicly listed manufacturers and their Implementation dates

Manufacturer	Listing exchange	Implementation quarter - year	Implied Market Cap @ implementation	Market cap Jan 1, 2016	Change in Market Value
Firm "L"	Toronto SE	Q4 2011	\$1,077,480,000	\$3,505,924,620	374%
Firm "D"	NYSE	Q1 2010	\$1,926,010,615	\$2,038,630,400	99%
Firm "M"	NYSE	Q2 2008	\$428,407,353	\$1,170,880,360	250%
Firm "N"	NYSE	Q3 2006	\$190,411,436	\$607,346,640	183%
This Group - Average			\$578,347,615	\$1,830,695,505	217%
DJIA		Q2 2005	\$10,513	\$17,425	66%
Better than DJIA					151%

Source: the authors based on Bloomberg L.P., 2016b

Picture 4 below shows the 10 year relative price change trend for these selected firms graphically for the selected known implementers and compares them with the return of the industrial average.



**Picture 4** Stock Performance Trend of Selected Implementers vs. DJIA

Source: the authors based on Yahoo Finance, 2016

This analysis of a small sample of firm's market capitalization and valuation indicates that the firms that have implemented projects to integrate sales and product development functions in order to better control forward profitability are outperforming their peers and the market. Comparatively the automotive parts sector tracked much lower performance over the same ten years, underperforming the NYSE/DJIA by about a half, increasing only 25% while these select advanced integrators had comparably stellar performance.

## Conclusions

The integration of Product Lifecycle Management (PLM), Sales Forecasting, Cost Estimating and Quoting and Enterprise Resource Planning (ERP) applications now allows Firms which Globally Design and Manufacture Products (manufacturer's) to tightly control the profitability of their future product pipeline. Capturing the impact of customer agreements, design changes in the product or product manufacturing, and procurement, is an integration task that firms can implement, and when implemented, can provide significant operational profitability and market valuation improvements. This new approach to integration now allows the producers of high complexity products to create and maintain accurate and dynamic life-cycle plans, and firm profitability targets for all dimensions of their business. While project implementation times and implementation rigor vary and improvements are not instantaneous, clear long-term performance improvements have been achieved by firms that have pursued this integration strategy. This paper provides evidence that these implementations and the empha-

sis on better understanding future profitability, enables firms to deliver exceptional returns to investors. Understanding costs and negotiating profitability years in advance has been a persistent challenge to these industries for decades. Appendix A presents a self-assessment rubric that can be used to evaluate internal processes and readiness for adopting integrated forward profitability tools.

Opportunity for further research exists in the analysis of the relative performance of these implementers using changes in automotive supplier rankings to determine relative success and evidence that better integration, planning, and strategic execution constitute a competitive advantage which has enabled these firms to overtake their peers. Further analysis of the improvement of the firm's market share ratios over time may also show evidence of real competitive advantage that superior returns provide.

## Appendix A: Forward Profitability Readiness Assessment

### 1. What level of detail do you currently use to support strategic long-range financial plans?

- Single, high level spreadsheet, prepared by one function only 1pt.
- Individual spreadsheets by each function 2pts.
- Each area has a planning database, but disconnected 3pts.
- Databases have product customer and regional details, but disconnected 4pts
- Single integrated system built on product integrated all functions 5pts.

### 2. How do you manage your sales team's plan and long-term growth?

- They are too busy handling quality problems to discuss planning 0pts.
- Single annual planning meeting via budget process for next year 1pt.
- Each individual has goals based on last year's sales 2pts.
- Sales goals are at product, region, and salesperson, reviewed quarterly 3pts.
- All goals and activity is monitored in CRM application 4pts.
- Sales and Product Development integrated in one live system 5pts.

### 3. How do you plan and track your market share?

- We are working to understand how much business our competitors have 1pt.
- Annual spreadsheet exercise 2pts.
- Integrated into budgeting and planning process 3pts.
- Tracking in our CRM 4pts
- Integrated live updates with sales and Knowledge Management tools 5pts

### 4. How do you calculate and manage future profitability?

- We have a budget for current year 1pt.
- We have a 3 year high-level plan by segment 2pts.
- Manual updates of actuals and re-forecast of 3yr plan 3pts.
- Monthly updates of actuals sales, no forward contract updates 4pts.

- Live integrated updates of actuals, forward contracts, forward costs 5pts.

### Scoring:

0-10: Plan a priority project to integrate sales forecasting with quoting and pricing

11-17: Ready to move to the next level of integration: integrate costing and profitability

18-20: Focus on executing market share tracking and profitability growth management **SM**

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## ✉ Correspondence

### Christopher R. Schmidt

University of Pécs  
 Vasvári Pál utca 4, H-7622, Pécs, Hungary  
 E-mail: schmidt.christopher@pte.hu

# Analysis of Employees' Time Management Behavior Skills and Strategies (TMBSS) in Pakistan

**Uzma Mukhtar**

Department of Commerce, University of Balochistan, Pakistan

**Saubia Ramzan**

Institute of Management Sciences, University of Balochistan, Pakistan

**Kaneez Fatima**

Institute of Management Sciences, University of Balochistan, Pakistan

## Abstract

The most successful organizations and people reveal the secret of success in terms of effective time management. Research studies identify that time management differs from person to person. Most of the research has been conducted in western countries discussing the time management skills. We rarely find study discussing time management in Asian countries. Hence, the main aim of this study was to measure the time management behavior in Pakistan. This questionnaire survey was conducted to this end. Data were collected from 260 respondents from an educational institution and Bank of Pakistan. Factor analysis and descriptive statistics were conducted. The result identifies the emergence of six factors of TOMBS. In addition to the identification of TM strategies used in Pakistan, this study conducted in-depth interviews with the cadre group of 33 persons working in public administration. The time management strategies identified by this study are documentation, goal setting and scheduling.

## Keywords

Time management, Pareto principle, goal setting, Pomodoro, time eaters.

## Introduction

The interest in time management is by no means new. The problem of how to manage time was already discussed in the 1950s and 1960s, and several authors propose methods on how to handle time issues on the job (e.g. Drucker, 1967; Lakein, 1973; Mackenzie, 1972; McCay, 1959). They suggest simple remedies such as writing down work plans on paper (so-called "to-do lists") in order to increase job performance. At the same time, some authors (e.g. Drucker, 1967) recognize that planning tasks and activities do not always lead to the completion of planned work, especially when time pressure is high.

McCay (1959) develops a concept for a time-management training program, which is still being used. The critical elements are: providing insight into time-consuming activities, changing time consumption, and increasing workday efficiency by teaching people how to make a daily plan, how to prioritize tasks, and how to handle unexpected tasks. Many books and articles have been written to convey these and similar ideas to managers, promising them a greater effectiveness while using less time (e.g., Blanchard & Johnson, 1982). Over the years, the focus of time management publications and training courses has shifted from managers as the major target group to a broad audience of working people. The term "time management" is actually misleading. Strictly speaking, time cannot be managed, because it is an in-

accessible factor. Only the way a person deals with time can be influenced. Time management can be viewed as a way of monitoring and controlling time (e.g. Eilam & Aharon, 2003). In this regard, it would be more appropriate to speak about self-management with regard to the performance of multiple tasks within a certain time period. But in the literature, the term self-management has a different meaning. It refers to monitoring and regulating oneself, but without any specific reference to techniques for monitoring time use.

Research studies (e.g. Drucker, 1967; Mackenzie, 1990; McCay, 1959 etc.) introduced different methods to use time effectively to increase performance. The idea that individuals decide how to use their time makes up the core of the time management (Koch & Kleinmann, 2002). Literature review reveals that a large proportion of research is associated with TM in school or university students. Another proportion of literature focuses on employee time management from the perspectives of methods of time management skills.

The increasing salience of time is reflected in theoretical as well as practical publications. A number of authors discuss the need for better incorporating time in theoretical models and research designs (e.g. Ancona, Goodman, Lawrence & Tushman, 2001; George & Jones, 2000; Wright, 2002). Others focus on the ways in which people in organizations manage their time, and on ways in which these efforts can be improved. This study narrows down the dearth of relevant literature on to the Time management scales. Hence, we find the Macan (1994) study as the most discussed study. She presented a time management model that comprised antecedent, mediating, and outcome variables with respect to three time management behaviors that are setting goals and priorities, mechanics of time management and preference for organization. She concluded that these behaviors would result in perceived control of time, or the feeling of having control over one's time. Later replicated studies were conducted to test her study. Amongst these, three replication studies (i.e., Adams & Jex, 1999; Davis, 2000; Jex & Elacqua, 1999) provided only partial support to Macan's (1994) model. However, Claessens, van Eerde, Rutte and Roe (2004) used a different time management scale to test the mediation model over time.

Therefore, we will stick to the use of the term time management in the present paper. In spite of

all popular attention to managing time, relatively little research has been conducted on the processes involved in using one's time effectively (e.g. by using "prime time" to carry out important tasks) and completing work within deadlines. In 1987, a review was published that addressed the increasing popularity of time management (Richards, 1987). It discussed the principles mentioned by authors like McCay (1959) and concluded that, for instance, setting life goals and keeping time logs were important techniques for managing one's time effectively. Although this article was helpful in understanding the ideas behind the notion of time management, it was not a review of empirical time management studies. In fact, to our knowledge, no reviews of empirical research of time management have been published since the article by Richards (1987). Therefore, the first aim of the present study is to review past empirical studies on time management and to determine the state-of-the-art in this area of research. We will review the way in which researchers have incorporated time management concepts and methods in their research and critically discuss the research designs they used. Our second aim is to identify the time management strategies at workplace.

### **Time management behavior scale – literature review**

Various self report instruments have been designed in order to identify the factors within time management. This study takes into account about 34 studies for identification of time management measurement instrument. These studies (see Table 1) identify that about fifteen studies used TMBS, 7 studies used TSQ, 3 studies used TMQ and other studies, for example Britton and Tesser (1991), used PTP; Burt and Kemp (1994) used Activity planning; Claessens et al. (2004) used Planning scale and Green and Skinner (2005) used key skills questionnaire (see details in Table 1). Hence, from the literature we find that three questionnaires have been most used: the five-factor time structure questionnaire (TSQ: Feather & Bond, 1988); the four or three-factor time management behavior scale (TMBS: Macan, Shahani, Dipboye & Phillips, 1990), and the three or two-factor time management questionnaire (TMQ: Britton & Tesser, 1991).

TMBS contains 33 items. Macan (1994) proposes a time management model that comprises antecedent, mediating, and outcome variables with respect to three time management behaviors

that are: setting goals and priorities, mechanics of time management and preference for organization. She concludes that these behaviors would result in perceived control of time, or the feeling of having control over one's time. Later replicated studies were conducted to test her model. Out of these replication studies, only three of them (i.e., Adams & Jex, 1999; Davis, 2000; Jex & Elacqua, 1999) provide partial support to Macan's (1994) model. However, Claessens et al. (2004) have used a different time management scale to test the mediation model over time. Esters and Castellans (1998) found that the TMBS predicted university student stress.

Similarly, TMQ contains items on attitudes and planning. Three factors accounted for 36 percent of variance: short-range planning; long-range planning, and attitudes. Two factors (short range planning and long term) were retained in subsequent studies (Barling, Kelloway & Cheung, 1996; Trueman & Hartley, 1996). See Table 1 for detail.

## Research methodology

Both quantitative and qualitative methodologies were used. Two phases of the studies were conducted (Phase I & Phase II). In the Phase I, we discussed the Time Management Behavior Scale (TMBS). In order to measure the time management behaviors, we modified the Macan (1994) time management behavior scale (TMBS) using a 5-point Likert-type scale from *seldom true* (1) to *very often true* (5). Later, factor analysis using SPSS was performed in order to reduce the data into influential factors. We sent this questionnaire of 33 items to two experts in the relevant subjects. Upon their consideration and recommendations this study excluded 11 items. The reasons for item exclusion were: (1) two items were revised in questionnaire; (2) other items were not considered related to the TMS in the context of organizational perspective of Pakistan, for example getting clothes ready at night, etc.

**Table 1** literature review of TMBS

Authors	Research method	No. of employees	Scale
Lay & Schouwenburg (1930)	survey	65 employees	TMBS
Hall & Hirsch (1962)	diary study	4 staff members & Faculty members	
King et al. (1986)	survey, intervention	56 participants	TM scale
Bond & feather(1988)	survey	Three samples:312,160 & 211 students	TSQ
Macan et al. (1990)	survey	353 employees	TMBS
Britton & Tesser(1991)	survey	102 sales person, 90 freshman & graduates	TMQ
Koolhaas et al. (1992)	survey	469 personnel officers	PTP'901'
Lang (1992)	survey	96 undergraduate students	TM coping scale
Simons & Galotin (1992)	survey, intervention & diary study	Study 1: 88 students, study 2: 39 students	planning survey
Slaven & Totterdell(1993)	survey, intervention & interviews	34 delegates	
Shahani et al. (1993)	survey	Study 1: 93 students, study 2: 106 students	TMBS, TSQ
Macan (1994)	survey	Study 1: 353 employees, study 2: 341 students	
Burt & Kemp (1994)	experimental, survey	Study 1: 100 students, study 2: 50 students	activity planning TSQ
Orpen (1994)	diary study	96 undergraduate students	TM scale
William et al. (1995)	survey	204 students	TMQ
Trueman & Hartley (1996)	survey	293 students	TMQ
Macan(1996)	survey, intervention	38 employees from social security service agency	TMBS
Barling et al. (1996)	survey	102 salespersons	TMBS
Adam & Jex (1997)	survey	522 employees	TMBS
Vodanovich and Seib (1997)	survey	115 student	TMBS
Mudrack (1997)	survey	701 for TQS & 207 for TMBS	TMBS, TSQ
Kaufman, Scarborough & Lindquist (1999)	survey	112	TMBS, TSQ
Francis-Smythe & Robertson (1999a)	experimental, survey	48 Students	TMBS, TSQ
Adam & Jex (1999)	survey	522 employees	TMBS
Jex & Elacqua (1982)	survey	525 Employees	TSQ
Strongmann & Butt (2000)	survey	Study 1: 104 students, study 2: 217 students	TSQ & diary
Davis (2000)	survey	Women	TMBS
Kelly (2002)	survey	130 Students	TMBS
Van Eerde (2003)	survey	37 trainees & 14 Participants	TSQ & diary
Griffiths(2003)	survey	120central office employees	TMBS
Classens et al. (2004)	survey, longitudinal survey	70 R & D engineers	planning scale
Green & Skinner (2005)	survey	232 employees	key skills questionnaire
Peeters & Rutte (2005)	survey	123 elementary school teachers	TMBS
Woolfolk & Woolfolk	experimental, survey	81 students	

Source: Authors



Phase II study was based on the identification of time management strategies. For this purpose the data were collected during a workshop conducted for a group of public administrators during November 2014. It was based on discussion and identification of strategies among the cadre of trainees in a public institute. The discussion was to gauge the perception of top managers about time management strategies.

### Data collection and profile of the respondents

In this study, the data were collected by two different approaches. First the survey was conducted to collect the data from public universities and a local bank. Then, a qualitative approach, i.e. in-depth interviews were conducted to collect data and information to explore the time management strategies of key informants. We first describe and discuss the quantitative study and discuss its findings in relation to our research question and objective. Then, the description and discussion of the in-depth interviews are presented. The findings are discussed accordingly.

### Survey

Data were collected from the employees of two different sectors namely public universities (A), and one local bank (B). A total of 300 questionnaires were distributed randomly in the one public university of each province of Pakistan. About 150 questionnaires were returned. In the sample of the local bank, similarly a total of three hundred questionnaires were distributed in three different branches of the bank of which about 110 questionnaires were returned. Female respondents were very few (i.e., 35%) which is opposite to Macan's (1994) study in which more female respondents participated. Male respondents dominate in Pakistan culture. As a result, the male respondent proportion is almost 65%. All respondents at the sample university were faculty members who are highly educated with Master's or Ph.D. degrees. In the sample banks, about 70% had Master's or MBA degree and 30% hold Bachelor's degree working at lower officer ranks. No one identified any kind of time management training they had received prior to participation in our survey.

### Time Management Behavior Scale (TMBS)

This study adapted the Macan et al. (1990) Time Management Behavior Scale. Macan et al. (1990)

used thirty-three time management behavior items using a 5-point Likert-type scale from *seldom true* (1) to *very often true* (5). These items of time management were compiled by Macan et al. (1990). The scale items were intended to measure the extent to which time management activities are used.

We sent this questionnaire to two experts of the universities. Upon their review and comments, this study excluded 11 items. The reason of item exclusion were: (1) two items were revised in questionnaire; (2) other items were not considered related to the TMBS in the context of organizational perspective of Pakistan for example getting clothes ready at night, etc. Hence this study used 22 –items in TMBS.

### Results and discussions

Table 2 shows the descriptive statistics and correlation among the variables. The mean values of the items of the TMBS scale range from 3.22 to 4.25 and standard deviation from 1.066 to 1.231.

In addition to results in correlation, Table 2 shows the significant relation with other variables at 0.001 and 0.05 respectively. Detail of each variable and their relation with other variables can be seen in the table 2 below.

Later, Table 3 depicts that Factor analysis using VARIMAX rotation was conducted to understand and uncover relationship among the variables. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.64.

Table 4 depicts that six significant factors emerge from the analysis, explaining 80.591 percent of the total variance. The variables that have high loadings are grouped together. All twenty two items are taken into consideration since their factor loadings are greater than 0.65. All have Eigen values more than 1. The first factor is composed of six items. All six items in factor one are grouped as Time Management Strategies explaining 32.623 percent variance; the second factor is named as Goal setting and evaluation explaining 14.676 percent variance ; the third factor is named as organization of time management explaining 11.713 percent of variance; the fourth factor contains two items named as Review of Time management activities explaining 10.027 percent of variance; the fifth & sixth factor contain two items related to scheduling of events and logs explaining 6.719 & 6.671 percent of variance. (See Table 4).

**Table 2** Correlation among TMBS variables

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	4.11	1.23	1																					
2	3.63	1.07	.167**	1																				
3	3.48	1.08	.105	.301**	1																			
4	4.14	1.19	.79**	.260**	.224**	1																		
5	4.13	1.08	.84**	.216**	.184**	.785**	1																	
6	3.84	1.17	.78**	.230**	.171**	.748**	.776**	1																
7	4.11	1.23	1.0**	.167**	.105	.794**	.849**	.776**	1															
8	3.63	1.07	.17**	1.00**	.301**	.260**	.216**	.230**	.167**	1														
9	4.22	1.08	.45**	-.014	.048	.479**	.395**	.333**	.435**	-.014	1													
10	4.17	1.06	.48**	.119	.025	.44**	.54**	.40**	.48**	.119	.72**	1												
11	3.9	1.15	.39**	.039	-.009	.380**	.352**	.50**	.396**	.039	.68**	.70**	1											
12	4.21	1.21	.480**	-.043	-.036	.388**	.382**	.35**	.480**	-.043	.77**	.80**	.78**	1										
13	3.52	1.08	-.076	.43**	.072	-.033	-.061	-.056	-.076	.430**	.203**	.280**	.250**	.19**	1									
14	3.49	1.04	.013	.050	.392**	.054	.035	.048	.013	.050	.174**	.20**	.094	.06	.36**	1								
15	4.22	1.1	.446**	.012	.011	.471**	.407**	.355**	.446**	.012	.957**	.743**	.688**	.788**	.210**	.186**	1							
16	4.17	1.06	.482**	.119	.025	.438**	.541**	.405**	.482**	.119	.728**	1.0**	.704**	.803**	.28**	.206**	.743**	1						
17	3.95	1.13	.013	-.110	.20**	-.017	.049	.053	.013	-.110	.078	.111	.186**	.198**	-.096	-.286**	.084	.111	1					
18	4.25	1.18	-.058	-.064	-.013	-.006	.021	.001	-.058	-.064	.046	.026	-.003	.007	.094	.125	.018	.026	.718**	1				
19	3.54	1.08	.22**	.011	-.082	-.277**	-.282**	.26**	.222**	.011	.243**	.378**	.363**	.288**	-.041	-.083	.29**	-.37**	.19**	.20**	1			
20	3.55	1.04	-.105	.005	-.037	-.079	-.046	.116	-.105	.005	-.005	-.022	.229**	-.105	.211**	-.017	-.027	-.022	.032	.049	.384**	1		
21	4.22	1.08	-.038	.039	-.031	.014	.035	.049	-.038	.039	-.063	-.013	.023	-.044	-.114	-.258**	-.072	-.013	.631**	.710**	.143**	.119	1	
22	4.15	1.081	.006	.115	.004	.072	.083	.092	.006	.115	.17**	.16**	.16**	.114	.036	-.101	.107	.16**	.56**	.73**	.205**	.141*	.74**	1

\*\*\*Correlation is significant at 0.001;

\*\*Correlation is Significant at 0.05;

Source: Authors

**Table 3** Eigenvalues of TMBS variables

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.177	32.623	32.623	7.177	32.623	32.623	4.988	22.673	22.673
2	3.229	14.676	47.299	3.229	14.676	47.299	4.329	19.676	42.349
3	2.577	11.713	59.012	2.577	11.713	59.012	3.152	14.33	56.678
4	2.206	10.027	69.038	2.206	10.027	69.038	2.315	10.522	67.201
5	1.32	5.998	75.037	1.32	5.998	75.037	1.478	6.719	73.919
6	1.222	5.554	80.591	1.222	5.554	80.591	1.468	6.671	80.591
7	0.852	3.873	84.463						
8	0.663	3.013	87.477						
9	0.546	2.483	89.96						
10	0.413	1.879	91.839						
11	0.377	1.715	93.554						
12	0.324	1.471	95.026						
13	0.253	1.15	96.176						
14	0.224	1.02	97.196						
15	0.196	0.889	98.085						
16	0.156	0.709	98.794						
17	0.122	0.553	99.347						
18	0.107	0.488	99.835						
19	0.036	0.165	100						
20	4.02E-17	1.83E-16	100						
21	-2.71E-18	-1.23E-17	100						
22	-3.46E-17	-1.57E-16	100						

Extraction Method: Principal Component Analysis.

Source: Authors

**Table 4** Rotated Component Matrix

	Components					
	1	2	3	4	5	6
Completes priority tasks	0.859					
Keeps long-term goals	0.878					
Handles letters & memos	0.777					
Carries appointment book	0.886					
Uses waiting time	0.856					
Practices recordkeeping Increases task efficiency	0.878	0.838				
Sets priorities		0.847				
Breaks down tasks		0.847				
Sets short-term goals		0.908				
Evaluate schedule daily		0.908				
Carries notebook			0.827			
Avoids interruptions			0.916			
Schedules time daily			0.881			
Organizes paperwork			0.861			
Review activities				0.959		
Makes list of things to do				0.59		
Writes reminder notes					0.846	
Sets deadlines					0.765	
Schedules events weekly						0.67
Keeps daily log						0.894

Extraction method: Principal Component Analysis.  
Rotation method: Varimax with Kaiser Normalization

Source: Authors

The above results and findings depict that TMBS comprised of twenty two items has sufficient reliability range, which is 0.64. Later, factor analysis identify six factors namely Time Management Strategies, Goal Setting and Evaluation, Organization of Time, Review of Management and Schedule Events and Logs .Hence, in order to meet the first aim of this study, we constructed questionnaire survey of TMBS and find this instrument valid with identification of six major factors of time management behavior skill in Pakistan

**In-depth interviews about TM strategies:**

In order to meet the second aim of this study, that is, to identify the major strategies that have been used at the workplace to manage time. This study focused on in-depth interviews.

In-depth interviews were conducted during workshop of three cadre groups of public administration. Based on the literature identification of time management strategies and major time waster, this study will refer to these activities involved in time wastage as time eaters. We presume that employees have prior understanding about concept of time management, literature and importance of time management. For this purpose, the data were collected during workshop conducted for a group of public administrators during November 2014. It was based on the discussion and identification of strategies among the cadre trainees in a public institute. The aim of the discussion was to gauge the perception of top managers about time management strategies and what activities cause major time waste at their workplace.

**Profile of the sample of the study**

About 33 respondents were present in the time management workshop. This workshop was conducted by the Government for training of group of public administrators. All were male; no female officer was in this workshop. Age-wise data depicts that most of the officer age lies between 40 and 55. Career wise they were in the middle level or some were in top level of the career waiting for promotion after completion of this training program.

**Respondents' perception about time management strategies**

After completing the training session of time management and discussion about time manage-

ment strategies in the light of the relevant literature, we asked them to identify what type of activities eat up the major portion of time and cause procrastination of other important activities and stress. Also we asked what they do to save time in terms of identifying or categorizing in light of strategies mentioned in the literature. For this purpose we adopted FDG (give full term too) method of discussion and asked those to discuss in their three cadres (groups) all of whom consisted of 33 respondents.

The first group which was composed of eleven members who were gathered in the meeting room for discussion. They started discussion among themselves. The crux of their discussion is that after entering at workplace or office when they sit at their desk, turn on the computers or laptops and start checking emails to identify any important messages to answer, and then browse FB messages. In the meantime, there are telephone calls that interrupt and walk-ins of the colleagues and other clients and talks that eat up their major time before they can focus on their work. This continues during work as well. They rate that emails, their answers, FB and Twitter, SMS eat up approximately 30% of their time. Telephone calls and meetings about 20% and walk-ins, sits and talks eat up 40% of their time with almost 10% of their time that they can give on office work without any interruption.

The second group consisted of eleven members. They started discussion. They identified that majority of their time spent on the walk-ins of people, talking, and long sits in the office without any purpose. They concluded that almost 50% of their time is spent on this activity. When they get free and alone in the office they spent time on social media and texting that is almost 20% and rest 30% of their time they spend in the meetings and office work.

Similarly after discussion the third and last sample group's leader presented concluding remark identifying that most of group members spent 30% of their time on the office work, meetings, while telephone calls takes 10% of their time. About 35% of time spent on the sit-in, walk-in etc. While they identified that when checking official mails they spent almost 25% on the social media and texting in sphere time that cause sometimes procrastination of some files signing and routine cases.

Addressing the second question on what they do to manage time, the three groups discussed in light of the literature and knowledge provided

during workshop. Literature review related to time management strategies depict that the researchers (e.g., Adams & Jex, 1999; Zampetakis, Bouranta, & Moustakis, 2010; Van de Meer, Jansen, & Tarenbeek, 2010; Seaward & Seaward, 2011; Lakein, 1973; Morris, 2001; Lay & Schouwenberg, 1993; Geist, 2003; Jex & Elacqua, 1999; Jordan, Cobb & McCully, 1989; Alay & Kocak, 2002; Bliss, 1976; Britton & Tesser, 1991; Burt & Kemp, 1994; Ashkenas & Schaeffer, 1985; Puffer, 1989; Woolfolk & Woolfolk, 1986) have identified the planning, goal setting, scheduling, prioritization of time/time matrix, list to do or documentation and good time management habits (e.g., avoiding procrastination, balance, keeping working table clean, etc.). Some researchers (e.g., Yager, 2008) link Pareto principle to prioritization of time. Hence, based on literature three cadres make list of the following strategies and they added one time management technique of Pomodoro in the light of information provided to them in workshop. Pomodoro is tomato in Italian. It is so named because it uses a small plastic kitchen timer that is shaped like a tomato. In this technique, usually Pomodoro timer (or any timing device) is set to 25 minutes, and after completing or concentrating full 25 minutes on the work, employees may take a short 5 minute break—go for a walk, get a coffee, etc. Pomodoro technique encourages completing 4 Pomodoros, and then they can take a longer break (20–30 minutes) to give brain a rest before beginning the next round of Pomodoros. They later on discussed what they do at their workplace:

1. Prioritization of Time or Pareto principle
2. Goal Setting
3. Scheduling
4. Organizing/Time Matrix
5. List to do and Documentation
6. Good time Management Habits
7. Pomodoro

While discussing the technique, the first group members identified that they have been using documentation, goal setting and scheduling as time management strategy. Almost all members stated they use the scheduling and documentation like diary or note keeping at their workplace. However after attending workshop they will prefer to use good time management habits, Pomodoro and prioritization or Pareto principle. The second and third group almost concluded their discussion with the identification of strategies similar to first group.

After concluding the remarks by each group, the group leaders justified the similarity of opinion among members by reasoning that almost all of them have been using the time management strategies mentioned above but they had not gone through any workshop or due to lack of knowledge about importance of time management and other strategies like Pomodoro, Pareto principles, they were not utilizing time and implementing strategies effectively.

Summing up, major time eaters or wasters are walk-ins of people, talking, long sits in the offices and social media like FB, twitter or SMS. The time management strategies identified by this second phase of the current study are documentation, goal setting and scheduling.

## Conclusion

The concluding remark of this study is: Time is most precious and irreversible among all assets either financial or non-financial.

Hence, to manage time at workplace has become most discussed topic at the workplace in the developed countries. Considering its importance, this study finds that much effort and research has been going on in the European and American Cultures while rare studies have been found in Asian cultures like Pakistan. Hence, this study tested the TMBS and identified six factors, namely, time management strategies, goal setting and evaluation, organization of time, review of time management and scheduling of events and logs. Addressing the second aim of this study, we focused on the practical aspects of time management on what types of strategies are being used at the workplace. For this purpose, in-depth interviews and discussion were conducted with the training cadre groups. They identified that no prior training has been conducted for time management and very few of them focus on managing the time effectively. The major strategies identified in the second stage of the study include documentation, goal setting and scheduling. The major time eaters or wasters are identified as walk-ins of people, talking, long sits in the offices and social media like FB, twitter or SMS.

Later Cadres emphasized the more training needs to enhance time management skills and strategies at the top and middle level of workplace in order to change the work attitude of workers especially in Asian countries like Pakistan. They also emphasized on the cultural change to change their habit of work procrastination to enhance the organizational effectiveness. So, recognizing the

importance of time management by employees at workplace, this study recommends much focus on training and effective utilization of work during work in order to avoid workplace procrastinations. This study recommends government and private sector intervention to provide training about effective utilization of time in the organization by realizing the importance of time. **SM**

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✉Correspondence

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**Uzma Mukhtar**

University of Baluchistan  
Pakistan

E-mail: mukhtaruzma@gmail.com

# The Role of Retail Strategy in the Development and Efficiency of Business on the Global Electronic Market

**Jelena Končar**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

**Sonja Leković**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

## Abstract

Global market expansion and steady growth of international trade have led to fiercer competition, and all with the aim to maintain its position on the market. Internationalization of business is becoming a new development strategy for large retail companies. Intense technological progress and transfer of technology contribute to the development of the global electronic market. The structure of the market and trade in global marketing channels is changing completely under the influence of the internationalization of retailing. Global retail sales have created a new culture and new needs in consumption. Marketing model of relationships with customers is of crucial importance and has impact on establishing long-term relationships between members of the marketing channel. The interactive nature of Web develops relationships with customers, with the aim of improving personalized service according to the requirements of each individual. Implementation of multichannel retail strategy to the global market is conditioned by new technological developments. With the development of optimal multichannel marketing mix strategies retailers tend to achieve interrelationship satisfaction with target market. Good multichannel strategy is becoming a primary means of achieving sustainable competitive advantage on the global electronic market.

## Keywords

Globalization, elektronic market, retailing, multichannel strategies.

## Introduction

Technological innovations are changing retail functions in marketing channels. Market globalization and transnational integration contribute to the internationalization of retail trade, which is developing new multi-channel strategies in the global electronic market. Competition in terms of global electronic markets creates new retail strategies tailored to strategic values of marketing consumer relationship model. All of this raises many questions regarding retail strategies in function of development and business efficiency of global electronic market:

- How does development of a global electronic market affect the internationalization of retailers?

- What are the strategic values of marketing consumer relationship model?
- How to evaluate and identify consumer characteristics and needs affecting the development and efficiency of the global electronic market?
- What are the new multichannel retail strategies to enter the global marketplace?

Answers to the questions of development and efficiency in global electronic market will depend, to a large extent, on the acceptability of new multichannel retail strategy.

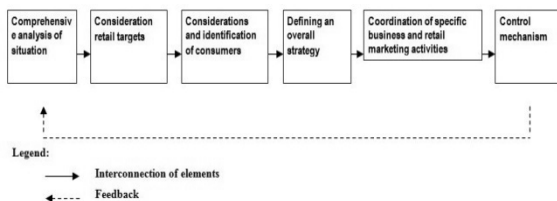


### 1. Elements and characteristic features of retail strategy

Retail strategy defines a global plan of action that leads retailers. Retail business activities are directed through retail strategy. Retail strategy requires monitoring and assessment of the institutional market and economic conditions, with the aim of better coordination of retail activities. Strategic planning at certain levels (strategic, functional and operational level) precisely defines the retail business philosophy, main functions, the market elements, general and specific retail activities, as well as a control mechanism for certain defined planning period. Comprehensive integrated retail strategy can be seen through a number of elements and characteristic features. This primarily relates to (Končar, 2015, p. 11):

- ability to complete the analysis of the situation,
- precise understanding of business objectives retail,
- analysis and identification of the consumer,
- defining overall strategy, through controlled (internal) and uncontrolled (external) variables,
- maximum coordination of specific business and marketing activities in retail and
- control mechanism through the evaluation and adjustment (in order to avoid any adverse trends in the market).

Among the above elements and characteristic features of the retail strategy there are interconnectivity and feedback. Certain elements of the distinctive features of the retail strategy can be seen in Figure 1.



**Figure 1** Elements of the characteristic features of retail strategy

Source: Revised according to Končar, 2015, p. 12

A comprehensive analysis of elements and characteristic features of retail strategy includes the evaluation or assessment of the objectives, opportunities and potential problems facing retailers in the global market.

### 2. The role of global electronic market in the internationalization of retailers

Globalization, which in a sense can be understood as an economy without borders, allows the realization of direct benefit (Grubor, 2008, p. 16). The global electronic market has characteristics of free market and free trade (Končar, 2008, p. 183). The global electronic market is a complex process of strategic decision making in accordance with global dimension of electronic commerce. Business decisions of retailers related to global electronic activities represent strategic issues of internationalization. Highly noticeable processes of retail market concentration have marked the end of the last and the beginning of this century (Lovreta et al., 2015, p. 213). Strategies for global business are made for reactive or even proactive reasons. The global electronic market requires realization of strategic goals of retailing with rational decision-planning decisions, as well as quick response to a set of options. In such circumstances, reactive reasons of global business are related to competitors who perform internationally with respect to all cultural differences and trade barriers. Proactive reasons for the implementation of new international markets include emerging economies (e.g. new resources, cost savings, encouragement of local authorities, etc.).

Applying new technologies based on Internet and the Web, electronic retailing performs business transactions in electronic marketing channels. The unique dimensions of technology in electronic retailing open up new possibilities for marketing and sales in the global electronic market. These unique characteristics of technology in electronic retailing are:

- omnipresence (Internet / Web technology is available at any location),
- global reach (technology across national borders worldwide),
- universal standard (Internet standards, as well as a collection of new technological standards),
- social technology (technology content and social network users),
- personalization and customization (this technology allows the transfer of personalized messages, both for individuals and groups),
- density of information (information technology reduces costs and raises their quality),

- interactivity (technology that works through the interaction with the user) and
- resources (technology allows different types of messages, such as video, audio and text messages).

Development of top ten internationalized retailers in the global electronic market are shown in Table 1, presented with revenue growth of electronic retailing 2011-2014 of the world's largest retailers:

**Table 1** The internationalization of retailers in the global electronic marketplace

e-50 sales rank 2014	Top 250 retail revenue rank 2014	Name of company	Country of origin	2014 e-commerce retail sales (US\$M)	2014 e-commerce retail sales % of total retail revenue	2014 e-commerce growth rate	2011-2014 e-commerce	Countries of operation 2014
1	12	Amazon.com	US	70,080	100.00%	15.10%	18.50%	14
2	48	Apple	US	20,600	49.00%	12.60%	29.90%	16
3	58	JD.com	China	17,672	100.00%	62.00%	73.20%	78
4	1	Wai-Mart	US	12,200	2.50%	22.00%	24.00%	28
5	76	Otto	Germany	8,397	65.40%	5.60%	6.70%	54
6	5	Tesco	UK	6,504	6.50%	20.00%	14.60%	13
7	35	Macy's	US	5,400	19.20%	30.10%	34.90%	3
8	97	Liberty Interactive Corporation	US	5,198	49.50%	6.40%	9.90%	9
9	15	Casino Guichard Pernachon	France	4,606	7.10%	20.10%	15.80%	29
10	57	Suning Commerce	China	4,199	23.70%	17.80%	63.50%	3

Source: Deloitte, 2016, p. 11-13, 36

Globalization provides companies with the opportunity to treat the world, including their own domestic markets, as one market (Cateora, 1990, p. 20). Basic benefits and advantages of globalization of electronic retailing are related to business opportunities at any time, from any place, at rational costs. Despite these benefits of globalization, there are also barriers that are related to investment and the international impact of electronic retailing. The barriers are primarily related to authentication of buyers and sellers, fulfillment of order, security, and domain names. Many issues raised in the solution of global electronic market require the adoption of appropriate legislation, to ensure the development of global electronic retailing.

### 3. Globalisation of retail market using global international standards GS1

Global GS1 international standards make clear identification of all businesses in the global market with the ability to identify the products and services in the retail sector. The organization GS1 globally aims to ensure that all actors along the supply chain keep pace with current changes (GS1, 2016).

Global electronic market requires complete and accurate information about the products.

Thanks to the automatic identification, GS1 standards provide quality and accurate data on manufacturers and their products. There are seven GS1 Identification Keys: GTINGlobal Trade Item Number, GLNGlobal Location Number, SSCSerial Shipping Container Code, GRAIGlobal Returnable Asset Identifier, GIAIGlobal Individual Asset Identifier, GSRNGlobal Service Relation Number and GDTIGlobal Document Type Identifier (Končar, 2008, p. 94).

Technological innovation, combined with the global international standards, leads to further growth of electronic retailing, which is one of the most profitable electronic marketing channels. Among the most important solutions that the GS1 organization has developed, are (GS1yu, 2016):

- GS1 DataBar "reduced" the next generation of GS1 bar code. It is smaller than the original bar code, or may contain more information. According to the GS1 survey, using GS1 DataBar, an average retail chain of 100 outlets annually generates operational savings of more than \$ 2.32 million in sales of meat.
- EPC Thew Electronic Product Code uses tags with radio frequency identification (RFID tags), enabling visibility and efficiency throughout the supply chain and higher quality information flow between companies and their major trading partners.
- GS1 eCom standards provide clear guidelines for creating electronic versions of all types of business documents so that business partners can easily and freely exchange information electronically, regardless of the language employees speak, or what their internal hardware/software system is.
- GS1 GDSN (Global Data Synchronisation Network), provides a powerful environment for secure and continuous synchronization of accurate master data on products and companies.

GS1GDSN (Global Data Synchronization Network) is a global standard for synchronizing master data that unifies and creates a network of electronic catalogs. As a global standard, EPC Global Inc. performs automatic identification of information in the supply chain of any company, anywhere in the world (GS1yu, 2016) in real time. GS1GDSN standards are the foundation of development in all business models of electronic

retail (B2C) through which they provide timely information that is essential for modern retail, which is becoming a reliable source of information for consumers.

**4. Global web sites of retailers**

Thanks to multi-channel sales, retail provides consumers with numerous possibilities of product presentation. Multi-channel sale is becoming more complex, and retailers are using a variety of tools in order to raise awareness of the purchase on each target segment. Each target segment requires creation of customized solutions rather than universal access, which was achieved by a strong communication with consumers.

The analysis should include all the cultural, administrative, geographic and economic framework of global electronic multichannel retailing. Solutions relating to cultural barriers include awareness of cultural identity and different target markets. Language translation is one of the most important aspects of globalization of Web sites. Meeting this goal, many retailers use the management system of globalization, all with the aim of reducing costs and maintaining global websites. The first global Web site with the latest innovations related to multilingual terminals, as well as the basics of globalization and multilingualism profile, was Facebook, in 2011. The following table 2 indicates top ten global Web sites in 2015.

**Table 2** Top ten global Web sites in 2015

Rank	Company name	Industrial sector	Website address
1	Google	Web services	Google.com
2	Facebook	Web services	Facebook.com
3	Booking.com	Providers of tourist services	Booking.com
4	Hostels.com	Providers of tourist services	Hostels.com
5	NIVEA	Consumers goods	Nivea.com//gateway/
6	Wikipedia	Providers of informations and content	Wikipedia.org
7	Microsoft	Diversified bussines activities	Microsoft.com
8	Philips	Diversified bussines activities	Philips.com/global/index.page
9	Adobe	Computer support programs	Adobe.com
10	Cisco	Business technology	Cisco.com

Source: Globalbydesign, 2016

The field of global electronic retailing requires solving international legal issues in order to

eliminate barriers to tariffs, rates, tax issues and specifications. Key financial barriers to global e-retailing are related to electronic payment systems, which should be flexible and aligned with different groups of customers in on-line shopping.

**5. Perspectives and identification of consumers characteristics and needs**

A very important element of the retail strategy is to identify the characteristics and needs of its customers. The retail system tends to cater to a particular group of consumers that constitute the target market. Selecting a target market can be defined in the following forms: selling products and services to a wide range of consumers (mass market); selling products to an individual specific market segment directed to two or more specific groups of consumers, or more market segments. However, in doing so, it is important to define different retail strategies and approaches for each customer group individually.

Selection and choice of target market is defined as the direction of the retail system. This is achieved through the strategic implications related to retail location, mix of products and services, promotional activities, pricing orientation, and some accented defined strategy (table 3). This system allows the retailer to highlight its comparative advantages and allocate financial resources.

**Table 3** Target marketing techniques and their strategic implications

Strategic implications	Target Market Techniques		
	Mass marketing	Concentrated marketing	Differentiated marketing
Retailer's location	Near a large population base	Near a small or medium population base	Near a large population base
Goods and service mix	Wide selection of medium-quality items	Selection geared to market segment-high- or low-quality items	Distinct goods/services aimed at each market segment
Promotion efforts	Mass advertising subscription	Direct mail, E-mail, media and messages	Diferent for each segment
Price orientation	Popular prices	High or low	High, medium and low – depending on market segment
Strategy	One general strategy for a large homogeneous (similar) group of consumers	One specific strategy directed at a specific, limited group of customers	Multiple specific strategies, each directed at different (heterogeneous) groups of customers

Source: Evans & Berman, 2013, p. 97

The selection of target markets and defining unique retail offer makes it a necessary component of achieving the objectives of retail business. Retailers have better and wider selection of target market and satisfy the customers' needs if there is a good understanding of consumer behavior. Today, customers are looking for added value, such as exclusivity, innovation, content, even so, a certain level of supporting services (Sanghavi, 1/1990, p. 20).

## 6. Strategic marketing value model for relationships with consumers

The basic prerequisite for the implementation of planning and implementation of electronic retailing is access through the use of general methodology of strategic marketing value model for connections with consumers. The general methodology may be composed of the following main stages:

- Analysis of the sector and retail competition;
- Retail strategy formulation;
- Application (implementation) of retail strategy;
- Assessment of realization of retail strategy.

Trade is a highly competitive economic sector characterized by very fast and strong changes (Končar et al., 2011, p. 797). Research is carried out together with the analysis of sector and competition, as well as evaluation and selection of information from external and internal environment of retail. The main objective of this analysis is to identify all the key factors necessary for the success of electronic retailing. Out of many approaches to strategy formulation, the one an enterprise adopts depends on the environment of strengths, weaknesses, opportunities and threats (SWOT) within which it operates (Bandyopadhyay, 2002, p. 218) retailer.

Next step is retail strategy formulation, which proposes different steps (Jelassi & Enders, 2005, p. 184.) based on the results of carried out analysis and the activities of the competition. Formulating strategy defines the long-term development and strategic plans, in order to achieve effective management of electronic retailing. The results of CSF (critical success factors) analysis can be used to develop plans for the implementation of (Bandyopadhyay, 2002, p. 220) electronic retailing. Critical success factors are related to business, technology and human

factors which, to a large extent, contribute to achieving the objectives of electronic retailing.

Strategy of assessment of electronic retailing tasks can be done through formal analysis of value chain, which includes a series of activities by which the retail organization achieves the goals of business. Thanks to this analysis, a retail organization contributes to improving their competitive position in the market. In addition, competitive position on the market for sale through electronic retailing can be accomplished with their own differentiation providing services at every point of contact with customers (the marketing model of integration with the customer in the figure 2).

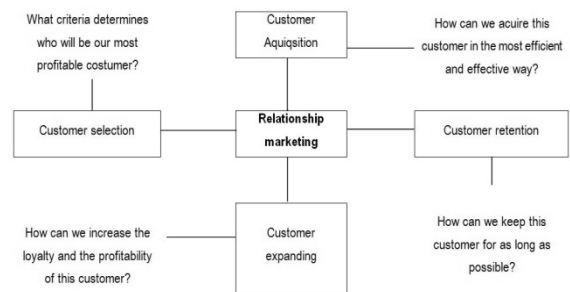


Figure 2 Relationship marketing model

Source: Turban, et al., 2000, p. 312.

Initiatives related to electronic retailers are often a generator of income, but do not create new markets, and, in turn, influence the emergence of new markets, or do not contribute to the realization of increased profits. For that purpose it is essential to research return on investment (ROI) for the purpose of electronic (Bandyopadhyay, 2002, p. 221.) retailing. This research is necessary in order to establish the relationship between costs and revenues on the basis of the project of electronic retailing. Resource costs (such as hardware, writing software, labor, training) necessary for electronic retailing, are very difficult to quantify and even harder to allocate (Bayles, 2001, p. 84). Those are intangible costs of electronic retailing related to effective marketing channel, increase in sales volumes, additional customer service and the like.

The strategic values of electronic retail are related to competitive advantage in the market and the benefits that can be achieved on the basis of new business procedures. Online organizational strategic risks are uncertain internal factor that is opposed to external competitive risks of uncertainties and application. The risks are supposed to be examined and looked into in order

to define the strategy of electronic (Turban, et al. 2000, p. 320) retailing.

### 7. Implementation of multichannel retail strategy to the global electronic market

Creating competitive advantage in the field of application of new technologies and global international standards require defining a strategy of electronic marketing channels. The next Figure 3 represents the entrance strategy in the global market.

	New business	Present business
"clicks" Pure players	<b>First mover</b> 1 Amazon.com	<b>Fast follower</b> 3 Alibaba.com
	<b>Alliance</b> 2 Booking.com/ hoteli	<b>Additional brand</b> 4 Tesco
„brick and mortar“ Mixed game		

Figure 3 Strategies of entry to the global market

New and traditional companies are entering the market of e-retailing faced with a basic choice "clicks" or "bricks and clicks". After selecting a strategy to enter the market, the next task of the company in the electronic marketing channel is to establish interrelationships with customers. Web site is an essential tool and leading initiative to establish interrelationships with customers. Website performs the functions of the commercial information of customers about products and services, which is an important factor for on-line customer experience. Customer experience refers to the totality of experiences that a customer has with a firm, including the search, informing, purchase, consumption, and after-sales support for the product (Laudon & Traver, 2015, p. 406.).

An appropriate strategy for electronic marketing channel leads to the elimination of distance, time homogenization and insignificant location, which gives managers the ability to concentrate on new technology with the aim of increasing the efficiency of marketing channels. Traditional marketing channels that include the movement of goods and services, thanks to technological advances and global international standards, shift the distribution marketing channel to interactive communication medium. The power of interactivity leads to better and more efficient differentiation of products and services through an accelerated flow of information, which allows

Internet network for all participants in marketing channels (from producers to consumers) on the virtual market. The potential of on-line retailing is enormous: in 2015 there were 314 million Web users in North America, 604 million in Europe, one billion 622 million in Asia, 27 million in Oceania and Australia, 345 million in Latin America, 123 million in the Middle East (InternetWorldStat, 2016).

Competition in the global electronic market is done without intermediaries. Through a strategy of classifying, sorting, routinization and research, electronic marketing channel is becoming more efficient as compared to traditional marketing channels (Lovreta et al., 2013, p. 142-146.). Basically, it is about new forms of motivating consumers to interactively explore, thanks to new technologies of marketing communications. "One on One" marketing is the ultimate form of marketing segmentation, targeting and positioning, where the individual are segments. Web-based techniques use more individual knowledge and personalization compared to traditional mass media. Thanks to the adjustment, the Web environment allows the customer to interactively create product. Websites, especially portal sites such as Yahoo, MSN and AOL, allow consumers to create their own customized versions of the Web Site.

### Conclusion

Retail strategy in global electronic marketplace contributes to the development of internationalization of retailers. Business decisions of retailers related to the global electronic activities represent strategic issues on which retailer approaches to internationalization. The global electronic market requires the realization of strategic goals of retailing with rational decision-planning, as well as quick response to set options in a changing environment. Electronic activities of retailers in global markets require global implementation of international standards GS1, and maintaining global websites. Consideration and identification of consumers' characteristics and needs makes it an essential and critical element of retail strategy. Based on the characteristics and needs of consumers, each identified target segment requires the creation of customized solutions, but not universal access, which is achieved through communication with consumers. Strong interactivity with customers leads to better and more efficient differentiation of products and

services through an accelerated flow of information. Retailers employ "one to one" marketing as the ultimate form of marketing segmentation, targeting and positioning, where the individuals are segments of the global electronic market. The implementation of the multichannel retail strategy for entering the global market, the strategy of electronic marketing channels is defined representing a new driving force of development. **SM**

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## ✉ Correspondence

**Jelena Končar**

Faculty of Economics in Subotica  
Segedinski put 9-11, 24000, Subotica, Serbia  
E-mail: koncarj@ef.uns.ac.rs

# Internal Audits of Frauds in Accounting Statements of a Construction Company

**Tatjana Horvat**

University of Primorska Slovenia, Faculty of Management, Koper, Slovenia

**Martin Lipičnik**

International Institute of Logistics, Celje, Slovenia

## Abstract

The purpose of the research is to examine the volume of assets in the balance sheet of the construction company X and in the construction industry. We compare company X's data with the data of the construction industry and carry out statistical analysis of the arithmetic mean of the assets (t-test). If the differences in data 2008/2012 between the construction company X and the construction industry are high, the internal auditor should take care of possible risks of frauds in accounting statements of the company. If the amount of construction industry's assets is not growing, the construction activity is not recovering and the risk for frauds is greater. The observation period is from 2008 to 2012. The findings of the research of balance sheet's assets help us to set up the steps in controlling activities using by the internal auditor to avoid frauds in balance sheet's assets.

One of the main accounting statements of the company is the balance sheet. Developments in the construction industry affect future economy. It is very difficult to say that a company or activity recovers if the volume of assets of the construction industry is decreasing. It also means the financial crisis is still ongoing and the risks of frauds are greater. The management of the company X should have internal audits to prevent from frauds in accounting statements. Internal auditing consists of internal monitoring of different processes in the accounting system. We recommend to management of construction company X to introduce internal auditing and set up different organizational internal controls for preventing frauds in the accounting statement, for example to introduce responsibilities of employees in accounting or finance, to introduce IT control in accounting statements – to introduce the reporting of deviations of planned and realized data of financial statements, to initiate cross-checks in IT system.

## Keywords

Management, balance sheet, assets, construction industry, construction company, financial crisis.

## Introduction

Management of the organization must be aware of the risk of fraud in the accounting statements, therefore the risk management of fraud is an integral part of the operations in each organization. To assist management of the organization in the detection of fraud and fraud risk there are internal auditors.

In our study we focused on the Slovenian construction company X and the Slovenian construction industry and the movements of assets in one of accounting statements – balance sheet from 2008 to 2012. The main thesis is that due to the crisis volume of business of the construction

company X was reduced and thereby the amount of assets in the balance sheet has been reduced too. We suppose this may be the reason for fraud in the balance sheet. The purpose of this paper is to give recommendations on the role of internal audit in the construction company X. Despite the movements of assets in the balance sheet due to the economic situation, the company should provide reliable information in the balance sheet and the internal auditor should help with this.

## 1. Accounting statements and frauds in the company

One of the main accounting statements of the company is the balance sheet. It has the equal amount of assets and liabilities. Assets in balance sheet are the values, rights and money available to the company and with their help the company is pursuing business goals (Kokotec-Novak, Korošec, & Melavc, 1997, p. 29). Assets consist of short-term and long-term assets, while liabilities consist of capital, long-term and short-term liabilities.

Assets in the balance sheet affect the volume of business and the size of the company. The sizes of the companies are measured by Simunic (1980, p. 172) and Palmrose (1986, p. 99) on the basis of the volume of total assets in the balance sheet. Same as Simon and Francis (1988, p. 257) as one of the factors of size of the companies consider the size of (balance sheet) assets. Liabilities show how assets are financed. One of the main accounting statements is also the profit and loss account but it is not in the scope of our study.

The accounting statements of the company in Slovenia should be prepared in accordance with accounting and reporting requirements set by the Slovenian Accounting Standards (SAS, 2006), in accordance with the Slovenian Companies Act (CA-1). Slovenian Accounting Standards should not be contrary with International Accounting Standards (IAS) and must summarize the content of Directive 78/660 / EEC and Directive 83/349 / EEC (CA-1-UPB3, 9195). The accounting statements should be prepared in euros, rounded to unit, for the financial year that equals the calendar year.

ACFE (Association of Certified Fraud Examiners) published data from their study of global deception, which showed that companies had at least 5% of the revenue losses due to fraud. KPMG's Fraud Survey documented a marked increase in overall fraud levels since its 1998 survey, with employee fraud by far the most common type of fraud (Wolfe & Hermanson, 2004, p. 38). This trend is consistent with the unprecedented recent spate of large frauds in accounting statements in world companies, such as Enron, Worldcom, Parmalat etc. According to Kopp and Gonzales (2016) the personal characteristics of employees are the reasons for committing a fraud.

Frauds in accounting statements may be a multitude of irregular and illegal acts, which lead to wilful deceit and are in favor or to the detriment of the company. The cause may be the person in

or outside the company. To fraud in favor of company brings unjustified or unfair advantage, which can deceive an external customer; those perpetrators generally have an indirect benefit. Fraud to the detriment of the company brings in general benefit for a person within the organization, a person outside the organization or another organization. (Standards for the Professional Practice of Internal Auditing - Procedures manuals, Slovenian Audit Institute, Ljubljana, 2003, pp. 36 -42).

Frauds in accounting statements are investigated by internal auditors, lawyers, investigators, security guards and other professionals within the company or outside.

Cases of indicators of fraud within the accounting statements easily could be unapproved transactions, unexplained exceptions in pricing, stealing money of customers or clients, stealing in the warehouse, fictional accounts of suppliers, displaying fictitious sales of revenue, unusually large losses on products, unusually large losses on inventories, fictitious invoice approval, manipulation of accounting statements, manipulation of accounting reports, and more.

Among the reasons, why frauds are happening in accounting statements are the personal characteristics of employees. Kopp and Gonzales (University of Lethbridge, Canada, 2016) explore how personality traits affect the individual to commit a fraud and what individual's characteristics refer a person to commit fraud. They had studied how likely it would be for individuals with personal characteristics, such as honesty, Machiavellianism, narcissism and conscientiousness, to commit a fraud. Their survey showed that personal characteristics that significantly affect the risk of fraud are honesty and Machiavellianism, especially in financial crisis of the industry. Narcissism and conscientiousness do not affect to the risk of committing a fraud.

Management of the organization must be aware of the risk of frauds in accounting statements. Therefore, the risk management of frauds in accounting statements is an integral part of the operations in each organization. The risk in an organization is risk of unit, of the event and so on, without management initiation of any action that would reduce either the likelihood of its occurrence or its impact. When the management adopts risk minimization activities as a response to the risk, we can talk about the remaining risks (COSO, 2004, p. 49).



As the legal and business conditions constantly change, a permanent risk assessment must become an iterative process (Sawyer, Dittenhofer, & Scheiner, 2003, p. 66).

The role of internal audits in improvement of reliability of data in accounting statements is even greater. The economic reforms conducted in many countries worldwide in the late 20<sup>th</sup> and early 21<sup>st</sup> century, and continued development of the global financial crisis, several waves of which made a significant impact on the world economy, compelled the managers and owners of companies in different countries to strengthen the role of internal audit as an inseparable component of the corporate management system, which is directly related to improvement in business efficiency (Mitrovic, 2015, p. 15).

## 2. The role of auditing in detection of frauds in accounting statements

To assist management of the organization in the detection of frauds in accounting statements and fraud risk there are internal auditors. They are employees of the organization or the organization hired them. We especially emphasize that internal auditors must have sufficient knowledge to assess whether there is a risk of fraud, but they are not expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud (Slovenian Institute of Auditors, 2003).

Internal auditing consists of internal monitoring of different processes in the accounting system. Internal monitoring supervises especially the financial management system, which comprises the setting up and implementation of accounting plans, accounting and reporting in order to achieve the set objectives and to assure the protection of assets from loss, damage and fraud (Horvat, 2007, p. 157).

Internal auditing provides autonomous assessment of accounting statements and control systems as well as counselling to the management on how to improve their efficiency. In connection with internal auditing, controlling is a preventive control based on professional simultaneous (parallel) establishing of facts by persons accountable for the management. The management is usually accountable for setting of the internal controls.

For example, an important element of internal audit is monitoring the regularity of accounting control system of data in accounting statements, the reliability of its operation and the manner of preparing accounting reports, especially accounting statements. Internal audits of accounting also

verify and assess computer programs, especially the functioning of built-in controls as well as the protection against unauthorized interference in computer data.

The management of the organisation should require from assistant headmaster or any other person accountable at organisation to set up such an internal control system, which will provide a transparent institute management, compliance with legality and regular operation which will assure effective, efficient and economical management. It is therefore significant that the internal control is implemented by another person who is not in the management as leaders should not monitor themselves. Computerized accounting data have an important part of control built-in the applied computer programs. Additional internal monitoring of management is provided by internal auditing.

Each employee in organisation is accountable for their areas of work in accordance with the definitions in employment agreements or the act on the classification of assignments and duties and in compliance with these rules. Accounting control system also monitors the accountability of persons responsible for assets, protection of assets from theft, loss, inefficient use, the accountability for liabilities, cost and revenue.

In the context of accounting statements, internal monitoring is provided for in compliance with the internal rules and built-in internal accounting controls. The objective of accounting control is to obtain reliable statements of account and budgets, which are parts of the accounting plan and the annual report (Horvat, 2007, p. 158).

The role of the internal auditor in preventing frauds in accountings statements is to assure the reliable data and information in accounting statements. This means setting up the control activities. Internal control supervises the school financial management system, which comprises the setting up and implementation of planning, financial plans, accounting and reporting in order to achieve the set objectives and to assure the protection of assets from loss, damage and fraud (Horvat, 2011, p. 436).

With the introduction of the internal control of fraud risks, we establish a control environment. Control environment includes integrity, ethical values, philosophy and management style, way of determining the powers and responsibilities, organizing and developing the skills of employees (Cukon-Mavec, 2006, pp. 5-6).

### 3. The research of the construction industry

The paper will focus on data of the construction company X and data of the construction industry in Slovenia from 2008 to 2012. Within construction industry, 1,356 companies were registered in 2012 in the Republic of Slovenia. This figure also includes companies which do not employ workers. 549 companies with at least one employee were registered. We focused on construction companies with at least 10 employees, amounting to 56 registered companies. That is the sample for the study. The period of 2008 to 2012 is the important period for our research, because a financial crisis started in Slovenia in 2008 (SURS, 2009), which was first reflected in the construction sector.

The problems of construction companies are warned about by studies and statistics data for Slovenia which show a decline of orders in the construction sector, drop in real estate sales and payment indiscipline. All this affects on business volume of construction company. The volume of business is reflected also in the volume of assets on the balance sheet.

The problems of construction companies are also pointed out by Anžlovar (2008, pp. 60-61), in his analysis where draws attention to the caution needed in real estate investments, insolvency investors and financial indiscipline, because they can be fatal for the company. Also Pevcin (2009, ii) in his study of production companies recognizes the need for urgent reduction of costs, as demand fell markedly. In addition to findings of Anžlovar (2008) and Pevcin (2009) also Kolar (2010, p. 24) in his study detects a reduction in orders in the construction sector, at the same time a decline in real estate sales. Realistically, construction in Slovenia reached average 4 percent growth in the period from 2005 to 2007, but during the period from 2008 to 2012 a 6.5 percent decline on average (Crisis Mirror, 2013, p. 1). Construction is one of the most important industries, because it is important from several points. When economic growth is high, it is also a booming in construction industry; if the economy is in crisis, the construction can be found in the biggest problems. Construction industry has a major impact on other activities, such as transportation, manufacturing, technical business, trade and others (Žerdin, 2015).

Construction also has a major impact on the number of employees, as it was in 2011, the third industry, which employed the largest number of

workers (ZRSZ, 2011, p. 4). Slovenia recorded the largest drop in GDP in 2009, 7.8%. Domestic investment decreased by 14.4% in that year, exports of goods fell by 19% and exports of services by 15%. Total construction activity decreased by 20%, construction work on residential buildings dropped by almost 25%, construction work on housing by 20%, part of a civil engineering works by 16.5%. The biggest problem of construction is lack of liquidity, which occurs due to lack of investment. The main problem is lack of payment discipline between main contractors and subcontractors (Employers' Association of Slovenia, 2010, p. 8).

#### 3.1. The purpose of the research

With the aim to explain the situation of the construction company X and the construction industry in Slovenia, we decided to compare company X's data with the data of the construction industry and carry out statistical analysis of the assets in the industry to which the company X belongs. For the statistical analysis, we used t-test (One-Sample Statistics) for the analysis of the arithmetic mean of assets. If the differences in data 2008/2012 between the construction company X and the construction industry are big, the internal auditor should take care of possible risks of frauds in accounting statements of the company. If the construction industry's assets are not growing, the industry is not recovering and the risk for frauds is greater. Financial crisis means uncertainty in future operations of the construction company. Uncertainty is characterised by the fact that it is impossible to foresee the likelihood of emergence of unknown events (Mitrovic, 2016, p. 16). The observation period is from 2008 to 2012. The findings of the research of balance sheet assets will help us to set up the steps how to use the internal auditor to avoid frauds in balance sheet assets.

#### 3.2. The results of research and discussion

##### 3.2.1. Comparison of balance sheet assets of the construction company with data in construction industry

Table 1 shows a comparison of growth / decline in volume of each elementary item in the balance sheet. In the table 1, we compared the movement of items of the company X in relation to construction industry at the beginning and at the end of the observation period.

The volume of total assets in activity declined as well as in the company. Company achieves

index 2012/2008 = 87.5, and construction industry achieves index of 86.25.

**Table 1** The main categories in balance sheet of the company and of the construction industry

Year, index Categories in EUR	2008		2012		Index 2012/2008	
	Company X	Construction industry	Company X	Construction industry	Company X	Construction industry
Total assets	27.873.194	188.481.517	24.389.579	162.565.954	87,50	86,25
Long-term assets	15.650.487	67.215.801	11.257.383	52.940.502	71,93	78,76
Short-term assets	12.189.337	119.757.154	13.115.448	108.761.983	107,60	90,82
Short-term operating receivables	8.445.453	74.526.797	9.178.821	64.213.536	108,68	86,16
Cash and cash equivalents	380.870	7.402.482	59.999	7.919.683	15,75	106,99
Off-balance sheet assets	13.264.064	20.958.118	11.976.261	24.666.293	90,29	117,69
Total liabilities	27.873.194	188.481.517	24.389.579	162.565.954	87,50	86,25
Capital	5.276.741	51.432.863	5.551.604	53.810.009	105,21	104,62
Long-term liabilities	7.738.850	28.392.993	4.448.708	17.621.224	57,49	62,06
Short-term liabilities	13.931.159	103.289.542	14.027.614	87.664.406	100,69	84,87

Source: AJPES, 2014

The data shows that the company is strongly reduced long-term assets at only 71.93 index value in 2012, while industry index reached the value 78.76. The company's volume of short-term assets in the observed period increased and reached an index value of 107.6, the volume of short-term assets in the industry declined, since 2012/2008 index reaches a value of 90.82.

When we observe the movement of short-term operating receivables we find the weak side of the observed company, since its receivables grew, reaching 108.68 of index value, while within the industry the receivables fell, reaching an index 2012/2008 = 86.16. Cash and cash equivalents in the industry managed to increase, reaching 106.99 of index, while the company had a decreased volume of cash and it reaches index value 2012/2008 = 15.75.

The company off-balance sheet assets have decreased by nearly 10 percentage points. In the industry, the volume of off-balance sheet assets increased and it reached index value of 117.69. However, we must not forget that the volume of assets in the company fell by 13.5 percentage points (Žerdin, 2015).

The company's equity in the observed period increased, reaching a growth index 2012/2008 = 105.21. The equity in the industry also increased and reached an index value of 104.62. Long-term liabilities in the observed period dropped signifi-

cantly. The company X achieved 2012/2008 index value of 57.49 within the construction industry's of 62.06 as shown in Table 1. Short-term liabilities of the company X in the observed period remained almost unchanged since the index value of 100.69. Short-term liabilities in industry were successfully reduced and thus achieved index value of 84.87. The company X has increased volume of short-term financial liabilities which mainly consist of financial liabilities to banks (Žerdin, 2015).

Comparing the index 2012/2008 we conclude there are big differences in index of the construction company X and construction industry, especially in short-term assets and short term liabilities. Among short-term assets there are big differences in cash and operating liabilities. The internal auditor should monitor the biggest declines in each part of assets and in long term liabilities in the company X and to set the control steps of the values for preventing frauds.

### 3.2.2. Statistical research of construction company assets

In statistical research we want to verify the hypothesis that the volume of total assets in companies within the construction industry significantly increased in the period 2008 to 2012. It is very difficult to claim that the company or the industry is recovering, if the volume of total assets in balance sheet is decreasing. In the sample, we have 54 companies that employed 10 or more workers in 2012. In parallel to these figures for those companies we found further information of their total assets in 2008.

We have identified the null hypothesis  $H_0$  and the alternative hypothesis  $H_1$ . In an alternative hypothesis we wanted to check whether in the construction industry, despite the economic crisis from 2008 to 2012, the volume of total assets increased. Because in the sample chosen in 2008, the average value of company total assets is € 1,283,988, we have identified the following null hypothesis and the alternative hypothesis:

$$H_0: M \leq 1.283.988 \text{ €}$$

$$H_1: M > 1.283.988 \text{ €}$$

In the null hypothesis it was assumed that the company X, on average, in 2008 had the volume of total assets equal to or less than € 1,283,988 ( $H_0: M \leq 1283988$ ). We used the following variables: »SR 2008 – the volume of total assets in 2008« and »Sred 2012 – the volume of total assets in 2012«.

However, since the goal of every company is to expand volume of total assets and it is also an indicator of the performance of companies or industry, in the alternative assumption we expected that in 2012 volume of total assets in construction industry was increased, and therefore place the following hypothesis ( $H_1: M > 1,283.988$ ). If we can confirm that, this could mean the recovery of the construction industry. Thus, basing on the selected sample we can confirm or reject the hypothesis of recovery of industry.

With the analysis of arithmetic mean of the total assets of Slovenian companies from the construction industry, which had 10 or more employees in 2012, we found that the volume of total assets, in the years observed, is on the rise on average.

However, with the statistical method of analysis t-test of equality of mean (One-Sample Statistics) in Figure 1, calculated with program SPSS, based on the selected sample, we cannot reject the null hypothesis  $H_0: M \leq 1283988$  with sufficient accuracy. Based on the results of the analysis of the arithmetic mean of total assets in 2012 we get in case of a bilateral test value: Sig (2-tailed) = 0.871.

In our case we have to use a one-sided test, therefore the exact level of risk is only half the precise degree of risk involved in case of a bilateral test: Sig (one-tailed) = 0.436. But despite the one-sided test, we cannot reject the null hypothesis because the risk level is still higher than 0.05. Therefore, we accept the null hypothesis. This means that an average Slovenian company in the construction industry in 2012 achieved the same volume of total assets as in 2008 or less.

The same is confirmed by the value of t-statistics, since the lower threshold  $t_{2012} = 0.164$ . Because it does not fall in the critical area of students' distribution, we must accept the null hypothesis and the conclusion that Slovenian companies in 2012 had in average just the same amount of total assets as it accounted in 2008.

So our analysis in this segment does not support the argument that the economy within the construction industry is recovering so that it could be made with sufficient accuracy demonstrated and confirmed.

In any case, we must, by feeding the ratings, be aware of the limitations of our sample, because the results of the analysis is relating to the companies in the industry that are employed in Slovenia in 2012, at least 10 workers. The sample upon

which we carried out the analysis, it is fairly small and standard error is quite high.

T-Test

[DataSet1]

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
SR 2008	54	1283988,17	4133551,095	562505,056
Sred2012	54	1367290,00	3738854,471	508793,649

One-Sample Test						
	Test Value = 1283988					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
SR 2008	,000	53	1,000	,167	-1128242,10	1128242,43
Sred2012	,164	53	,871	83302,000	-937208,82	1103812,82

Figure 1 The values of arithmetic mean of the total assets Source: Žerdin, 2015

Figure 2 shows the distribution of total assets of companies from a statistical sample. It is evident from the figure that the distribution is not completely normal, but it is closer to, and such analysis is suitable for the chosen pattern.

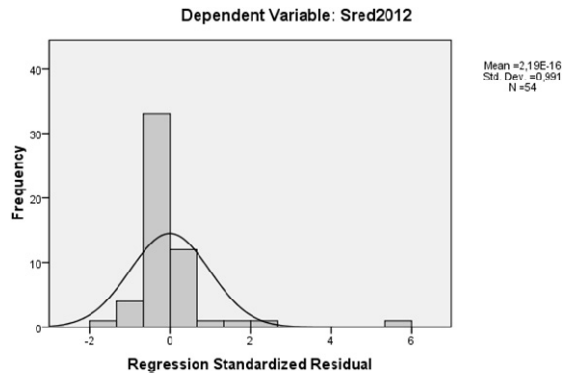


Figure 2 The distribution value of total assets in 2012 Source: Žerdin, 2015

Summarizing all the above analysis, despite the suitability of the selected sample, as evidenced in Figures 2, and the data in Figure 1 with the analysis of arithmetic mean of the total assets in construction industry we cannot confirm the hypothesis that the volume of total assets in construction industry increases (Žerdin, 2015).

The volume of assets is not yet growing at such a scale that it would be able to confirm with sufficient accuracy, so we cannot talk about recovery within the analyzed industry. Companies within the specified industry in 2012 achieved on average only equal to or less than volume of total assets in 2008 (Žerdin, 2015).

If the construction industry was not recovering from the beginning of financial crisis this is not

good news for the company X. Data in assets should be carefully monitored by the internal auditor. The internal auditor should monitor the reliability of data in assets and set up the steps to prevent from frauds.

The internal control system comprises a system of procedures and methods with the objective to assure compliance with the principles of legality, transparency, efficiency, effectiveness and economy. The financial control of data verifies the regularity of accounting data and the correction of found irregularities as well as the inventory of assets and liabilities. This means monitoring of bookkeeping documents, keeping subsidiary book of account, analytical records and general ledgers as well as the transmission of accounting data to outside users.

## Conclusion

The management of the company X should set internal controls in organisation to prevent frauds in accounting statements. After statistical analysis of total assets in industry we found that the volume of total assets does not increase on such a scale that it would be able to confirm with sufficient accuracy, so we cannot talk about recovery of the construction company X. Limitation of research represents the number of construction companies with final construction work in a sample of companies.

We recommend to management of the construction company X to introduce an internal auditing and set up following organizational internal controls for preventing the frauds in accounting statements:

- to introduce into responsibilities of employees in accounting or finance, which must be recorded in the internal acts,
- to initiate into responsibilities of employees in accounting or finance, which should be clearly written and granted,
- to introduce IT control in accounting statements,
- to initiate independent monitoring of accounting statements,
- to introduce the reporting of deviations of planned and realized data of accounting statements,
- to initiate cross-checks in IT system, etc.

Aiming to reduce frauds in the accounting system, active role of the internal auditor is recommended for the support of management in identifying and assessing the risks of frauds. The inter-

nal auditor has to be helpful to check, independently and impartially, whether the internal risk control of frauds operates. **SM**

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#### ✉ Correspondence

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**Tatjana Horvat**

Faculty of Management  
Cankarjeva 5, p.p. 761, SI-6101, Koper, Slovenia  
E-mail: [tatjana.horvat@fm-kp.si](mailto:tatjana.horvat@fm-kp.si)

# Brand Valuation and Marketing Assets Assessment – Theoretical Background vs. Contemporary Managerial Issues

**Snežana Mojsovska Salamovska**

University of “St. Kliment Ohridski”, Faculty of Economics, Prilep, Macedonia

**Marinela Todorovska**

University of “St. Kliment Ohridski”, Faculty of Economics, Prilep, Macedonia

## Abstract

This scientific paper aims to elaborate the nature of relationship between marketing assets and marketing equity, especially brand equity, and the materialization of their effects as one of greatest managerial challenges in a process of marketing performance assessment. Theoretical elaboration and research findings serve as evidence that there is an increasing trend of brand valuation and measuring the brand equity and marketing assets worldwide, but incorporating the value of brand equity and/or marketing equity in formal financial statements continues to be one of the greatest challenges for companies worldwide, especially if observed from a standpoint of financial and accounting specialists.

This paper will focus both on theoretical and managerial issues related to the brand valuation and marketing assets assessment, especially brand equity assessment and formal evidence in companies. The results of a study, conducted on a sample of Macedonian companies will be presented as well, in order to support the theoretical elaborations with recent research data, and to draw conclusions. How applicable is it, what are the world's best practices and does the overall external marketing and managerial environment in Macedonia offer significant preconditions for implementation of such a sophisticated managerial concept in practice?

## Keywords

Brand valuation, marketing assets, brand equity.

## Introduction

In marketing theory, the term “marketing assets” is in direct correlation with marketing equity, which perfectly reflects the essential difference between sales and marketing concepts. The marketing concepts' ultimate goal is to evoke immediate purchasing of the product/service, aiming to contribute to revenues increase in the income statement. Marketing concept is oriented towards investment of resources in a certain period of time, but the sales effects are not expected immediately, but a certain period of time is allowed. According to the eminent British author Tim Ambler (Ambler, 2003), one of the greatest challenges in the process of marketing performance assessment is that evaluation and assessment is oriented towards instantly visible effects assess-

ment, but, unfortunately, methods for assessment of latent effects of marketing investments (effects before sales) are not advanced to the level required, which leads to many confusions related to marketing activities, especially marketing communications activities.

The trend of measuring the brand equity, its valuation and formal inclusion in company's financial statements started in 1980's in the USA, and nowadays it is an increasingly important trend worldwide. (Salinas, 2009) Normally, the market prices of companies that are subject of acquisition, merger, re-branding etc. are significantly higher than the actual figures in the financial and accounting statements in the companies. Goodwill, as a synonym for intangible assets of companies, covers a whole palette of intangible assets,











such as brands, royalties, patents, know-how, distribution contracts, customer loyalties etc. The assets of companies nowadays are increasingly represented by the amount of intangible assets that a company possesses, and the price-earnings ratios are significantly higher, as a result of formal inclusion of intangible assets, including the brand value in the formal financial statements. (Contractor, 2001)

Existence of strong brands creates added value for companies in the real sense of the word. Despite the traditional value creation concepts considering that only tangible assets create value for companies, in contemporary environment the most important type of capital are companies' brands, intangible and immaterial, and in above mentioned context of acquisitions, even companies that face losses are capable of attaining high price-earning ratios, as a result of famous and well known brands they possess, and a good reputation of their brands, which is purely intangible. The brand value is created independently from the company's net value, and it is possible to be "hidden" in the unfavorable financial performance of that company (Kapferer, 2007).

In accounting and finance, goodwill represents the difference between the price paid, and the accounting value of that company. (Salamovska Mojsovska & Vitanova, 2011) This difference is caused as a result of a *psychological goodwill*, i.e. favorable attitudes and assumptions of consumers, customers, distributors, and all other members of the distribution channels and value channels. And thus, the financial analysis and a marketing analysis are interrelated and interdependent (Kapferer, 2007). Accounting goodwill represents the monetary value of the psychological goodwill that is created by the brand over time, as well as creating the brand reputation. The brand itself is treated as a company's asset, because its economic effects are significantly higher than the effects of product purchasing could indicate. The strong brand is a generator of profitability and growth of company, and a goodwill creator, so brand valuation studies are conducted with a purpose of improving the brand management, and to design and implement effective branding strategies.

The following picture represents the most valuable brands for 2015 and their position compared to 2014. The first five brands kept their positions and in the meantime some brands strengthened their positions and some are on the downfall and should take immediate actions in order to stay on the top. But actions depend on information and

the lack of information and tools for brand valuation and assessment could make a difference between success and destruction.

Rank			Logo	Name	Country	Brand Value (USD \$ Millions)	
	2015	2014				2015	2014
1	1	1		Apple	USA	128,303	104,680
2	2	2		Samsung Group	KOR	81,716	78,752
3	3	3		Google	USA	76,683	68,620
4	4	4		Microsoft	USA	67,060	62,783
5	5	5		Verizon	USA	59,843	53,466
6	7	7		AT&T	USA	58,820	45,410
7	8	8		Amazon.com	USA	56,124	45,147
8	6	6		GE	USA	48,019	52,533
9	13	13		China Mobile	CHN	47,916	31,845
10	9	9		Walmart	USA	56,705	44,779

**Picture 1** The most valuable brands of 2015  
Source: BrandFinance, 2015

The brand equity asset comprises various market segments' memories of the brand. The most important segments are usually the end users, the immediate trade buyers (or franchisees or branch managers in retail) and the employees. To appraise brand equity, the executive committee first has to decide the relative importance of each segment and then identify the brand metrics, or key indicators, relative to competition, for each segment that matters. A metric, for example, is the percent of customers who intend to buy the brand in the next month. A company with only one brand, like McDonalds, has a simpler job than Unilever. Aggregating metrics across brands and markets and segments (BMS) loses too much detail. The trick is to single out the brand-market-segments that account for most shareholder value and appraise those. Appraisal probably needs between 10 and 25 metrics per BMS, some financial (sales, marketing investment and profit) and some non-financial measures from the marketplace (e.g. relative satisfaction and perceived quality). (Ambler, 2000) According to Cravens and Guilding (2000), market orientation is positively correlated with profit performance and these companies are more likely to conduct brand valuations.

The measurement of brand equity in organizations is not an activity that is an ultimate goal per se, but its goal is to contribute towards improving the quality of decision making processes of higher managerial levels. In larger companies with formalized planning systems, the frequency of measurements is determined by the cycles of planning and submitting reports. The basic principle in marketing decision making is that not only the profit, but also brand equity as a category must be taken into consideration. Planning cycles could be



a major barrier in this context, due to the fact that the measurement and assessment of brand equity is an extremely sensitive issue, and it could not be conducted very frequently, but it is very risky if conducted rarely. The vast majority of companies conduct measurement in a time interval shorter than a year, but longer than three months. Optimum period for measurement and assessment of brand equity is 6 months. In smaller companies, that have no developed systems of planning, the marketing performance audit and brand equity assessment are conducted annually.

## Methodology

This paper is divided into two parts: literature analysis of the modern tools applied for measuring brand equity and marketing assets and a research on a sample of 50 companies of the Republic of Macedonia.

The goal of the literature analysis of the modern tools is to clarify some of the widely used tools, to point out that some of them are simple and applicable even for small and medium sized companies. The goal of the research that was conducted with a structure questionnaire is to give a better understanding of the current situation in the field of brand valuation and brand analysis in Macedonian companies, to identify their marketing approach in terms of adequate position of the marketing sector in the organizational structure and adequate personnel that performs the marketing activities, the frequency of measurement and the types of measures they use. Also the companies of the sample responded about their familiarity and application of the modern tools for brand assessment and brand measurement and their openness for further collaboration with the academic community in this field in order to develop new tools that should be adequate to their market position and resources.

## 1. Modern tools for measuring brand equity and marketing assets

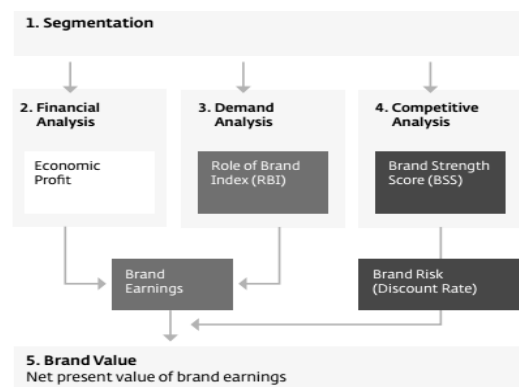
In practice there are various tools that are used to measure brand equity and in the following part we will make a review of the most influential methodologies that are widely used.

### 1.1. Interbrand's brand valuation methodology

The pioneer in brand valuation is Interbrand and there are three key components in all of their valuations: an analysis of the financial perform-

ance of the branded products or services, of the role the brand plays in the purchase decision, and of the competitive strength of the brand. (Davis, 2010) These are preceded by a decision on segmentation and at the end of the process are brought together to enable the financial value of the brand to be calculated. (Rocha, 2000)

- Segmentation – segments are typically defined by geography, business unit, product, service or customer group. Segmentation is important because a robust valuation requires a separate analysis of the individual parts (or segments) of a business to ensure that differences between those segments in terms of the three key components of the brand valuation (financial performance, Role of Brand and Brand Strength) can be taken into consideration.
- Financial Analysis – it measures the overall financial return to an organization's investors, or its 'economic profit.' Economic profit is the after-tax operating profit of the brand minus a charge for the capital used to generate the brand's revenues and margins. A brand can only exist and, therefore, create value, if it has a platform on which to do so. Depending on the brand, this platform may include, for example, manufacturing facilities, distribution channels, and working capital.



**Picture 2** Interbrand's brand valuation methodology  
Source: Rocha, 2000, p. 2

- Role of Brand – it measures the portion of the purchase decision that is attributable to the brand, relative to other factors (for example, purchase drivers like price, convenience, or product features). The Role of Brand Index ('RBI') quantifies this as a percentage. RBI findings are cross-checked against historical roles of brand for compa-

nies in the same industry. Finally, RBI is multiplied by the economic profit of the branded products or services to determine the earnings attributable to the brand (“brand earnings”) that contribute to the valuation total.

- Brand strength – measures the ability of the brand to create loyalty and, therefore, to keep generating demand and profit into the future. Brand Strength is scored on a 0-100 scale, based on an evaluation across ten key factors that Interbrand believes make a strong brand. Performance on these factors is judged relative to other brands in the industry and relative to other world-class brands.
- Brand value – the brand-specific discount rate is used to discount brand earnings back to a present value, reflecting the likelihood that the brand will be able to withstand challenges and deliver the expected earnings into the future. This is equal to brand value.

## 1.2. Brand Asset Valuator

Young and Rubicam’s **Brand Asset Valuator** model is also a widely applied approach and it was originally created twenty years ago by top academics and practitioners, and in the years since no other model of brand development and valuation has BAV’s ability to show direct and indirect impacts of brands on business metrics like pricing, loyalty and P/E ratios. BAV directly measures brand contribution to firm price and financial return.

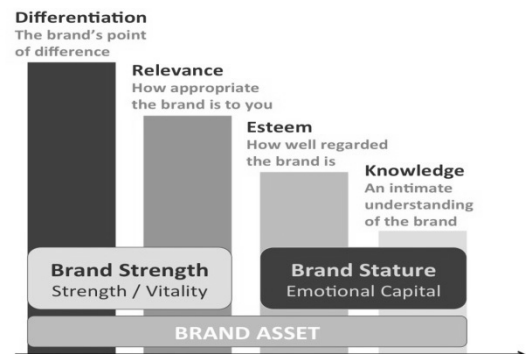
The most valuable asset of this tool is its database. In the two decades since BAV was founded, they have collected seventy-eight metrics on 50,000 brands in fifty-one countries. Annual studies are conducted in seventeen countries comprising 78% of global GDP. In the U.S. alone, they interview 17,000 people each quarter, to collect data on more than 3,500 brands. This database allows them to continually reconfirm and evolve the model itself, as well as provide deep insights to brands around the world – where they currently stand, how they perform compared to competitors, and the ways they can follow other icon brands to positions of greater value.

Brand Asset Valuator demonstrates that brands are built in a very specific progression of four consumer perceptions: Differentiation, Relevance, Esteem and Knowledge. (Franzen & Moriarty, 2009). More than 350,000 consumer interviews

conducted across the globe, measuring more than 55 different consumer perceptions with regard to over 20,000 brands, have shown these four measures — the Four Pillars of Brand Asset Valuator — to be consistently linked to a brand’s ability to deliver revenue and profit for its owner — no matter the category, no matter the country, no matter the age of the brand. These Pillars measure a brand’s strength and stature — its value as an asset capable of creating wealth.

Differentiation is critical to brand success. BAV illustrates clearly that differentiation is critical in the successful development and maintenance of a brand. The Differentiation metric has three components: Different, Unique and Distinctive. Different captures the ability of an offering to stand out from its competition. Difference can either be positive or negative, liked or disliked. Uniqueness tends to reflect a brand’s essence, beliefs, and personality. Uniqueness is highly correlated to a brand’s originality and authenticity. Distinctiveness is about a brand’s prestige and its pricing power. Distinctiveness captures the brand’s ability to command a premium price.

The second pillar in brand development is Relevance. If a brand is not relevant, or personally appropriate to consumers, it is not going to attract or retain them. Relevance would seem to come first in a brand’s progression; if it’s not relevant, why would consumers bother with it in the first place? However, BAV shows that Differentiation is what catches the eye – if a brand doesn’t stand out, you can’t judge its Relevance. Without Differentiation, a brand just gets lost in the crowd. But once Differentiation has been achieved, Relevance is the source of a brand’s staying power.



**Picture 3** Brand Asset Valuator  
Source: Young & Rubicam, 2003, p. 3

The third key measure identified by Brand Asset Valuator is Esteem — the extent to which consumers like a brand and hold it in high regard.

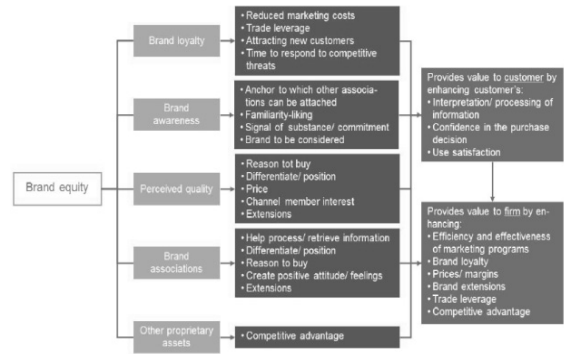
Esteem relates to how well a brand fulfils its implied or overtly stated consumer promise. It does not occur without Differentiation and Relevance, but it can outlive those by many years. Brands that show high Esteem even after losing ground on Differentiation and Relevance. Esteem is influenced by two factors: perceptions of Quality and Popularity.

If a brand has established its Relevant Differentiation and consumers come to hold it in high Esteem, brand Knowledge will follow. High Knowledge means consumers understand and have internalized what the brand stands for. High Knowledge cannot be attained only by higher levels of media support spending. It has to be achieved, and it generally takes time. Knowledge is the end result of all of the marketing and communications efforts and experiences consumers have had with a brand.

## 2. Aaker's Brand Equity Model

Another model that is widely used to measure the brand equity is the model developed by David Aaker. Aaker's Brand Equity Model contains the five following brand equity components (Aaker, 1991):

1. Brand loyalty – that shows the extent to which people are loyal to a brand and it is expressed in the following factors:
  - Reduced marketing costs (keeping loyal customers is cheaper than attracting new)
  - Trade leverage (loyal customers represent a stable source of revenue for the distributive trade)
  - Attracting new customers (current customers can help boost name awareness and bring new customers)
  - Time to respond to competitive threats (loyal customers that are not quick to switch brands give a company more time to respond to competitive threats).
2. Brand awareness – it shows the extent to which a brand is known among the public, which can be measured using these parameters: anchor to which associations can be attached, familiarity and liking, signal of substance/commitment to a brand and brand to be considered during the purchasing process.



**Picture 4** Aaker's Brand Equity Model

Source: Aaker, 1991, p. 1

3. Perceived quality – it demonstrates the extent to which a brand is considered to provide good quality products and it is measured through the following criteria:
  - The quality offered by the product/brand is a reason to buy it
  - Level of differentiation/position in relation to competing brands
  - Price
  - Availability in different sales channels (consumers have a higher quality perception of brands that are widely available)
  - The number of line/brand extensions (this shows to the consumer that the brand stands for a certain quality guarantee that is applicable on a wide scale)
4. Brand associations that can be assessed through the following indicators:
  - The extent to which a brand name is able to retrieve associations from the consumers brain
  - The extent to which associations contribute to brand differentiation in relation to the competition
  - The extent to which brand associations play a role in the buying process
  - The extent to which brand associations create positive attitude/feelings
  - The number of brand extensions in the market (the bigger is this number, the opportunity to add brand associations is higher)
5. Other proprietary assets: patents, intellectual property rights, relations with trade partners.

### 3. Application of brand valuation tools and methods in companies in republic of Macedonia

Recent studies of brands and brand equity have shown that Macedonian companies have developed and own strong brands and some of them are in the top ten brands of the Balkan region. Many of the companies possess very good brands that have high growth potential but they require investment in order to develop a stronger position and benefits from the brand. Like Ambler said measurement is necessary in order to have good management of the brand equity, a study on a sample of 50 companies of Republic of Macedonia was conducted with the purpose of identification of the challenges that these companies face in the brand valuation and measurement process. These challenges refer to organizational inadequacy and lack of marketing educated human resources that affect the measurement process, its frequency and accuracy.

As literature and data from the research show bigger companies (in terms of number of employees) have a marketing sector and therefore the person responsible for conducting marketing activities and appropriate measurement is a marketing manager.

A big issue in Macedonian companies is that in many of them especially the smaller ones and many of the medium sized companies the general manager is responsible for marketing and brand management but often he can't have the time or the knowledge to complete all the tasks. As the table below shows in those companies where the marketing manager is responsible for the measurement process the main focus is brand equity and brand performance, whereas in those companies where the general manager is responsible for the measurement process the company measures a big variety of measures as it was declared by the respondents but the application of the findings and the data credibility is questionable because it depends on the knowledge and time available for this process. Another problem that Macedonian companies face is that the person responsible for measurement is the finance manager or another person, usually the administrator, because these people at the end of the work must show the numbers and usually they must put everything in the statements and brands and brand equity are intangible assets that must be measured and assessed with appropriate measures and not randomly and in favor of the financial statements.

**Table 1** Type of measurement in the companies depending on the person responsible for the measurement process

Who is responsible for measuring?	What Do You Measure				Total
	brand equity and brand performance	customer satisfaction	customer lifetime value	other indicators	
Marketing manager	11	1	0	0	12
Financial manager	3	0	0	0	3
General manager	10	9	4	4	27
Other person	4	3	0	1	8
<b>Total</b>	<b>28</b>	<b>13</b>	<b>4</b>	<b>5</b>	<b>50</b>

Source: Authos

In order for the measurement to be effective it must be performed with appropriate frequency so that it can affect the decisions. As it was discussed above often in Macedonian companies the measurement process is performed along with the annual planning and this can be confirmed with the data from the research sample. That contains a big danger since these numbers must coincide with the financial metrics shown in the annual reports. In terms of brand equity measurement half of the companies that measure this metric do it in intervals that are smaller than six months that is considered as optimal for brand valuation and that shows that they show proactiveness towards their brands in order to take fast corrective measures if necessary.

**Table 2** Frequency of measurement depending on the types of metrics that are measured

What do you measure?	Frequency of measurement				Total
	once a month	every three months	every six months	once a year	
brand equity and brand performance	2	11	4	11	28
customer satisfaction	1	1	2	9	13
customer lifetime value	0	0	0	4	4
other indicators	0	0	1	4	5
<b>Total</b>	<b>3</b>	<b>12</b>	<b>7</b>	<b>28</b>	<b>50</b>

Source: Authos

In order to see whether there is a connection between the size of the company (in terms of number of employees and the frequency of measurement) a correlation analysis was performed on the data and the correlation coefficient is 0.697 which shows positive correlation which means the bigger the company is in terms of number of employees the measurement process is performed more frequently, which can enable better data findings application and better decision making in the area of brand management.

**Table 3** Correlation analysis between the size of the company and the frequency of measurement

Correlation			
		Size (nb employees)	Frequency of measurement
Size(NbEmployees)	Pearson Correlation	1	(,697)**
	Sig. (2-tailed)		,001
	N	50	50
Frequency of measurement	Pearson Correlation	(,697)**	1
	Sig. (2-tailed)	,001	
	N	50	50

Source: Authos

Additionally a correlation analysis was performed between the frequency of measurement and the presence of a marketing sector in the organizational structure of the company. The results show positive correlation of 0.792 which means that in companies where there is a marketing sector the probability of frequent measurement is high. Frequent measurement is necessary for fast actions on the market in terms of actions connected with the brands owned by the company and companies should work on providing the organizational space and position in the structure for a marketing sector that will solve all the issues in the marketing area.

**Table 4** Correlation analysis between the presence of a marketing sector and the frequency of measurement

		Marketing Sector	Frequency of measurement
Marketing Sector	Pearson Correlation	1	,792**
	Sig. (2-tailed)		,005
	N	50	50
Frequency of measurement	Pearson Correlation	,792**	1
	Sig. (2-tailed)	,005	
	N	50	50

Source: Authos

Also the companies were interviewed about the approach they use in the brand valuation process and most of them were familiar with the Aaker's methodology and they responded that they measured the metrics of it through quarterly questionnaires in different parts of the market. Also the number of companies that were familiar with Brand Asset Valuator was big and none of the respondents responded that they use or are familiar with Interbrand's methodology. Some of the companies responded that are in process of development of metrics that will enable them to have a better brand valuation process and all of them were open for collaboration with the academic community to work on this process.

## Conclusion

Brand valuation is an integral part of the brand management process and appropriate measurement processes have a crucial role in it. In literature and in practice there are various approaches and methodologies that can be applied in practice but most of the time companies in Republic of Macedonia that were surveyed for the purposes of this study lack knowledge and adequate work force to have better brand valuation and brand management processes. Most of them have certain familiarity with the modern tools applied in this area and use them partially mostly depending on their complexity and price for conduction, but they are open for further research and work in this field in collaboration with the academic community. With more dedication in this field some of the main problems such as lack of educated personnel and frequency of measurement of the brand metrics can be overcome so that brand valuation can become a more important area of the work of the company and a distinctive part of the annual planning process. The potential of this area is big since today's era is the era of brands and companies must invest time and resources in order to have a better understanding and management of this subject in their every day work. **SM**

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#### ✉ Correspondence

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##### **Snežana Mojsovska Salamovska**

Faculty of Economics

Marksova b.b., 7500, Prilep, Macedonia

E-mail: snezana.salamovska@uklo.edu.mk

# The Role of Human Resource Management in Development of Small and Medium-sized Enterprises

**Dušan Bobera**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

**Radmila Bjekić**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

## Abstract

People, the basic and most important element of organizational systems, today play a key role in the development of enterprises, not only in large, but also in small and medium-sized enterprises (SMEs). Most of the research in the field of human resource management (HRM) is focused on large companies, but some researchers recently started to explore and obtain significant results in the field of HRM in SMEs. The paper analyzes the activities of human resource management (staffing, training, and development) in SMEs and makes a theoretical basis for creating a model of the HRM, which would be applicable to these companies. The aim of the paper is to determine the role of the HRM in the development of SMEs. The paper presents a review of the existing works in this field and a theoretical analysis of the dominant attitudes about the importance of human resources management in SMEs. If we know that more than 90% of business activity in the European Union is carried out by SMEs and that these enterprises employ 2/3 of the total number of employees, it is obvious that they are the driving force of economic development, and that development of SMEs is very important. This should be based on the development and improvement of HRM practices in SMEs. The conclusions of the paper open new questions for research on possible solutions and models of HRM in SMEs.

## Keywords

Human resource management, small and medium enterprises, development.

## Introduction

It is estimated that 40% of entrepreneurs cease to exist in the first year of the establishment, while additional 80% of small and medium enterprises, which survive the first year, cease to exist in the next five years. This fact is very disturbing and encourages thinking and seeking answers to the problem. The results of numerous studies point to a number of problems, which stand out as the most important, and are a stumbling block to the most authors. According to a survey conducted in the US by Dunn and Bredstreet (Profit magazin, 2011), 96% of companies fail because of bad management. Jessie Hagen from the U.S. Bank determined the reasons for it. The reasons are as follows: cash flow problems (82%), starting with

the lack of cash (79%), lack of research and planning (78%), too high level of optimism about expected sales (73%), bad and undefined process of creating the price (77%), failure to realize the problem and not seeking help (70%), minimizing the importance of promotion (64%), lack of business experience (63%), inadequate level of delegation of responsibility (58%), recruiting the wrong people (56%), lack of understanding of the competition (55%) and reliance on one client (47%). Although the research was conducted in the United States, these causes can approve to be more dangerous when applied to Serbia. It can be concluded from the above mentioned that the choice of people who will work in the company, assignment of tasks, responsibilities and powers

have a significant impact on the operations of small and medium enterprises. Errors in these steps can be fatal for the survival of the company. On the other hand, choosing the right people, an adequate delegation which is primarily focused on respecting the principle of delegating tasks to be done well and in a defined period of time, an adequate system of motivation and rewarding could be the driving force behind the development of enterprises. This will even enable the company to cope with some of the above mentioned problems, overcome the crisis and continue on its path of development. Putting the right people in the right places is a task that must be fulfilled by the founder/owner/manager if he/she wants the company to develop into a healthy organization from the very establishment.

## 1. Characteristics of small and medium enterprises

Development of small and medium enterprises is the driving force of economic development. The basic characteristics of SMEs, when compared to large systems, are the following: greater vitality, greater flexibility, specialization, easier management, lower costs, faster innovation, aggressive entrepreneurship, local development and job creation which affect the reduction of unemployment (Ahmetagic, 2008, p. 191). Thanks to its flexibility, vitality, and propensity to undertake innovative and risky venture, and greater opportunities for specialization, SMEs are superior relative to large business systems, adapted to the demands of consumers and the dynamic changes in business conditions in the global market (Beraha, 2011, p. 316).

In addition to these characteristics, in the context of the contribution of SMEs to economic growth and development of the national economy, it is necessary to point out dimensions of SMEs (Hobohm, 2001, p. 4):

- Compared to large enterprises, SMEs are more labor intensive and affect the reduction of inequalities in income distribution. These companies play an important role in generating employment and, consequently, in poverty reduction;
- In developing countries, SMEs contribute to a more efficient allocation of resources by applying labor-intensive production methods, which provide a balance of greater availability of workforce and shortage of capital;

- SMEs supported the creation of the system of production capacity by absorbing productive resources at all levels in the economy and contributing to creating dynamic and resilient production systems in which small and large enterprises interrelated. Compared to large enterprises, SMEs are geographically more evenly allocated, thereby contributing to the development and diffusion of entrepreneurial ideas and skills and reducing economic performance between urban and rural areas.

**Table 1** Typology of enterprises according to the methodology of the European Union

Criteria	Micro	Small	Medium	Large
Average number of employees	< 10	10-50	50-250	> 250
Business income	< 700,000 €	700,000-8,800,000€	8,800,000-35,000,000 €	> 35,000,000 €
The average value of business assets	< 350,000 €	350,000 – 4,400,000€	4,400,000 – 17,500,000€	> 17,500,000 €

Source: Eurostat, 2016

The largest number of companies registered in the European Union are SMEs. As many as 99% of companies out of 200 million are small and medium in size. Out of these, 93% are the smallest, micro-enterprises with up to 10 employees. This is the main reason why SMEs are a major source of employment and an important source of wealth creation in the EU (Eurobarometer Team of the European Commission, 2007).

In the case of Serbia, SMEs constitute a significant part of economy, 99.8% of active companies, and 2/3 of employees in the non-financial sector.

**Table 2** The share of SMEs in total number of enterprises in the Republic of Serbia (%)

Size of enterprise	Number	Share (%)
Entrepreneurs	222152	70,3
Micro	81775	25,9
Small	9353	3,0
Medium	2132	0,7
<b>MSPP</b>	<b>315412</b>	<b>99,8</b>
Large	494	0,2
TOTAL	315906	100

Source: Chamber of Commerce, 2013

## 2. Human resource management in small and medium-sized enterprises

During the development of human resources management, HRM was primarily focused on applications in large organizations. Human resource management in SMEs is an insufficiently explored area, not only when it comes to scientific



research, but also in practice. It is widely accepted that the management of human resources is not essential for small and medium enterprises and is not cost-effective. Owners and managers of SMEs often ignore the activities, such as professional and objective selection, training and staff development, performance appraisal, etc. This approach to human resources management is wrong because the growing competition affects SMEs in a similar way as large companies and imposes the need for better understanding and management of all available resources, especially human resources. Effective process management of human resources is particularly important for SMEs which grow and strive to commercialize innovations. This indicates that the HRM activities such as, among other things, training and development are necessary for the survival and further development of the company. Many SMEs are fast-growing and have a problem finding and hiring quality people, which, according to numerous studies, is listed as one of the main reasons for the decline of SMEs. An adequate and efficient system of human resources management can significantly help owners and managers of small and medium-sized enterprises if human resources management is well-organized from the establishment of small and medium-sized enterprises, regardless of what the lower degree of formalization is in the micro and small enterprises, while the level of formalization in terms of the activities of recruitment, selection and training becomes higher as enterprises grows. This is shown in the conceptual framework of the HRM in small and medium enterprises, which is the result of research in this field.

Human resources management in small and medium-sized enterprises has gained importance in the recent decades. A small number of studies and researches have been devoted to this field. In the period from 1984 to 1999, only 17 articles on this topic were published in relevant and recognized journals (Heneman & Barkley, 1999). Only in the last two decades have serious researches been carried out and importance attached to human resources management in small and medium-sized enterprises.

The importance of human resources for the development of small and medium enterprises has been indicated by a number of authors. Among the available resources in organizations, people are the “glue” that holds and binds other resources (Mathis & Jackson, 2010). Bearing in mind that SMEs are labor intensive (Anheier & Seibel,

1987; Schmitz, 1995), a well-organized process of recruitment (Williamson, 2000, p. 27) and of selection, and later of training and human resource development are key to creating a good base of workforce that will meet the challenges the company faces on the path of its development, successfully solve all the “usual” problems, and prevent the emergence of “pathological” problems (Adizes, 2009). However, the research results indicate that very little attention is paid to these processes in practice. Most studies have shown that the recruitment and training are two of the three most important management problems faced by SMEs (Slavkovic, 2011, p. 3).

“Lifecycle of Enterprise” by Adizes was used for representation of the development of enterprise. On its development path, a company faces problems that can be rated as “usual” and “pathological”. By its nature, the usual problems are transient. They occur, give instruction and objective lesson and after that you are ready to continue. In contrast, pathological problems slow down the progress and development of the organization. Pathological problems hinder development and retain the enterprise in a certain stage of the life cycle. By their nature, pathological problems are stronger and more serious than the usual ones (Adizes, 2009). If there is a frivolous and disorganized approach to the recruitment and selection of human resources from the beginning, there is a significant risk of creating an inadequate personnel structure, which can be a hindrance to the development of enterprises and the transition to the next phase of the life cycle. Fast and hasty decisions regarding recruitment and selection of human resources and their thoughtless implementation can lead to fatal consequences for the functioning and survival of the company.

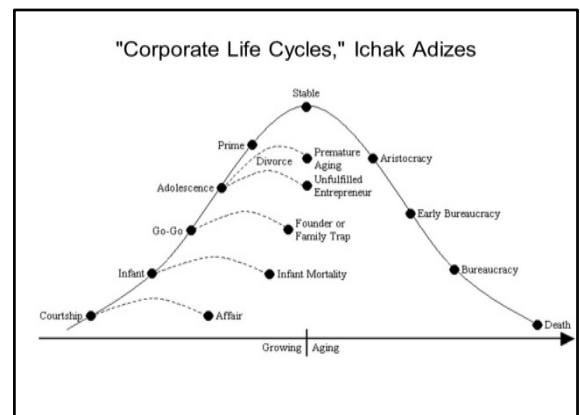


Figure 1 Adizes Corporate lifecycle  
Source: Adizes, 2009, p. 177

### 3. Overview of research practice of human resources management in SMEs

Enterprise development and staff development are directly related; in other words, companies cannot develop without the development of human resources (Poljasevic & Petkovic, 2013, p. 308). Before the process of training and development, it is necessary to carry out the process of recruitment and selection. Results of different researches conducted in SMEs around the world and in Serbia will be presented below. Based on these studies, conclusions about the practice of HRM in SMEs will be derived.

Researches regarding small enterprises are mainly focused on the individual practice of human resource management (Cassell, Nadin, Gray, & Clegg, 2002, p. 673). The majority of studies which had the level of formality of practice human resource management in SMEs as their subjects, came to the conclusion that the HRM in SMEs is an informal, intuitive and ad-hoc process (Mayson & Barrett, 2006, p. 449; Saridakis, Munoz Torres, & Johnstone, 2013, p. 445). Numerous studies support the aforementioned, one of which is the research that covered the activities of recruitment, selection, compensation, training, development and remuneration, which showed that the degree of formalization is lower in SMEs when compared to large enterprises (De Kok & Den Hartog, 2006, p. 450).

Several studies, whose subject of research was human resources management in small and medium-sized companies, show that SMEs prefer an informal approach to the staffing process; they choose methods of recruitment that are cheaper and can be controlled directly by the owners or managers of the companies (Poljasevic & Petkovic, 2013, p. 306). Surveys conducted in Australia and in the UK during 2002 came to conclusion that, when it comes to the recruitment process, the recommendations are the most common criterion, while the importance of other sources of recruitment such as employment agencies and advertisements in the media become more in use as companies grow. In other words, the level of formality of the process of recruitment in large enterprises is growing, while SMEs still predominantly use informal ways. When it comes to the selection process, the study results are very similar to the results of recruitment. SMEs use a cheaper and simpler method of selection (Mayson & Barrett, 2006; Kotey & Slade, 2005). The most

commonly used method of selection is an informal interview between the candidate and the owner or manager. Trial work as a method of selection is highly ranked.

The study, which was conducted on the sample of 148 SMEs in Serbia in 2011, whereby the methodology of the European Union was used for the classification of enterprises, which is shown in Table 1, confirms the management practices in small and medium-sized enterprises that have been explored in the previous research in the US, EU and UK. When it comes to process of recruiting in SMEs, the assumption regarding the use of ways which are conventional, cheap and under full control of the company is confirmed. The informal methods of recruitment are predominantly used, the most common of which are the recommendations, while advertisements in newspapers, advertisements on the Internet, services of specialized agencies in the field of human resources and services of the National Employment Service are used to a lesser extent. In the field of selection, it was found that for SMEs on the territory of the Republic of Serbia, the most important selection criterion is the positive attitude towards work, which may suggest a smaller degree of formalization of the selection process, because the assessment of candidates in relation to this criterion can be estimated by using unstructured oral interview and comes down to determining the level of motivation for obtaining that job. When it comes to the training of employees, SMEs in Serbia allocate significantly fewer funds for the training of employees when compared to large companies. It was determined that the average percentage of employees participating in some form of training in relation to the total number of employees is significantly lower in SMEs when compared to large enterprises. The reason is the lack of financial resources and lack of time for the delivery of training, which may be the result of bad organization of working time and lack of interest of responsible persons in investing money in the employee development (Slavković, 2011)

The results of research that was performed on the basis of the CRANET database and obtained in the period between 2008 and 2010 show that, generally, SMEs which possess a HR department, HR strategy and HR manager who is present on the board rated their performance at a higher level. In this study authors used data for SMEs, for four countries, Slovenia, Serbia, Hungary and Bulgaria, with total of 443 SMEs (Stangl Susnjar, Slavic, Berber, & Lekovic, 2016, p. 226). The

major finding of the research work is that SHRM is an important and indispensable tool for any organization's performance and for any organization (SMEs and large) that wants to gain competitive advantage (Muogbo, 2013).

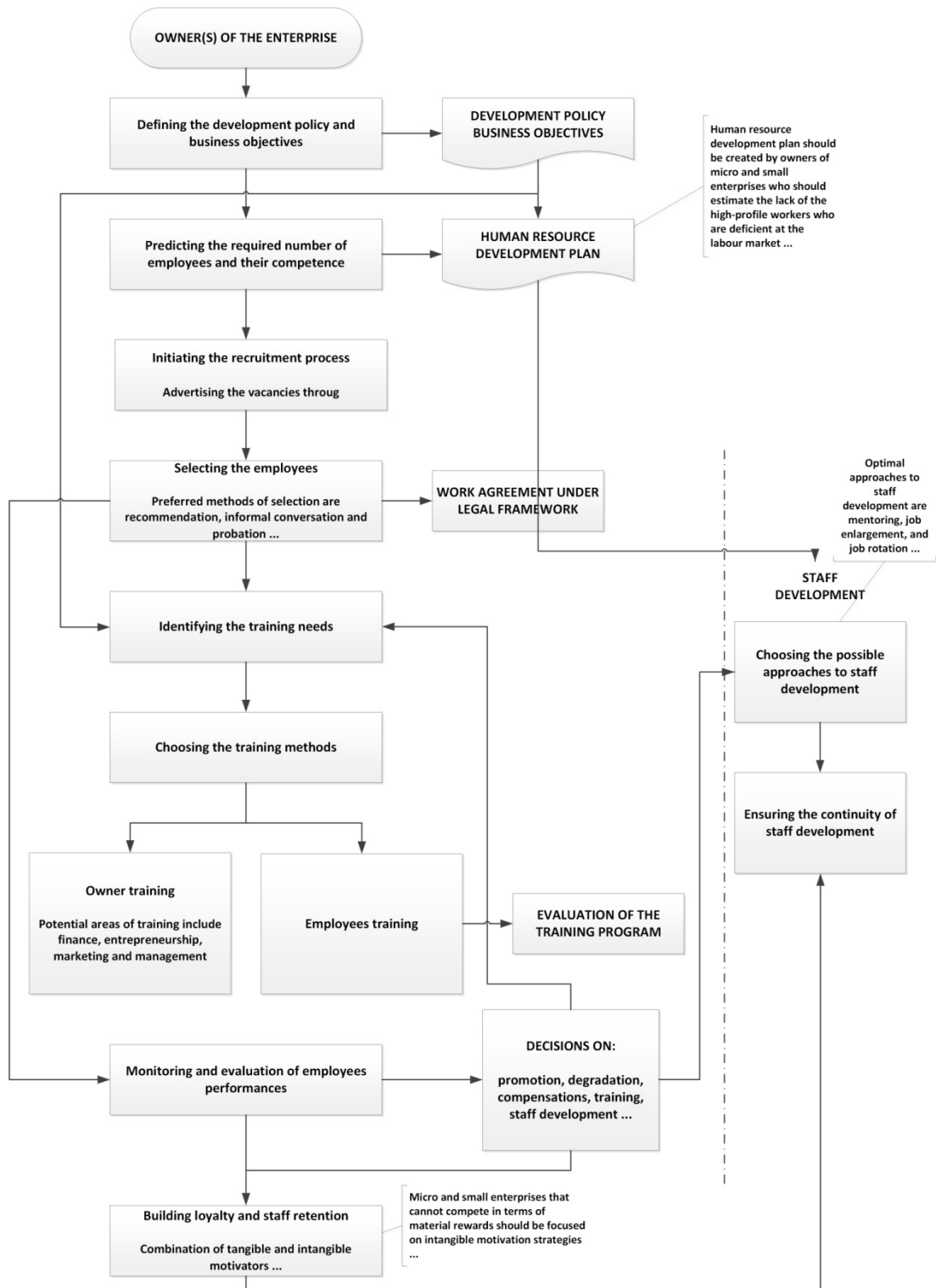
#### **4. The role of human resource management in the development of SMEs**

Starting from the importance of human resources for any organization, regardless of whether they are SMEs or large enterprises, human resource management is crucial for the survival and development of enterprises. Due to the lack of research and works on the subject of HRM in SMEs, there is a need to take more systematic and serious approaches to this area because human resources management should be a priority from the very beginning of the development of enterprises. Researches that have been conducted so far suggest the use of an informal approach to human resource management in SMEs. They also suggest that the degree of formality increases as the company grows and develops. It is expected that in the company's initial period of development, when the company has 10 employees, a manager or an owner of the company managing the employees mainly uses an informal approach in management. However, as the number of employees grows, especially when it exceeds 50, it is necessary to delegate this job to a professional manager, who has responsibilities and power to perform certain tasks regarding human resources. Starting with this period, it takes an expert for Human Resources (HR managers) to delegate tasks related to the recruitment, selection, training and development of employees. Starting with this period, it is necessary to delegate the tasks which are related to the recruitment, selection, training and development of the employees to an expert for Human Resources (HR manager). The expert, in accordance with the requirements during the development, should define the human resources department in which he/she will hire people who will perform only tasks related to the activities for which they are responsible (recruitment, selection, training and development of employees, etc). During the development of enterprise, the department for human resources will grow and develop, introduce a wider range of activities and tasks in accordance with a larger number of employees, and introduce new methods in accordance with the growing level of formalization. This is par-

ticularly important, as it is necessary to take care of building a healthy organization from the start of the company's development. Only people will have a crucial impact on the organization's health. The characteristics of "healthy" organizations are: the goals are widely accepted by the members, there is a strong and consistent will for achieving the goals, people daringly indicate problems and they are optimistic when it comes to solving the existing problems, there is a sense of teamwork and demarcation of responsibility, there is trust between the people and the organization, and cooperation is widespread (Ahmetagic & Harmat, 2009, p. 57). The condition for this is the very qualitative and quantitative harmonization of personnel structure that is provided only with an adequate and serious approach to the organization of the recruitment process and selection of employees, adequate staff training, not only in terms of obtaining skills and acquiring the ability to complete their tasks, but also in training regarding interpersonal relationships. Enterprise development requires a higher degree of formalization when it comes to human resources management. This can be achieved by forming the Department of Human Resources and delegating responsibility, authority and power from the owners/managers of companies, to the human resources manager who will be head of the departments where employees who are specifically responsible for the recruitment, selection, training, development, rewarding, and other activities will work. As evidence, conceptual framework for micro and small enterprises will be shown in the next section, as well as proposal for organizing the HRM in medium-sized enterprises, based on the existing research.

##### **4.1. The conceptual framework of human resources management in micro and small enterprises**

It is obvious from the aforementioned that the department of human resource management does not exist in the micro and small enterprises, and that the owner of the company makes all decisions in terms of defining business policy and within that policy, from the policy of development of human resources, to the process of recruitment, selection, training, performance appraisal, and development of staff. In the process of selection, as it has been repeatedly proven in practice, the dominant source of recruitment is advertising vacancies via personal contacts, which is one of the more informal ways of recruiting. When it comes



**Figure 2** The conceptual framework of human resources management in micro and small enterprises  
 Source: Poljasevic & Petkovic, 2013

to selection, recommendations, informal interviews, and probation work are most commonly used. Training can be observed from the aspect of owner training and staff training. Owner training

is mainly related to training in finances, entrepreneurship, management, and marketing. Significant attention should be paid to the process of motivation.

#### 4.2. The proposal for organization process of human resources management in the medium-sized enterprises

Unlike micro and small enterprises, medium-sized enterprises require a higher degree of formalization of the process of human resources management in accordance with the needs and problems faced by the company on its development path. As the company develops, there is a need for establishing a separate department in which people who deal with the activities of human resource management will be employed, in other words, the HRM department should be formed. Defining a plan of human resources, especially the development plan of human resources, should be the responsibility of the managers of human resources. Data related to the number of people and required qualifications for potential employees should be included in the plan. This would enable qualitative and quantitative harmonization of the structure of human resources, and represent a healthy base for further development of the company, because the disharmony often becomes a barrier to development. As for the fact that there is a need for a detailed plan, it can be concluded that, in these enterprises, there is no more space for an ad-hoc approach to human resource management activities. A special segment of HRM plan should relate to the development of human resources.

The process of recruitment starts by forming an adequate recruitment commission, by adopting the decision which is related to filling vacant positions and consideration of the situation on the labor market, respectively on the demands of the market. After the assessment, the next step is the search for potential candidates, and simultaneously, an estimation of possible sources of recruitment. Unlike the situation of the micro and small enterprises, medium-sized enterprises use multiple sources of recruitment. Today, advertisements in newspapers and on the Internet should have an important role. Even in medium-sized enterprises it is necessary that the process of recruitment is serious and well-organized, because it has a strong impact on the process of selection, respectively whether adequate candidates will be selected. Selection of inadequate candidates adversely affects the organization, climate, employee productivity, motivation and a number of other factors that can represent obstacles to the development of enterprise.

The process of human resources selection continues on to the recruitment process. These two

activities are interrelated and interdependent. The selection process should be such that it rejects the weak and inadequate candidates. Unlike micro and small enterprises, where informal interviews, recommendations, and probation period were dominant, here, in addition to the above mentioned, the emphasis is on the testing of candidates through various types of tests. But above all, a selection of received resumes must be made in the first phase, as well as the elimination of inappropriate candidates. An evident difference can already be seen in the approach to the process of recruitment and selection at a higher level of development of the company.

It has already been stated in the text that the development of the employees is one of the conditions for enterprise development, and without the development of the employees, and without paying attention to the training and development of the employees, the healthy development of enterprises will be questionable. Therefore, training and development are to be one of the crucial activities. First of all, it is necessary to identify the training needs within the organization. The next step is to analyze the possibilities of providing the training, as well as to analyze the employees who need training. Training methods that will be used will be selected on the basis of the employees' needs and opportunities of the organization. The third step is the implementation of the chosen method.

A greater degree of formality should be present when it comes to methods of performance evaluation and definition of performance. It is necessary to choose the appropriate methods of measuring performance and to provide feedback. The main reason for this is to motivate the employees.

Bearing in mind the fact that medium-sized enterprises have an organizational structure with hierarchical levels which are more numerous than in small businesses, which usually comes down to a simple organizational structure, it indicates that we now have more levels of management, and now there are real needs and the possibility for forming a special department that will be responsible for the activities of human resource management. However, the size of this department in relation to HRM departments in large enterprises is definitely smaller, as well as the number of employees in this department compared to large companies. While large companies can ensure that more people in the HRM department are engaged in the activities related only to recruitment, an-

other group of people deals with selection, etc., in medium-sized enterprises, one person or a small group of people are engaged in many different tasks in the HRM department, primarily due to cost saving, among other things. Another difference is that, in micro and small enterprises, all decisions related to human resource management are made by the owner of the company.

## Conclusion

The importance of the development of human resources for the enterprise has been repeatedly proved, and it is a fact that, without development of people, there is no development of enterprises. From the establishment of the enterprise, the owner must pay attention to the employment of adequate workforce. Awareness of the importance of the high quality human resources from the establishment can only drive enterprise development, because people are the most important resource of the organization and they are crucial to ensuring the success of the company and the achievement of the set goals. Their specificity puts them in focus in relation to other resources of an organization. Human Resources have the power of self-renewal and development. Investing in human resources is more profitable than investing in any other resources, because there is no added value without human labor. All of this testifies to the fact that the attention should be placed, from the beginning, on creating an adequate structure of employees, qualitatively and quantitatively harmonized. Furthermore, the approach to human resources management should be serious from the establishment of the enterprises, including recruitment, selection, and employee motivation. In that way, all the problems that the company will face during its development will be solved more easily.

Based on the existing works and research results that have been published both in the world, and in Serbia, enterprise development increases the degree of formality of human resource management. In small companies, the dominant access is informal access to the activities of human resource management, which is shown in the work, while the degree of formalization is growing with the growth and development of the company. However, in terms of human resource management, when compared to large enterprises, which have a higher concentration of people and a greater concentration of financial resources, requirements and needs of SMEs are different, and the possibilities are smaller.

We should bear in mind that human resource management is becoming increasingly important and has a crucial role in the development of enterprise, especially in sector of small and medium-sized enterprises. However, there are not enough scientific papers in this area. It was not until the last few decades, both in science and in practice, that significant results occurred in this field. Considering the increasingly significant role of SMEs in the development of the economy, and increased competition, it will be increasingly necessary to find a way to differentiate from the competition. Only people can be competitive strength of companies, on which the company will build and maintain its competitive advantage. Considerable attention should be given to the implementation of activities of the HRM, from the recruitment process, through selection, training, development, performance appraisal, to the motivation. The selection of the right people, taking care of their needs in terms of training, equitable performance appraisal, selection of appropriate motivators will contribute to the development of human resources, and they will be a healthy base that will enable and encourage the development of enterprises. These facts open up new possibilities for research and finding new ways to manage human resources at different stages of development of the company, which will be the subject of further research. **SM**

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#### ✉ Correspondence

**Dušan Bobera**

Faculty of Economics in Subotica  
 Segedinski put 9-11, 24000, Subotica, Serbia

E-mail: bobera@ef.uns.ac.rs

# The Impact of Social Media on Improving Business Efficiency

**Jovica Đurković**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

**Jelica Trninić**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

**Vuk Vuković**

University of Novi Sad, Faculty of Economics in Subotica, Subotica, Serbia

## Abstract

The exchange of information, experiences, novelties and knowledge has accompanied the human community from the earliest history until nowadays. This is expected to continue in the future as well. Oral communication and personal contact between people is recently being substituted by the Internet. Its technological explosion in the late 20th century is changing the world radically, resulting in a process of powerful migration from the real to the virtual in all segments of people's life and work. The modern world nowadays cannot function without the Internet. It has become a dominant medium and the most significant communication channel.

Internet technology is the basis for the emergence of social media, which provide a broad spectrum of opportunities for contemporary communication methods, and the exchange of data, documents, opinions, views, ideas and multimedia contents. Rapidly, in real time, reliably, simply, relatively safely and at a reasonable price. Modern social media are not only virtual communication communities, but rather an increasingly powerful tool for influencing the business efficiency of contemporary organizations.

In addition to the conceptual determination of basic terminological categories, the authors of this paper consider: the types of social media and their characteristics, levels and phases of use of social media for business purposes, rules of optimizing social media, and the impact of social media on improving business efficiency. Bearing in mind that social media are nowadays used for marketing campaigns and activities to a significant extent, the paper places particular focus on the metrics used for measuring the effects of these activities.

## Keywords

Social media, optimization of social media, metrics of social media, social media and business efficiency.

## Introduction

Sociologists and psychologists claim that man cannot remain on the planet as an isolated unit. They have the need to join, connect, communicate and live in community with others. 10,000 years ago the Sumerians wrote on clay plates, the Ancient Egyptians on papyrus, the Romans on animal skins. In Medieval Europe, texts were written on paper. Modern communication is predominantly based on the use of mobile telephones, the internet and social media. It is estimated that there are about 3.5 billion mobile phone users, over 3 billion Internet users and almost 2.5 billion users of digital social media (Trninić & Đurković, 2016). There is an estimate that over a hundred

billion messages are sent worldwide on a daily basis (Trninić & Đurković, 2016). The future of human civilization will be based on these technologies. These numbers are imposing and the business community cannot ignore it.

Social media refer to virtual communities within which people nowadays exchange information, opinions, attitudes and experience by use of information and communication technologies based on internet applications.

Owing to the development of communication systems, computer networks and the explosion of the Internet, the means of communications have changed completely over the past decade. Traditional media such as newspapers, radio and TV



are increasingly losing the dominant importance in the information system. Let us consider what the difference between social and traditional media is.

- **Ownership.** Traditional media are mostly privately or publically owned. Ownership of social media is similar to the ownership of the internet. The co-owners of social media are its users.
- **Organization.** The traditional media have a centralized business model (headquarters, business entity, board of editors, employees etc.). Social media are decentralized by organization because their stakeholders, users, and visitors are dispersed worldwide, wherever the internet is present. In addition, information in traditional media is broadcast by professional organizations, whereas in social media, information can also be broadcast by an individual.
- **Timeliness.** In some traditional media, information is broadcast with a delay which can span as much as several days. Information on an event that happened is published on social media in real time.
- **Frequency.** Broadcasting new information on social networks is continuous and frequent. In traditional media, it is sequential and permanent. Actually, contents broadcast through social media in most cases cannot be changed afterwards, whereas it is possible in the case of social media.
- **Quality.** The quality in traditional media is uniform; it does not vary and is at a somewhat higher level than in social media. In social media, the quality of digital contents varies from high to very low.
- **Dialogue.** Traditional media are mostly unilateral in the transfer of information and the user has no opportunity to react in real time. Even if they do it, then it is with a smaller or greater time delay, when the information loses relevance. Social media offer the possibility of dialogue in real time, which makes them attractive, acceptable and more suitable for the communication process.
- **Previous knowledge.** Traditional media require professionals with completed competent school, trainings and specialization. Social media do not require a specialized skill. The users are actors with their existent abilities.

- **Price of information.** The price of information the user receives through social media is relatively low, definitely lower than traditional media. According to Pew Research's study in the USA, 60% adult Americans find out information from social networks, which is faster, more convenient and cost-effective than newspapers (Radenković, Despotović-Zrakić, Bogdanović, Barać & Labus, 2015).

Nowadays, media organizations use social media in addition to traditional in placing information. An empirical study shows that 59% of users use social media to keep in touch with relatives and friends, 49% to meet people, 47% to express their opinion, 20% for entertainment, and 17% for business purposes. Social media are expected to be used for business purposes (Giles, 2011).

Analyses show that, due to the vast number of users of social media, high speed of forwarding information, and low cost of advertising on the internet, an increasing number of companies organize marketing campaigns through social media.

Social media can be described through a framework comprising seven functional blocks (Radenković et al., 2015):

- **Identity.** Within this block, the user of social media is expected to enter their true personal data such as name, age, profession, place of residence, interests, etc.
- **Identity.** This block defines to which extent the users communicate. The most common objective of social media is to intensify communication between individuals and groups.
- **Sharing.** It is determined to which extent users exchange, distribute and accept the contents of other social media users.
- **Presence.** This block defines the possession of information on the presence of other users on the network and their availability.
- **Connections.** It is described to which extent the users are mutually connected.
- **Reputation.** Refers to the extent of trust existing between media users.
- **Groups.** Refers to the degree to which users can create communities and subgroups.

The presence and engagement of users of social media can be viewed through four phases (Radenković et al., 2015).

- Usage. The first phase in the participation of users on the network includes downloading, viewing, reading and listening to digital contents.
- Assessment. The second phase, within which the user sorts, filters, assesses and comments the downloaded contents.
- Creation. The third phase, within which the user independently creates digital contents.
- Cooperation. The last phase, in which the user cooperates with others and, through this cooperation, participates in creating and assessing the digital contents to be exchanged.

The significance of digital social media for contemporary business operation is attracting increasing attention of academic researchers in the areas of business informatics, marketing management, business performance management, but also of people from business community (Bastian & Zali, 2016).

Undoubtedly there are numerous advantages brought on by digital social media. But, let us briefly consider some disadvantages. The largest number of complaints refers to trust, privacy concerns, domination of influential creators, negative impact on self-confidence, increasing alienation (an increasingly present sociological phenomenon) impact on communication between the young, use of social media for promoting terrorism, racial discrimination and immorality.

*Trust.* Bearing in mind that the content on social media can be created by anyone without previous review, there is doubt and scepticism regarding those contents. The basis for such doubt includes contents published by malevolent social media users.

*Privacy.* Through social media, users communicate information from private life, the circle of their immediate or extended family, and business environment. This information can be gathered by third persons and misused in various ways, often criminal ones.

*Domination of influential creators.* There is an opinion that most users of social media are passive observers, and that the majority of contents is created by the same people. They can make a huge impact on the formation of public opinion.

*Negative influence of self-confidence.* It has been observed that people on social media present an unrealistic and idealized picture of their lives, not revealing problems present in every person's life. Such an unrealistic picture and unobjective

information often make a negative impact on friends, resulting in loss of confidence and depression.

*Alienation between people.* With the occurrence of social media, people, predominantly younger generation, have substituted real socialization with virtual. There is no personal contact, getting to know others, and immediate communication. Such practices result in numerous social, emotional and psychological consequences undermining the foundations of every social community.

*Influence on the change of language and grammar.* Virtualization and acceleration of life influences the acceleration of communication processes, emergence of slang and acronyms. So, for instance, in the English-speaking area, LOL is short for "Laugh Out Loud", BAE is acronym for "Before Anyone Else". It has been observed that the need for speedy communication, in addition to the use of abbreviations, tends to change the grammatically correct sentence structure, so that, for instance, it has been observed that the verb *are* tends to be omitted. Language and grammar are expected to change rapidly in the era of the internet and social media.

*Social media serving extremism.* Numerous extremist groups use social media for disseminating their ideas, recruiting adherents and securing material and financial prerequisites for their cause. In addition to this, social media are a contemporary means of spreading racial discrimination or immoral contents making a negative impact on the upbringing and maturing of young generation.

## 1. Types of social media

Social media can be divided into the following groups (Trninić & Đurković, 2016):

- Collaboration projects (Wikipedia);
- Blogs and microblogs (Twitter);
- Communities for content creation and sharing (YouTube);
- Social networks (Facebook, LinkedIn etc.);
- Virtual game worlds (World of Warcraft)
- Virtual social worlds (Second Life)
- Social bookmarking sites (Reddit);
- Aggregators (Really Simple Syndication – RSS).

We shall consider some of the above mentioned social media.

## 1.1. Social networks

One of the key web services of the Internet are social networks, a phenomenon of modern civilization undergoing revolutionary development. It is estimated that nowadays more than 2/3 of people using the Internet are on social networks (Trninić & Đurković, 2016).

Social networks are online communities using the internet to gather people of similar interest. They use the virtual environment to socialize, exchange information, knowledge, and impression. Thus, they influence one another forming individual, but also collective attitudes on products, events, politics, democracy, organization and individuals.

Basically, social networks can be classified into two basic categories (Trninić & Đurković, 2016):

1. Social networks not adhering to strict rules, intended to create connections between people, virtual socialization and social interaction. This network is used for exchanging multimedia contents, experiences and knowledge, and spreading new friendships.
2. Social networks of formal nature subject to defined rules. These rules are intended for e-business and used for finding new business partners, consolidating the credibility of organizations, employment, constituting professional communities, marketing campaigns, etc.

In practice, there is no clear-cut boundary between these categories of social networks, bearing in mind that their contents sometimes overlap.

The beginning of developing social networks is associated with the not so distant 1971, when the first e-mail was sent from one computer to another. The computers were physically located on the same desk, one next to another. Almost two decades later, the first social networking site, with modest possibilities, emerged under the name of Geocities. The same period saw the emergence of other social networks, the most popular of which were Live Journal, Asian Avenue, Black Planet, and others.

The beginning of the third millennium saw the sway of social networking, and it is especially worthy to mention the generally known **Facebook** network. Created at Harvard in 2004, this was the first network to gain the characteristic of global, as it gathers over a billion people of different pro-

files worldwide. The network was developed from the idea of its creator, Mark Zuckerberg, to enable students to communicate more easily. The network quickly established itself, accepted by a large number of Internet users, surpassing the university environment and becoming the largest social network. It provides different services: profiles, groups, events, fan pages, paid advertisements and chat. It covers a variety of contents, forms of connection and communication. It can be successfully used for business purposes, brand promotion and marketing activities. It has about 1.4 billion users, 350 of whom can be qualified as addicted, and 25% are indolent, because Facebook discloses their privacy. The largest number of users of this network is found in the USA, followed by Brazil and India. The smallest number of accounts is found in the Vatican – only 20 (Trninić & Đurković, 2016).

In Serbia, more than 85% of internet users are also Facebook users. Facebook is the owner of **Instagram** (about 100 million users), intended for storing photographs, and since 2013, publication of video footage up to 15 seconds long.

**Google+** is a social network bearing many similarities to Facebook. Some argue that it offers more advantages than Facebook.

**LinkedIn** social network is used exclusively for exchanging business and scientific information. The most common topics are career development, employment counselling, new projects, new undertakings, business negotiations and cooperation. Two new accounts (users) emerge every second.

**My Space** is a social network that emerged in 2003. A minor network with a small number of users, it thrived from 2005 to 2008, and became the most visited network. This period was followed by attrition in membership due to unwillingness to keep up with contemporary trends. At the time of emergence and prosperous affirmation in 2005, the media giant News Crop bought this portal for 580 million dollars, and in 2012 it was sold for only \$ 35 million (Trninić & Đurković, 2016).

In addition to the above mentioned social networks available to everyone, there are, without limitations, elite social networks. The key criterion for membership in these networks is wealth and global political influence. The links of these networks are not publically available. The elite private network TopCom was established in Davos and gathers 200 most powerful people of the world (Bill Gates, Dmitry Medvedev, Angela

Merkel, Al Gore, Bill Clinton, David Cameron, Queen Rania of Jordan, etc.). Chinese wealthy people have their own social network, P1. In addition to wealth, a new member of this network must have recommendations from at least five current members. The elite network Affluence does not charge for membership, but a new member must have a minimum of 3 million dollars on their bank account. A Small World is a network known by the fact that, before entering the club, the new member must present their list of contacts worldwide to the existing members. The Square network contains an offer of precious objects, and can be joined only by those who have a lot of money.

## 1.2. Community for creation and sharing of contents

**YouTube** and **Flickr** are used for sharing video footage and exchange of photographs. The users of this site upload, share, view and assess video content. According to the terms of use, only original contents can be uploaded. YouTube reserves the right to use, correct, amend and delete the uploaded contents. It is available to a large number of users in different languages. An average user of this network spends 15 minutes a day for viewing interesting video clips (Trninić & Đurković, 2016).

## 1.3. Collaboration projects

**Wikipedia** is the best known collaborative website. It is a digital encyclopaedia that emerged by the use of wiki tools. The user is given an opportunity to write, link and edit a HTML document. It must be borne in mind that, before publishing and making these contents visible in the encyclopaedia, they are approved (reviewed) by competent editors (Trninić & Đurković, 2016).

## 1.4. Blogs and microblogs

Blogs are online environments for publishing multimedia contents. In term of contents, they can be photo, video, or audio. Depending on the purpose, they can be personal, political or business-oriented. Business blogs are used for marketing campaigns, creating company image or product branding.

**Twitter** belongs in the category of microblogs. The service is popular and connects influential people, politicians, managers and business people. It is specific by the fact that the user is given to publish their blog in a brief, concise and clear

manner, using a maximum of 140 characters. 750 new tweets are published every second. Twitter is a microblogging service used for political and marketing campaigns, encouraging teamwork, gathering humanitarian aid, giving information about the jeopardized, political protests and public relationships (Trninić & Đurković, 2016).

## 1.5. Social booking sites

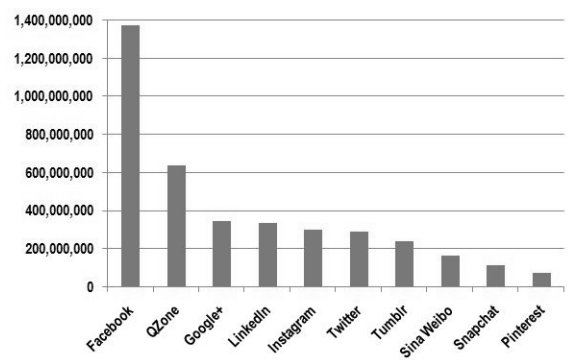
These are popular places for storing, classifying, sharing and searching links. The most popular one is **Pinterest**, launched in 2010. It is a virtual memo board. Memo boards are used for various purposes: for defining business strategies, decorating parks or houses, creating recipes and similar contents. Memo tables are suitable for your own creations, but you can also take a look at other people's boards, ideas and creations. This service aids in acquainting and cooperation between people who share the same hobbies, similar ideas, creations and design solutions. This site is dominated by women, as high as 97% (Trninić & Đurković, 2016).

## 1.6. Aggregators

Aggregators are websites gathering contents from other web sites and social networks. A user of this site does not need to visit other sites. They define the areas of interest, and the service itself gathers information from other sites and prepares them for reading by the user.

A frequently used site is Really Simple Syndication (RSS), providing a single place for reading current news without visiting numerous web pages. It offers the opportunity of personalising homepages (Trninić & Đurković, 2016).

Figure 1 graphically represents the number of users of popular social network based on data from source 2015.



**Figure 1** Number of users of social networks worldwide  
Source: Statistic Brain, 2015

There are other social media which have a smaller number of visitors, but should not be neglected. We shall mention some of them: (Flickr (about 65 million users), a service intended for sharing images; Vine (42 million users), a site for sharing video clips; Vkontakte (80 million users), a network spread in Russia, and similar to Facebook in terms of concept (Giles, 2011).

Table 1 shows the results of empirical research conducted in 2014, pointing to some interesting dimensions of using social media.

**Table 1** Results of empirical research conducted in 2014.

Social networks	Facebook	Twitter	Google+	LinkedIn
Estimated number of users	More than 1300 million	More than 300 million	More than 300 million	More than 300 million
Users' gender	40%-60%	40%-60%	60%-40%	55%-45%
Time spent on the network (monthly average)	405 min.	89 min.	30 min.	21 min.
Users' age from 18 to 54	82%	87%	84%	89%
Business orientation	B2C	B2C/B2B	B2C	B2B
Possibility for viral disseminating of information advertising	YES	YES	YES	YES
Possibility of advertising	YES	YES	NO	YES

Source: Čirić, Sedlak, Čirić & Ivanišević, 2014

Table 2 shows the classification of social media in terms of presence, social network type and self-presentation level.

**Table 2** Classification of social media

		Social presence / usage of media		
		Low	Medium	High
Self-presentation / self-disclosure	High	Blog	Social network (Facebook)	Virtual social world (i.e. another life)
	Low	Collaboration project (Wikipedia)	Community content (YouTube)	Virtual world of video games (World of Warcraft)

Source: Šidanin, 2012

## 2 . Social media and modern business operations

In addition to the use of social networks for virtual socialization between people and private exchange of information, today they are often used in the area of business, especially e-business. It is considered that an organization that has no web site might as well not exist, and the one that is not on social network is highly likely to be noticed in the digital business space. Social networks are used for business purposes in establishing contacts with customers and suppliers, promoting new products and services, branding products, acquiring loyal and new customers, and conducting marketing campaigns. Experiences so far show that companies use social network in communication with individual clients (B2C), whereas the B2B model is still in its infancy.

We shall briefly consider some experiences in applying social networks in business operations (Radenković et al., 2015).

Companies are offered a possibility to announce their requirement for labour on certain sites, and private persons can also look for jobs. The former and the latter can communicate and negotiate. Facebook and LinkedIn offer the possibility of recruiting workers for a certain job (e-recruitment). Within their profiles, network users enter data about themselves, completed education, practical skills, experience, references from the companies they worked with, and recommendations from their colleagues and friends.

Social networks are successfully used in companies' marketing activities. Unlike one-way marketing characteristic of campaigns and promotions on the radio, TV and newspapers, marketing on social networks offers the possibility for a new quality – two-way communication between the company and the client. Clients have the opportunity to use social networks to express their opinion on products or services. The gathered data is subjected to sentiment analysis, which includes the analysis of natural language, text analysis and computer linguistics. These opinions are very useful to companies for rapid response on the market and creating future business policies. Product branding is an important form of marketing activities. When it is conducted through social networks, the costs are much lower than when branding is done using classical methods.

A special form of marketing on social networks is viral marketing. The basis of this form of marketing is the concept that information announced on social networks about products or

services is transferred from one person to another the way a virus is spread. When a person on a social network gathers information about announced and presented values of products or services, they transmit this information, knowledge and impression to their friends, with whom they are connected through social media. This form of information dissemination is much more cost-effective than marketing campaigns through traditional means (flyers, newspapers, radio, TV, etc.).

When discussing marketing on social networks, it is important to mention product branding and building a brand community. Both marketing activities on social networks are cheaper and produce more convincing results than when they are conducted by classical instruments (Radenković et al., 2015).

What is important in the domain of marketing on social media is the issue of optimizing social media. This is a set of marketing methods creating the desired effect on social networks in a systematized way. Costs are either non-existent or negligible in relation to effects. Some rules for optimization of social media are cited (Radenković et al., 2015):

- defining contents that are easy to share and disseminate,
- increasing the number of links on the pages of social media and supporting incoming links,
- stimulating active and diligent users by rewarding,
- encouraging interaction,
- keeping pace with innovation.

The final objective of marketing campaigns and activities on social networks is to increase profit. To achieve that objective, marketing activities and campaigns are launched with the aim to include consumers into earlier stages of product design and development, to inform them about innovation, to let them express their opinion on products and services, etc. Appropriate metrics are used to establish or measure the effects of marketing activities on social networks. The most often used metrics are (Radenković et al., 2015):

- total number of visitors involved in the campaign,
- average number of visitors to web sites per day during the campaign,

- establishing how many discussions were led on social networks within the marketing campaign that were related to the company's operations,
- number of web site visitors who downloaded contents belonging to the marketing campaign,
- number of visitors who returned to the web site after the campaign.

In addition to the above, other metrics can be used, which are very useful. They identify the profit earned by marketing promotion, correlation between increased sales volume and internet advertising, total effects of advertising on web pages, consumers' response to the marketing campaign, etc.

Various software tools are used in realizing the metrics on social networks. We shall list only some of them: Buffer, Local Response, Google Analytics, Socialbakers Analytics etc.

We shall now deal briefly with the analysis of specific use of some social media in modern business operations.

### Facebook

Facebook offers the possibility for the interested parties to create a profile on which they will present their business. This possibility is extraordinary, especially for start-ups, for the effect is excellent, and costs almost non-existent. In addition, Facebook offers free advice on how to create a profile and how to achieve the highest effects of promotion and marketing campaign. Thus created profile has a shortcut to the entrepreneur's web site. We shall point to some advice offered by Facebook (Facebook, 2016):

- Share the created profile with your friends. This way, you will have a huge network of people informed about your business.
- Maintain your page regularly: innovate the contents, be creative and innovative, upload attractive pictures of your business and answer the asked questions. This will keep up your dialogue with people interested in your business.
- Facebook continuously monitors results of visits to your profile. Use those results, analyze them and create an active attitude to the conclusions you draw.

Facebook is the broadest platform for advertising anything: advertising a personal blog, small business, newly opened café or shop, for announcing sale or discount. This medium can be used to draw attention to yourself if you are a creative designer, architect, programmer or something similar.

### Instagram

Instagram is a platform visited by more than 75 million visitors daily (Trninić & Đurković, 2016). These are potential buyers of products and/or services. This social medium should be used to offer them photographs pleasing to the eye. Those photographs of products and services (clothes, footwear, jewellery, furniture, sports equipment, tourist services, insurance etc.) must be with original ideas that will draw the visitors' attention. Instagram is not suitable for serious contents such as education, scientific and business conferences, business advertising, etc.

Here is some practical advice for business use of Instagram (Instagram, 2016):

- Study which hashtags are used by your target customers;
- Make a list of 50-100 influencers for tags that are key;
- Extend the list of interested people;
- Monitor how people react to influencers' opinions;
- Build good relationships with influencers and potential customers. Thank, comment, answer question, like and be patient. Think long-term.

### Twitter

This medium is suitable for gathering information from buyers of a company's product and services. Twitter advises (Twitter, 2016):

- Define the target group for which your product or service is intended;
- Use hashtags skilfully to ask questions to potential buyers of your products or services;
- Analyse replies and make decisions that will enable you to attain the set business objectives.

### YouTube

Experience so far shows that good advertising on classical media has a strong influence on the buyers of products and services. The problem is that many do not have enough money to pay for an

advertisement that would be broadcast in prime-time slots. YouTube offers the possibility for the advertisement or video clip that was created to be seen by the whole world without costs. This medium offers the possibility of analysing based on which it is concluded who views the advertisement and who is interested in your products and services. What is especially interesting is the information on the visitors returning to your advertisement or video clip.

### Skype


As regards its character and purpose, this social medium cannot be used directly for marketing campaigns, but can be used for free communication between business people who are on distant destinations. Skype offers the possibility for organizing video conferences between business partners without them leaving their places work and environments where they live and work. This enables economizing in time and money, and the risks and efforts of travel are eliminated.

A number of experts in internet marketing warns that the technique of email marketing should not be abandoned too early, at least not for those who are not confident sailing in all the tumultuous waters of social media. Social media are nowadays successfully used in creating public opinion, taking, confirming or changing a positive opinion about an individual, organization or event.

The presence of organizations on social networks is unavoidable nowadays. An organisation that is not on social network is almost regarded as non-existent. Despite this, a study (Trninić & Đurković, 2016) shows that social networks are insufficiently used in business operations and marketing activities. The estimates are that such a situation will change soon. Out of 1709 CEOs from more than 40 countries worldwide, included in a survey, only 16% stated that their organization uses social networks for contacts with customers. This percentage is expected to grow to about 60% in a couple of years.

In addition to significant influence of social networks on economy, another convincing influence is to political trends and election results. This is proven by presidential elections in the USA and some other countries. In the wave of political revolutions on the African continent known as the Arab Spring, social networks played a decisive role in a brief time. At the time of writing this article, social networks are taking on an active role in the refugee crisis that has hit Europe.

## Conclusion

Communication between people is a key component of the human civilization. With the emergence of the internet and digital media, people are communicating in a new, virtual way. New forms of communication are switching people from classical to digital social media. Business operations are transferring to where people are, i.e. the internet. Modern marketing is increasingly migrating from traditional to digital social media. In addition to strategic business orientation, an effective, convincing and profitable marketing campaign on modern social media requires original ideas and competent knowledge of internet marketing, customer psychology and modern information and communication technologies. With the attainment of these prerequisites, digital social media can be a powerful factor of impact on the success and enhancement of modern business operations. 

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### Correspondence

**Jovica Đurković**

Faculty of Economics in Subotica  
Segedinski put 9-11, 24000, Subotica, Serbia

E-mail: [djovica@ef.uns.ac.rs](mailto:djovica@ef.uns.ac.rs)

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A paper must be written in text processor Microsoft Word. Paper size: A4. Margins: 3.0 cm on top and bottom, and 2.5 cm on left and right sides. As a guide, articles should be no more than 5.000 words in length. In case the paper exceeds the normal length, the Editors' consent for its publication is needed. Articles submitted for publication in Journal should include the research aim and tasks, with detailed methodology, presenting literature overview on the research object, substantiation of the achieved results and findings, conclusions and a list of references. Manuscripts should be arranged in the following order of presentation.

**First page:** Title (no more than 10 words), subtitle (if any), autobiographical note (the author's full name, academic affiliation, telephone, fax and e-mail address and full international contact). Respective affiliations and addresses of co-authors should be clearly indicated. Please also include approximately 50 words of biographical information on each author of the submitted paper.

### Second page:

- A self-contained abstract/summary/resume of up to 150 words, describing the research objective and its conclusions
- Up to ten keywords, which encapsulate the principal subjects covered by the article; and
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- Line Spacing: Single
- Alignment: Justified
- Indentation: Left: 0, Right: 0, Special: 0.
- Style: Normal (**not Title, Heading1, Heading2,...,Body Text, etc!**)

Leave an empty line between paragraphs.

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**Section headings** should be in **bold** with Leading Capitals on Main Words, Times New Roman, 14pt, bold, centered.

**Sub-section headings** should be in *italics*, with Leading Capitals on Main Words, Times New Roman, 12 pt, bold.

All tables, graphs and diagrams are expected to back your research findings. They should be clearly referred to and numbered consecutively in Arabic numerals. They should be placed in the text at the appropriate paragraph (just after its reference).

**Tables** should be centered. All tables must have captions. The title of your table should follow the table number. Tables should not be wider than the margins of the paper. Skip two lines before and after each table.

**Figures** should be centered. All figures must have captions. The title of figures should appear immediately below the figure. The title of the figure should follow the figure number. Figures should not be wider than the margins of the paper. Skip two lines before and after each figure. Figures will not be redrawn by the publisher. Figures should be high-quality **grayscale** graphics (please, do not use colors): vector drawings (with text converted to curves) or 300 dpi bitmaps. Please do not supply any graphics copied from a website, as the resolution will be too low. In all figures taken or adapted from other sources, a brief note to that effect is obligatory, below the figure. One sentence at least referring to the illustration is obligatory.

**Mathematical expressions** should be numbered on the right side, while all variables and parameters must be defined.

## Copyright

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## Proof

Authors are responsible for ensuring that all manuscripts (whether original or revised) are accurately typed before final submission. One set of proof will be sent to authors, if requested, before the final publication, which must be returned promptly.

## Referencing Guide

The references should specify the source (such as book, journal article or a web page) in sufficient detail to enable the readers to identify and consult it. The references are placed at the end of the work, with sources listed alphabetically (a) by authors' surnames or (b) by the titles of the sources (if the author is unknown). Multiple entries by the same author(s) must be sequenced chronologically, starting from the earliest, e.g.:

- Ljubojević, T.K. (1998).
- Ljubojević, T.K. (2000a).
- Ljubojević, T.K. (2000b).
- Ljubojević, T.K., & Dimitrijević, N.N. (1994).

Here is a list of the most common reference types:

### A. PERIODICALS

Authors must be listed by their last names, followed by initials. Publication year must be written in parentheses, followed by a full stop. Title of the article must be in sentences case: only the first word and proper nouns in the title are capitalized. The periodical title must be in title case, followed by the volume number, which is also italicized:

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical, volume number*(issue number), pages.

#### ➔ Journal article, one author, paginated by issue

Journals paginated by issue begin with page 1 in every issue, so that the issue number is indicated in parentheses after the volume. The parentheses and issue numbers are not italicized, e.g.

Tanasijević, V. (2007). A PHP project test-driven end to end. *Management Information Systems*, 5 (1), 26-35.

#### ➔ Journal article, one author, paginated by volume

Journals paginated by volume begin with page 1 in issue 1, and continue page numbering in issue 2 where issue 1 ended, e.g.

Perić, O. (2006). Bridging the gap: Complex adaptive knowledge management. *Strategic Management*, 14, 654-668.

➔ **Journal article, two authors, paginated by issue**

Strakić, F., & Mirković, D. (2006). The role of the user in the software development life cycle. *Management Information Systems*, 4 (2), 60-72.

➔ **Journal article, two authors, paginated by volume**

Ljubojević, K., & Dimitrijević, M. (2007). Choosing your CRM strategy. *Strategic Management*, 15, 333-349.

➔ **Journal article, three to six authors, paginated by issue**

Jovanov, N., Boškov, T., & Strakić, F. (2007). Data warehouse architecture. *Management Information Systems*, 5 (2), 41-49.

➔ **Journal article, three to six authors, paginated by volume**

Boškov, T., Ljubojević, K., & Tanasijević, V. (2005). A new approach to CRM. *Strategic Management*, 13, 300-310.

➔ **Journal article, more than six authors, paginated by issue**

Ljubojević, K., Dimitrijević, M., Mirković, D., Tanasijević, V., Perić, O., Jovanov, N., et al. (2005). Putting the user at the center of software testing activity. *Management Information Systems*, 3 (1), 99-106.

➔ **Journal article, more than six authors, paginated by volume**

Strakić, F., Mirković, D., Boškov, T., Ljubojević, K., Tanasijević, V., Dimitrijević, M., et al. (2003). Metadata in data warehouse. *Strategic Management*, 11, 122-132.

➔ **Magazine article**

Strakić, F. (2005, October 15). Remembering users with cookies. *IT Review*, 130, 20-21.

➔ **Newsletter article with author**

Dimitrijević, M. (2009, September). MySQL server, writing library files. *Computing News*, 57, 10-12.

➔ **Newsletter article without author**

VBScript with active server pages. (2009, September). *Computing News*, 57, 21-22.

## **B. BOOKS, BROCHURES, BOOK CHAPTERS, ENCYCLOPEDIA ENTRIES, AND BOOK REVIEWS**

### **Basic format for books**

Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle*. Location: Publisher.

**Note:** "Location" always refers to the town/city, but you should also include the state/country if the town/city could be mistaken for one in another country.

➔ **Book, one author**

Ljubojević, K. (2005). *Prototyping the interface design*. Subotica: Faculty of Economics.

➔ **Book, one author, new edition**

Dimitrijević, M. (2007). *Customer relationship management* (6<sup>th</sup> ed.). Subotica: Faculty of Economics.

➔ **Book, two authors**

Ljubojević, K., Dimitrijević, M. (2007). *The enterprise knowledge portal and its architecture*. Subotica: Faculty of Economics.

➔ **Book, three to six authors**

Ljubojević, K., Dimitrijević, M., Mirković, D., Tanasijević, V., & Perić, O. (2006). *Importance of software testing*. Subotica: Faculty of Economics.

➔ **Book, more than six authors**

Mirković, D., Tanasijević, V., Perić, O., Jovanov, N., Boškov, T., Strakić, F., et al. (2007). *Supply chain management*. Subotica: Faculty of Economics.

➔ **Book, no author or editor**

*Web user interface* (10th ed.). (2003). Subotica: Faculty of Economics.

➔ **Group, corporate, or government author**

Statistical office of the Republic of Serbia. (1978). *Statistical abstract of the Republic of Serbia*. Belgrade: Ministry of community and social services.

➔ **Edited book**

Dimitrijević, M., & Tanasijević, V. (Eds.). (2004). *Data warehouse architecture*. Subotica: Faculty of Economics.

➔ **Chapter in an edited book**

Boškov, T., & Strakić, F. (2008). Bridging the gap: Complex adaptive knowledge management. In T. Boškov & V. Tanasijević (Eds.), *The enterprise knowledge portal and its architecture* (pp. 55-89). Subotica: Faculty of Economics.

➔ **Encyclopedia entry**

Mirković, D. (2006). History and the world of mathematicians. In *The new mathematics encyclopedia* (Vol. 56, pp. 23-45). Subotica: Faculty of Economics.

## C. UNPUBLISHED WORKS

➔ **Paper presented at a meeting or a conference**

Ljubojević, K., Tanasijević, V., Dimitrijević, M. (2003). *Designing a web form without tables*. Paper presented at the annual meeting of the Serbian computer alliance, Beograd.

➔ **Paper or manuscript**

Boškov, T., Strakić, F., Ljubojević, K., Dimitrijević, M., & Perić, O. (2007. May). *First steps in visual basic for applications*. Unpublished paper, Faculty of Economics Subotica, Subotica.

### ➔ **Doctoral dissertation**

Strakić, F. (2000). *Managing network services: Managing DNS servers*. Unpublished doctoral dissertation, Faculty of Economics Subotica, Subotica.

### ➔ **Master's thesis**

Dimitrijević, M. (2003). *Structural modeling: Class and object diagrams*. Unpublished master's thesis, Faculty of Economics Subotica, Subotica.

## **D. ELECTRONIC MEDIA**

The same guidelines apply for online articles as for printed articles. All the information that the online host makes available must be listed, including an issue number in parentheses:

Author, A. A., & Author, B. B. (Publication date). Title of article. *Title of Online Periodical, volume number*(issue number if available). Retrieved from <http://www.anyaddress.com/full/url/>

### ➔ **Article in an internet-only journal**

Tanasijević, V. (2003, March). Putting the user at the center of software testing activity. *Strategic Management, 8* (4). Retrieved October 7, 2004, from [www.ef.uns.ac.rs/sm2003](http://www.ef.uns.ac.rs/sm2003)

### ➔ **Document from an organization**

Faculty of Economics. (2008, March 5). *A new approach to CRM*. Retrieved July 25, 2008, from <http://www.ef.uns.ac.rs/papers/acrm.html>

### ➔ **Article from an online periodical with DOI assigned**

Jovanov, N., & Boškov, T. A PHP project test-driven end to end. *Management Information Systems, 2* (2), 45-54. doi: 10.1108/06070565717821898.

### ➔ **Article from an online periodical without DOI assigned**

Online journal articles without a DOI require a URL.

Author, A. A., & Author, B. B. (Publication date). Title of article. *Title of Journal, volume number*. Retrieved from <http://www.anyaddress.com/full/url/>

Jovanov, N., & Boškov, T. A PHP project test-driven end to end. *Management Information Systems, 2* (2), 45-54. Retrieved from <http://www.ef.uns.ac.rs/mis/TestDriven.html>.

## **REFERENCE QUOTATIONS IN THE TEXT**

### ➔ **Quotations**

If a work is directly quoted from, then the author, year of publication and the page reference (preceded by “p.”) must be included. The quotation is introduced with an introductory phrase including the author's last name followed by publication date in parentheses.

According to Mirković (2001), “The use of data warehouses may be limited, especially if they contain confidential data” (p. 201).

Mirković (2001), found that “the use of data warehouses may be limited” (p. 201). What unexpected impact does this have on the range of availability?

If the author is not named in the introductory phrase, the author's last name, publication year, and the page number in parentheses must be placed at the end of the quotation, e.g.

He stated, “The use of data warehouses may be limited,” but he did not fully explain the possible impact (Mirković, 2001, p. 201).

### ➔ Summary or paraphrase

According to Mirković (1991), limitations on the use of databases can be external and software-based, or temporary and even discretion-based. (p.201)

Limitations on the use of databases can be external and software-based, or temporary and even discretion-based (Mirković, 1991, p. 201).

### ➔ One author

Boškov (2005) compared the access range...

In an early study of access range (Boškov, 2005), it was found...

### ➔ When there are **two authors**, both names are always cited:

Another study (Mirković & Boškov, 2006) concluded that...

### ➔ If there are **three to five authors**, all authors must be cited the first time. For subsequent references, the first author's name will be cited, followed by “et al.”.

(Jovanov, Boškov, Perić, Boškov, & Strakić, 2004).

In subsequent citations, only the first author's name is used, followed by “et al.” in the introductory phrase or in parentheses:

According to Jovanov et al. (2004), further occurrences of the phenomenon tend to receive a much wider media coverage.

Further occurrences of the phenomenon tend to receive a much wider media coverage (Jovanov et al., 2004).

In “et al.”, “et” is not followed by a full stop.

### ➔ Six or more authors

The first author's last name followed by "et al." is used in the introductory phrase or in parentheses:

Yossarian et al. (2004) argued that...

... not relevant (Yossarian et al., 2001).

### ➔ **Unknown author**

If the work does not have an author, the source is cited by its title in the introductory phrase, or the first 1-2 words are placed in the parentheses. Book and report titles must be italicized or underlined, while titles of articles and chapters are placed in quotation marks:

A similar survey was conducted on a number of organizations employing database managers ("Limiting database access", 2005).

If work (such as a newspaper editorial) has no author, the first few words of the title are cited, followed by the year:

("The Objectives of Access Delegation," 2007)

**Note:** In the rare cases when the word "Anonymous" is used for the author, it is treated as the author's name (Anonymous, 2008). The name Anonymous must then be used as the author in the reference list.

### ➔ **Organization as an Author**

If the author is an organization or a government agency, the organization must be mentioned in the introductory phrase or in the parenthetical citation the first time the source is cited:

According to the Statistical Office of the Republic of Serbia (1978), ...

Also, the full name of corporate authors must be listed in the first reference, with an abbreviation in brackets. The abbreviated name will then be used for subsequent references:

The overview is limited to towns with 10,000 inhabitants and up (Statistical Office of the Republic of Serbia [SORS], 1978).

The list does not include schools that were listed as closed down in the previous statistical overview (SORS, 1978).

### ➔ **When citing more than one reference from the same author:**

(Bezjak, 1999, 2002)

➔ When several **used works by the same author were published in the same year**, they must be cited adding a, b, c, and so on, to the publication date:

(Griffith, 2002a, 2002b, 2004)

### ➔ **Two or more works in the same parentheses**

When two or more works are cited parenthetically, they must be cited in the same order as they appear in the reference list, separated by a semicolon.

(Bezjak, 1999; Griffith, 2004)

### ➔ **Two or more works by the same author in the same year**

If two or more sources used in the submission were published by the same author in the same year, the entries in the reference list must be ordered using lower-case letters (a, b, c...) with the year. Lower-case letters will also be used with the year in the in-text citation as well:

Survey results published in Theissen (2004a) show that...

➔ To **credit an author for discovering a work**, when you have not read the original:

Bergson's research (as cited in Mirković & Boškov, 2006)...

Here, Mirković & Boškov (2006) will appear in the reference list, while Bergson will not.

➔ When **citing more than one author**, the authors must be listed alphabetically:

(Britten, 2001; Sturlasson, 2002; Wasserwandt, 1997)

➔ When there is **no publication date**:

(Hessenberg, n.d.)

➔ **Page numbers must always be given for quotations:**

(Mirković & Boškov, 2006, p.12)

Mirković & Boškov (2006, p. 12) propose the approach by which “the initial viewpoint...

➔ **Referring to a specific part of a work:**

(Theissen, 2004a, chap. 3)

(Keaton, 1997, pp. 85-94)

➔ **Personal communications, including interviews, letters, memos, e-mails, and telephone conversations**, are cited as below. (These are *not* included in the reference list.)

(K. Ljubojević, personal communication, May 5, 2008).

## FOOTNOTES AND ENDNOTES

A few footnotes may be necessary when elaborating on an issue raised in the text, adding something that is in indirect connection, or providing supplementary technical information. Footnotes and endnotes are numbered with superscript Arabic numerals at the end of the sentence, like this.<sup>1</sup> Endnotes begin on a separate page, after the end of the text. However, Strategic Management journal **does not recommend the use of footnotes or endnotes.**

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