

SELECTING LEADERSHIP: UTILIZING THE TALENT DIMENSION IN THE INFORMATION TECHNOLOGY SECTOR IN CROATIA

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ALGEBRA UNIVERSITY COLLEGE

MASTER'S THESIS

**SELECTING LEADERSHIP: UTILIZING THE
TALENT DIMENSION IN THE
INFORMATION TECHNOLOGY SECTOR IN
CROATIA**

Maja Pavičić

Zagreb, September 2019

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Maja Paricic

Preface

The idea to investigate further Information Technology leaders' talent came from everyday situations at work. Information Technology leaders are always great experts in their field of expertise, but just a few of them are true leaders who possess talent and soft skills to successfully lead teams and projects. Talent in general is not investigated enough and the literature on Information Technology leaders' talent is very scarce. Therefore, I wanted to give contribution to that part of the literature.

I would like to thank my whole family, especially my husband Tomislav, my children Jakov and Lucija and my mother Vesna, my sister Mirna and her family for their unconditional support during the period I was writing this Master's Thesis and during these two years. Thank you!

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Prilikom uvezivanja rada, Umjesto ove stranice ne zaboravite umetnuti original potvrde o prihvaćanju teme završnog rada kojeg ste preuzeli u studentskoj referadi

Abstract

Many Information Technology companies in Croatia, and worldwide as well, are faced with a big and growing problem of finding good Information Technology leaders who will have both professional knowledge, skills and leadership talent. Leaders' talent is different in every sector and this thesis aims to find these specific talent differences for Information Technology leaders. Research findings will help recruiters and managers to better understand what to look for during IT leaders' selection process and what aspect of their talent needs to be further developed. In that way they will have the right person on the right position and get the best value for all stakeholders. Also, by having more literature and knowledge about the talent in general and about IT leaders' talent, it will be much easier to win 'The War for Talent' in IT sector in Croatian companies, but worldwide as well.

Company Talent Plus conducts Executive Interview Interpretive AnalysisSM which covers ten talent themes: Ego Drive, Focus, Intelligence, Conceptualization, Relationship, Persuasion, Individualized Approach, Growth Orientation, Response to Negativity, Executive Skill. Every theme can be weak or strong. Different types of leaders have different combinations of strong themes. Research sample consists of 3.820 executive interviews from all industries which cover above mentioned ten themes and compare Information Technology leaders' results with the results of leaders from all other industries. IT leaders are for more than one point better than other leaders in three Talent Plus executive interview themes: Focus, Relationship, Response to Negativity. Themes in which IT leaders are inferior to other leaders for more than one point are: Persuasion, Individualized Approach and Growth Orientation. Differences up to one point are not considered substantial. By applying these research findings recruiters and managers know exactly what to look for in IT leader candidate in Croatia and worldwide and what aspects of talent they will possibly have to further develop. In that way, the whole selection process will be more successful and the IT sector will be even more efficient.

Keywords: talent, Information Technology, leaders, leadership, development, research, Talent Plus, themes, selection process, Croati

Sažetak

Brojne tvrtke u Hrvatskoj, ali i širom svijeta, koje se bave informacijskim tehnologijama suočavaju se s velikim i rastućim problemom pronalaska dobrih voditelja koji istovremeno imaju bogata stručna znanja i vještine, ali i vještine vođenja. Talent vođenja se razlikuje unutar pojedog sektora te je cilj ovog rada pronaći specifične razlike u talentu karakteristične za voditelje u sektoru informacijskih tehnologija. Rezultati provedenog istraživanja pomoći će menadžerima i sudionicima selekcijskog procesa da usmjerenije provode selekciju jer će točno znati koje aspekte talenta trebaju tražiti kod kandidata, a koje je potrebno dodatno razviti. Na taj način imat će pravu osobu na pravoj poziciji te tako dobiti najveću vrijednost za sve uključene strane. Također, postojanjem više literature o talentu, a posebice o talentu voditelja u tvrtkama koje se bave informacijskim tehnologijama, bit će puno lakše „pobijediti u ratu za talente“ u sektoru informacijskih tehnologija u Hrvatskoj, ali i širom svijeta.

Tvrtka Talent Plus provodi Executive Interview Interpretive AnalysisSM koja pokriva deset aspekata talenta kroz teme: Ego, Fokus, Inteligencija, Konceptualizacija, Povezanost, Uvjerljivost, Individualizirani Pristup, Orijentacija Rastu, Odgovor na Negativnost, Voditeljske Vještine. Svaka tema može biti slaba ili jaka. Različite vrste voditelja imaju različite kombinacije jakih tema. Uzorak korišten za istraživanje sastoji se od 3.820 intervjuja s menadžerima iz raznih sektora. Intervju pokriva deset navedenih aspekata talenta (tema). Istraživanje uspoređuje rezultate voditelja u sektoru informacijskih tehnologija s rezultatima voditelja iz ostalih sektora. Voditelji u informacijskim tehnologijama su za više od jednog boda bolji od voditelja iz ostalih sektora u tri Talent Plus teme iz intervjuja za menadžere: Fokus, Povezanost, Odgovor na Negativnost. Teme u kojima su voditelji u informacijskim tehnologijama lošiji od ostalih voditelja za više od jednog boda su: Uvjerljivost, Individualizirani Pristup i Orijentacija Rastu. Razlike do jednog boda ne smatraju se značajnima. Primjenjujući rezultate ovog istraživanja svi uključeni u proces selekcije u hrvatskim tvrtkama, ali i širom svijeta, znaju točno na koje teme usmjeriti pažnju. Na taj način cijeli proces bit će puno uspješniji i IT sektor bit će učinkovitiji.

Ključne riječi: talent, informacijske tehnologije, voditelji, vodstvo, razvoj, istraživanje, Talent Plus, teme, selekcijski proces, Hrvatska

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1. Introduction

This thesis aims to understand how different Information Technology (IT) leaders' talent is compared to leaders' talent in other industries.

The Information Technology sector is very specific in Croatia, the entire sector is suffering from the lack of IT experts in every segment of the sector and a special part of this problem is in most cases how to find a good IT leader who has developed both IT skills *and* leadership talent. This task is extremely difficult because leadership talent is not something that is usually sought in IT experts (Hrnjak, K., Owner and CEO, Yottabyte j.d.o.o. Interviewed by: Pavičić, M. (July 5th 2019)).

This thesis attempts to answer three questions and continues by explaining talent definition and etymology. Literature review consists of three parts: a) literature related to leaders and talent in general, b) Information Technology leaders and talent, c) 'The War for Talent'. Methods part explains how the research is conducted, explains the research method and sample and explains ten Talent Plus themes in details. Results part explains main research findings. And finally, discussion and conclusion part compares literature review with research results and concludes by answering the three questions posed at the beginning of the thesis.

1.1. Questions to answer

As it will be further discussed in chapter 2. of this thesis, the literature and research studies on leaders' talent are scarce. This statement applies mostly to research related to IT leaders' talent.

Therefore, this thesis will try to answer three questions:

1. *What does IT leaders' talent look like?*
2. *How is IT leaders' talent different than other leaders' talent?*
3. *How can research findings related to leaders' talent/IT leaders' talent help us win 'The War for Talent'?*

This thesis will enrich literature related to IT leaders' talent in Croatia, help to better understand IT leaders, and help to understand IT leaders' talent and its special characteristics compared to other leaders' talent. Research findings can also help to win 'The War for Talent' because they will show leaders'/IT leaders' strengths and weaknesses. With a talent strategy adjusted to research findings related to talent, the result should be winning at least a battle, if not the whole 'War for Talent'. Research findings are applicable worldwide as well because there are no significant differences in IT leaders' talent geographically.

1.2. Talent definition and etymology

To understand IT leaders' talent, it is first necessary to define talent; however, a perfect talent definition is difficult to choose as numerous definitions exist.

In order to avoid talent definition misunderstandings, it is necessary to define talent and strengths. According to Clifton StrengthsFinder 2.0, *talents are "a recurring pattern of thought[s], feeling[s] or behaviour[s]" that "naturally exist within individuals" and strengths are "the ability to provide consistent, near-perfect performance in a specific task"* (Asplund, et. al. 2007). To show the complexity of the term *talent* it is necessary to show the etymology of the word.

The word “talent” is thousands of years old, and lexicologists have identified how the term has varied greatly with time, people and locality (Tansley, 2011). The first dictionary definition of “talent” refers to “a denomination of *weight*, used by the Assyrians, Babylonians, Greek, Romans, and other ancient peoples” (Tansley, 2011). A talent became a *monetary unit* when value was attributed to one talent of silver (Tansley, 2011). The word “talent” entered English via the Bible. In Matthew 25: 14, there is a reference to a man who, about to go on a journey, entrusts his property to his servants, giving each five talents, two and one respectively “according to his ability”. The Greek version of this verse uses the word “talent”, whereas the New English Bible translates the Greek word “talent” with the word “*capital*” (Tansley, 2011). Today, HR people also use the term “*human capital*”, which in some contexts could be seen as synonymous to “talent”. By the thirteenth century the word “talent” was related to an *inclination or a disposition*. In the fifteenth century it related to treasure, riches, mental endowment and *natural ability* (Tansley, 2011). In the seventeenth century “talent” related to a special natural ability or *aptitudes and faculties* of various kinds (mental orders of a superior order, mental power or abilities), (Tansley, 2011). By the nineteenth century, talent was viewed as embodied in the talented – hence, *a person of talent and ability* (Tansley, 2011).

Throughout the ages, the word “talent”, which started life as a unit of weight and then a unit of money, acquired new meanings in Europe in the Middle Ages. This changed to mean special ability or aptitude, with those seen as talented able to demonstrate *outstanding accomplishments* in mental and physical domains. The motivation here was certainly to distinguish talent from “mere” skill. For instance, in contemporary dictionaries, where talent is defined as “*a natural ability to do something well*” (Longman Dictionary of Contemporary English, 2006) and “a special aptitude or faculty; high mental ability, a person or persons of talent” (Concise Oxford Dictionary, 1990), (Tansley, 2011).

Thorne and Pellant (2006) argue that a talented individual is “someone who has ability above others and does not need to try hard to use it. They excel with ease and grace. A talented person has a certain aura in their ability that others wish to emulate and from which lesser mortals draw inspiration” (Tansley, 2011). Gagne´ (2000) suggests that talented people have the ability to perform an activity to a degree that places their achievement within at least the upper 10 percent of their peers who are active in that field. In his study, Goleman

(2006) noted that in professional jobs, top performers who were capable of adding value to their organisation are worth ten times as much as their co-workers; although it is not clear how this performance is measured. With regard to specific perspectives of talent in organisations, these are defined from a number of different standpoints, e.g.: behavioural aspects (such as having a “can-do” attitude); knowledge; skills (having enough creative flair to create new realities and experiences and thus new knowledge); and competencies and cognitive capability (having diversity of thought or flexibility in producing a particular state of mind which matches organisational requirements, irrelevant of job role), (Tansley, 2011).

There is no single or universal contemporary definition of "talent"; however, there are different organisational perspectives of talent. Current meanings of talent tend to be specific to an organisation and highly influenced by the nature of the work undertaken. A shared organisational language for talent is important. There is high level of influence of management consultants in the development of the term in managing people with unique knowledge and skills.

As definitions of talent are complex, ambiguous and incomplete, there can never be a “one size fits all”. Understanding this ambiguity enables organizations to identify possible flaws in their approach to defining talent. Considering the distinct and separate notions of talent and success empowers organizations to ask more relevant questions around how employees are encouraged to leverage the talents they do have into success.

To conclude the talent definition section, the shortest and the clearest definition of talent is that *"talent is a person's capacity for near-perfect performance that exists naturally within an individual"* (Talent Plus, 2014¹), which brings talent definition close to strengths definition. This definition is used as a basis for this Information Technology leaders' talent research.

¹ <https://www.talentplus.com/about-us/> (November 14, 2014)

1.3. Talent definition perspectives - Talent as object & Talent as subject

Taking into account the linguistic evolution of the term talent, described earlier, the conclusion is that the original meaning of the term talent refers to personal characteristics (*talent as object*). In English, as well as in other European languages, talent is typically described as an innate ability that manifests in a particular field (Tansley, 2011). It is commonly understood as above-average ability for a specific function or range of functions. Rather than corresponding to 'normal' ability, talent is considered a special ability that makes the people who possess, develop, and use it rise out above the rest of their age peers in the specific area of their talent (Gagné, 2000). Consequently, talent is often equated to excellent performance in a given performance domain. The second meaning of talent found in contemporary English Dictionaries refers to a person or a person of talent (*talent as subject*) i.e., people possessing special skills or abilities. In fact, it is very common to see job advertisements in which talent refers to potential applicants (e.g., “talent wanted”). Likewise, managers frequently refer to their workforce as the talent of the organization, so as to stress the fact that people are the organization’s most important assets (Ashton & Morton, 2005). The subject approach to talent, which is historically ‘newer’ than the object approach (Tansley, 2011), currently coexists with the object approach. There are always tensions between these two approaches to the conceptualization of talent (Gallardo-Gallardo et al., 2013).

Therefore, Talent as object refers to talent as individual's ability to perform better than average on a certain field. Talent as subject is referred to a talent of organization, group of talent which makes organization strong and grow and is organisation's most valuable asset. Talent as subject approach is newer, more modern and maybe more applicable to modern times and organizations. Talent as object concept basically confirms talent definition from the perspective of an individual. This view is closer to this thesis theme. Talent as a subject is also very valuable approach because the talent of the organization is very important for company's success.

1.4. Talent dimension in Information Technology sector in Croatia

Information Technology sector is a very young sector in Croatia compared to other sectors, but it is at the same time the fastest growing sector. Talent dimension research is generally rarely conducted and for talent dimension in Information Technology sector there are no researches conducted at this time.

Experiences shared by C-level leaders from Information Technology and headhunting companies in Croatia are showing that when team members who are brilliant in their field of expertise are put on team or division leadership positions, leading technical teams of experts, quite often (not in all cases) do not have sufficient leadership talent and soft skills. Technically, processes run smoothly, but when it comes to leading people, soft skills, social skills, emotional intelligence, establishing relationships, motivation and vision communication, Information Technology leaders are not that successful as they should be because these are all talent components, among many others, which differentiate great leaders from the average or even the bad leaders.

Many Information Technology leaders have technical background and for that reason they did not have an opportunity to learn about methodologies and soft skills during their formal education. The best way to gain such experience and to develop skills is probably to work along with senior IT member who could be like a mentor and also to gain experience over time. I believe that soft skills that are necessary for leadership positions can be developed not only by learning factual knowledge from books, but also by doing the work by gradually gaining more responsibilities, and of course, working with a mentor. Approach should be holistic in a way that leaders should also learn this basic knowledge and gain experience through everyday work and different workshops, but I do not think that these components can be isolated. It would be helpful for IT leaders to have education and then combine the knowledge with the experience (Kreković, G., Management Advisor, Visage Technologies d.o.o. Interviewed by: Pavičić, M. (June 18th 2019)).

Whether IT leaders have developed leadership skills or not depends on the maturity stage of the company. In companies that are still in the start-up phase or have recently outgrown the

start-up phase (less than 80 people) it is not uncommon for IT leaders to come from the ranks of software developers. Usually, this is a software developer willing to take on more responsibility and aims for a higher salary. In some cases, this software developer already possesses a certain set of soft and leadership skills, but they are usually derived from their personality and not something that was acquired or learned through a systematic course. Depending on the motivation and time this software developer may either develop these skills or may choose to focus more on improving his technical knowledge while neglecting the soft skills. The more mature companies, if they are reasonable, can afford to hire more experienced IT leader personnel which had chosen to hone the soft skills and leadership skills. We are born with a slight inclination towards developing a certain personality and traits. In that phase I consider the "doors" to still be wide open for an individual. Which personality traits you eventually develop depend on the education and what you learn and see by example at home. Certainly, some individuals will have developed personalities which are better suited for a leadership role or which will result with a less steep learning curve for soft skills. This period of learning can spare one of many difficulties later in life. However, I still believe that these skills can be learned. For example, one might become a leader due to his charisma (this is not something that can easily be learned) and one might lead due to his vast knowledge on a subject. By working hard, one can come close to being a decent and even an above average leader/manager. A systematic approach is certainly a good idea for learning leadership and soft skills. Learning the concepts and rules and why's and why-not's. It's usually related to psychology and social interactions study. It is important that the individual himself sees the benefit and value of such skills. Otherwise, he might not engage fully. A good literature always helps. Of course, as it is with a lot of subjects, one cannot learn everything from books and courses. As much as a good background and foundation is important, it is even more important to "get out there" and experience how it really works. This means, making mistakes, analysing them and learning from them. It also means exploring out of one owns comfort zone as much as possible and putting yourself in situations from which you can learn new skills. To speed the learning along, it is a great approach to have a mentor or someone to look up to (Stojanac, P., CEO, Visage Technologies d.o.o. Interviewed by: Pavičić, M. (July 4th 2019)).

The experience shared by the headhunting/HR agency is slightly different, but still on the same trace.

Looking from the HR agency perspective, I would say that most of the IT leaders have strong focus, vision, and leadership as well. In some cases, soft skills are strongly present, while in the others I have noticed that those skills are trained. Some personalities communicate more efficiently and use soft skills more successfully than others do. Soft skills can be trained, but can never be compared to leadership and soft skills of the people who are born with them (Čoklica, C., Business Development Manager, Manpower d.o.o. Interviewed by: Pavičić, M. (July 2nd 2019)).

Classic "leadership" is not applicable in IT sector. IT leaders are highly educated, often strong individuals, so they need individual approach. Motivation for them is not only the financial compensation, but the fact that their good work is recognized and that they are doing the work that is interesting for them. Soft skills are inevitable in that sense. IT leader manages employees who are experts, but often does not possess the knowledge and skills to manage and motivate employees to perform at the highest level. Education helps in developing necessary skills and in understanding management models. Leadership talent is partially dependent on leader's character, leader should by its nature be able to successfully manage people and combined with appropriate education further develop its leadership talent. Classic formal education models and workshops are a great basis for further IT leadership talent and soft skills development (Hrnjak, K., Owner and CEO, Yottabyte j.d.o.o. Interviewed by: Pavičić, M. (July 5th 2019)).

The other problem recognized in Croatian companies is that majority of Information Technology leaders do not actually like doing managerial jobs (meetings, documents, following different procedures, holding one-on-one meetings with their team members...) and making managerial decisions (hiring and firing, communicating bad feedback...). When technical experts become team leaders, they are starting to work more on managerial tasks and less and less on technical tasks which they prefer. This observation is made based on the communication with numerous Information Technology companies and experts in Croatia. They all have the same problem. Information Technology leaders are becoming more and more unhappy with their managerial position and some of them eventually step away from their managerial functions and get back to their technical and development tasks and become happy team members again.

The next two paragraphs will explain how and when things related to talent, skills and management in Croatia, and worldwide as well, became so complex. Our society has moved from Industrial Revolution 3.0 to Industrial Revolution 4.0 rapidly (4IR was introduced in Germany in 2013). 4IR, digital revolution and transformation, digital technologies and platforms are factors, processes and enablers for Digital Economy or Digital Society creation. This new era requires completely new leadership talents and set of skills which require to be 'updated' more frequently than ever (every two to three years). Talents required within 4IR concept must possess creative thinking abilities, agile learning, efficient teamwork abilities, interdisciplinary and similar soft skills (Vlačić, 2019).

New term, recognized by the European Commission as well, has been introduced to leadership terminology and that term is *e-leader*. E-leader is a leader who can manage and lead organizations by applying highly developed business skills and who further develops excellence by combining highly developed business skills with the knowledge of using cutting-edge digital technologies and applying strategic thinking skills. E-leader must possess interdisciplinary 'cocktail' of knowledge and skills and preferably be a leader with highly developed business, strategic and technological competences. Of course, all these should be well balanced with the organization's business nature, maturity phase and industry type. In order to further prepare e-leader's talent for all future challenges, it is necessary to apply modern principles of Social Emotional Learning (SEL) approach in education. Also, e-leader should develop the personality of balanced agility which will enable e-leader to respond quickly to fast changing environment (Vlačić, 2019). There is a strong need in Croatia as well, especially in IT sector, to regularly 'update' knowledge and skills. This is necessary in order to be able to follow described global trends successfully. It is necessary to quickly remodel the whole national education system in order to meet challenges of digital society and to overcome the lack of e-leadership talents. This primarily means less useless facts learned 'by heart', but still keep the dose of factual knowledge necessary as a base for further development and innovation. It is equally important to develop personal skills, preferably through learning-by-doing model, spiced with a dose of futuristic orientation (Vlačić, 2019).

All of these facts have motivated this Master's Thesis theme. The goal is to get research results which will show us how Information Technology leaders' talent looks like, which

aspects of Information Technology leadership talent are efficient compared to other leaders and which are better, what actions can we take to improve deficient aspects and help Information Technology leaders to become more satisfied with their leadership role and in that way improve overall efficiency of the company they are working for. These findings will be very valuable for Information Technology companies in Croatia which are struggling with all previously mentioned issues.

2. Literature review and theory

The literature on Information Technology leaders' talent is almost non-existent. In fact, IT leaders may be the youngest segment of leadership. There are many books, articles, researches and papers on talent management, which has become one of the most important aspects of management in general (in many companies still not positioned high on the priorities list), but successful companies have realized that people are the company's most valuable asset and that the company which invests a lot in its employees' talent will be the most successful one. 'Right person on the right position' is the formula for success and differentiation (Ulrich et al., 2012). Therefore, the first step is to understand what talent really is and what the literature says about it.

2.1. Leaders and Talent

2.1.1. Twelve essential talents of leadership

In order to inspire employees to be willing participants, partners in making the company thrive, it is necessary that leaders have the following talents: (1) demonstrate acute awareness, (2) encourage a challenging environment, (3) think with vision, (4) create alignment, (5) act decisively, (6) engage others, (7) exude powerful energy, (8) build relationships for success, (9) communicate and listen, (10) see patterns and trends, (11) create high-energy teams, (12) display consistency and integrity through authenticity (Cohen, 2011). As it will be presented later in this thesis, these twelve talents relate to the Talent Plus themes.

As mentioned in the paragraph 2.1.3 in formula for talent all three components have to be present and strong in order for talent to exist, $Talent = competence \times commitment \times contribution$ (Ulrich et al., 2012). The same principle is valid for the above listed talents leaders have to have in order to be successful leaders. If they lack a single mentioned talent, they may not be completely successful in performing their job. A successful leader has to have: great energy and be able to pass that energy to their teams and to actively engage teams in organization's activities, ability to create and support challenging environment, create the atmosphere of integrity, fairness, consistency and openness. They have to always be aware

of what is happening in their teams and around them, have strong communication skills and be great listeners in order to fully understand what employees want to communicate to them.

2.1.2. Talent identification and attitudinal outcomes

Social Exchange Theory (SET) explains the association between employees' perceptions about whether or not they have been formally identified as "talent" and the following attitudinal outcomes: commitment to increasing performance demands, building skills, and supporting strategic priorities; identification with the unit and the multinational enterprise; and turnover intentions. Analysis reveal a number of differences between employees who perceive that they have been identified as "talent" and those who either perceive that they have not been identified or do not know whether they have been identified. Limited differences are found between the two latter categories (Björkman et al., 2013).

In sum, good communication and frequently given feedback are extremely important. If employee, especially leader, knows that his talent is recognized and valued accordingly, employee's performance will be at a much higher level, employee will know that the direction he is taking is a good one and overall results will grow, e.g., IT leader who knows that his talent is recognized will have higher satisfaction level and will probably stay in the company longer than without this recognition.

2.1.3. Talent in a formula

Every employee should be considered as a talent. Therefore, we can define talent through a formula: Talent = competence x commitment x contribution (Ulrich et al., 2012).

Competence refers to the knowledge, skills, and values required for today's and tomorrow's jobs (Ulrich et al., 2012). One company further refined competence as 'right skills, right place, right job and right time'. Competence matters because it leads to a good decision making. But without commitment, competence is discounted. Highly competent employees who are not committed are smart, but do not work very hard. Committed or engaged employees work hard, put in their time, and do what they are asked to do (Ulrich et al., 2012). Commitment and competence have been the standard elements for talent. But, the next generation of employees may be competent (able to do the work) and committed (willing to

do the work), but unless they are making a real contribution (finding meaning and purpose in their work), their interest in what they are doing diminishes and their talent wanes (Ulrich et al., 2012).

Contribution occurs when employees feel that their personal needs are being met through their active participation in their organization (Ulrich et al., 2012). Competence deals with the head (being able), commitment with the hands and feet (being there), and contribution with the heart (simply being). In this talent equation, the three terms are multiplicative, not additive. If anyone is missing the other two will not replace it. A low score in competence will not turn into talent even when the employee is engaged and contributing. Talented employees must have skills, wills, and purposes; they must be capable, committed, and contributing (Ulrich et al., 2012).

Senior executives who wish to build a talent culture should spend time identifying and improving each of these three dimensions (Ulrich et al., 2012).

To summarize, competence, commitment and contribution are equally important parts of talent equation. If one is non-existent or weak, there is no talent.

2.1.4. Talent derailment

Research by (Lombardo et al.1988) identified key derailers as: overly strong self-determination, inability to negotiate, insensitivity, arrogance and coldness. Further research also identified inability to develop effective interpersonal relationships (Lombardo et al., 1988; McNally and Parry, 2002; and Van Velsor and Leslie, 1995, in McCartney and Campbell, 2006). While these attributes were not specifically referenced as such, they are in fact key attributes of emotional intelligence. (Berger and Berger, 2004) suggest that talent indicates high performance, inspiring others to achieve high performance and the demonstration of core institutional competencies. Inherent in focussing on strengths when developing talent is the assumption that it is more motivational to work with strengths where the individual is leveraging a talent that comes naturally to them, than to try to develop in someone a skill, knowledge or capability that they have little or no natural aptitude for (Ross, 2013).

Talent derailers are in short all self-centred actions and behaviours. If a leader or an individual 'does not see' people around himself, his environment and create two-way relationship, talent cannot grow or exist because its main characteristics are non-existent. With hard work and effort and especially with talent development importance awareness, talent can be developed in individuals who are self-centred, but willing to change. It is important to have a focus on strengths during that process.

2.1.5. Characteristics of leaders during key transitions in leaders' career

Talent development strategies need to leverage strengths appropriately, develop skills, knowledge and competencies and mitigate weaknesses in order to ensure that these factors do not derail leaders at a future date. Talented leaders are particularly vulnerable to derailment at key transition stages. (Charan et al. 2011) identified six key passages (transitions) in a leaders career: (1) managing self (individual contributor) to managing others; (2) managing others to managing managers; (3) managing managers to functional manager; (4) functional manager to business manager; (5) business manager to group manager; (6) group manager to enterprise manager. Charan argued that each transition requires both the acquisition of new ways of working and the letting go of old ways of working in the three areas of: skills and capabilities, time frames of working and values around what it is important to focus on. As talented leaders accelerate through their leadership career and the scale and scope of their leadership challenge grows, so does the potential for derailment. Understanding the vulnerability of leaders through these key transitions and the derailment potential of over utilised strengths, inability to adapt, failure to let go of old ways of working and the necessity to acquire not only new skills, knowledge and capabilities, but to also develop a new mind set and operating beliefs, enables the potential to create much more robust development plans than are created from a focus on either strengths or development areas alone (Ross, 2013).

Every change and every transition is difficult. Fear of change is a part of human nature and that is why every change in leader's career is stressful and requires new talents and the adoption of new ways of working. Leaders which are more prepared to go out of their comfort zone will adopt new talents faster and this transition will be easier and faster for them.

Section 2.1 describes leaders, their talents and topics related to leader's talent starting from twelve essential leader's talents which can be matched quite nicely with ten themes this thesis research is based on. Social Exchange Theory (SET) talks about the need to give talent recognition feedback to employee in order to achieve best performance level employee can achieve. Ulrich et al. have created formula for talent which says that talent is comprised of competence, commitment and contribution and does not exist if one part of the formula is missing. Special attention should be paid to talent derailers which are self-centred actions and behaviours in which the individual does not see and recognize his environment and people around himself and therefore cannot create two-way relationship which is one of essential parts of leadership talent. Every leader passes transition phases in his career. Ross is talking about six transitions, starting from basic management level to top management level. Not all leaders will come to top level, but despite that fact, every level requires different talents which leaders have to be able to recognize and adopt to be successful and to be able to reach the next transition stage.

2.2. Information Technology Leaders and Talent

2.2.1. Information Technology leaders' talents

To further expand the topic covered in section 2.1.3 Talent in a formula (Ulrich et al., 2012) and discuss other, but similar aspects of talent considered by Maglione (2018), in this section IT leaders' talent will be discussed in more depth.

One possible scenario for developing talented IT leaders who will be able to further develop other necessary talents to be excellent IT leaders is to test their critical thinking, creativity, communication talent, collaboration, commitment and change acceptance (Maglione, 2018). All these talents, among other, differentiate great from good or bad leaders. These are all needed to create great two-way bonds with employees and have great business results (which is expected from a great leader). If a candidate shows that he possesses majority of characteristics listed and has great IT skills and knowledge, it is more likely that he will become a good IT leader. Critical thinking means that tech professionals should possess a skillset to analyse situations, evaluate issues, determine risks, identify potential problems, and find opportunities for project or program success and achievement. Creativity means

that recruits must be able to think outside of the box to develop new ideas or generate creative solutions to overcome existing roadblocks or potential pitfalls. Communication means that candidates should have the ability to communicate well, including exceptional listening skills, oral, and written communications, along with other forms such as discussions on whiteboards, note sharing, stand-up meetings, reports, presentations, etc. (Maglione, 2018). Collaboration means that a person should have the ability to collaborate with colleagues and project teammates. It is essential to be open for feedback at work and being willing to share ideas with others, with the intent of building and producing a stronger overall product or solution. Many tech companies now use pair programming, team structures, matrix structures, and cross-functionality, and these types of management approaches should be looked at favourably by employees. (Maglione, 2018).

Commitment means that if a person truly believes what they are doing is valuable, they will be more engaged, more conscientious, and willing to work harder to get to a better end result. In addition, and this goes without saying, but having a strong work ethic, being dependable, and possessing a positive attitude are all essential soft skills needed for success. And finally, change acceptance is related to adaptability which is a key behaviour trait for a collaborative environment. A person must be willing to change roles, assignments, and tasks to provide value to the company and customer needs. Adaptability implies that someone is not only adept at change, but also able to create strategies and develop skills to deal with that change. If a person is not adaptable, they will struggle with the constant change of a fast-moving technology company (Maglione, 2018).

Good IT leaders should be able to listen and to feel the needs of his teams, should be flexible in job organization in order to achieve maximal results and effectiveness. This means organizing IT work using scrum, flat organization, matrix organization and similar in order to provide great work conditions and support to employees.

2.2.2. Information Technology Leaders (CIOs)

To excel in Information Technology, leaders should have the right talent, knowledge and skills. Information Technology knowledge and skills work very well for IT people since it is something they are really interested in. Often they have problems with soft skills and communication in general, it just does not come natural to most of them and they are extremely important for successful people management and teamwork. Successful leader

(and IT leader as well) should be able to embody three crucial personas: communicator, salesperson and influencer. IT leaders should work harder to embody these three personas and to adopt these skills (Bedi, 2018).

Information Technology leaders are usually great at IT related topics, but what differentiates them from other IT employees are soft skills and related talents. Good IT leaders have to have a solid base for the three mentioned personas development: communicator, influencer, salesperson (Bedi, 2018). Exactly in that order, because IT leader will have to invest biggest effort to become a salesperson. In this area their performance is worse than the performance of other leaders.

2.2.3. Soft skills for IT leaders

In the digital age, when the line between IT and “the business” has almost disappeared, it is essential that IT leaders have soft skills like: communication and openness, curiosity and tenacity, patience, clear and concise verbal and written communication, empathy, emotional intelligence (EQ), situational awareness and collaboration (Casey, 2018). Business needs IT leaders because in modern, digital age they have to coexist and successful leader has to possess all these skills. New role of IT leader has emerged as a result of a need for employee profile who will be both IT expert and a leader. Consequently, IT leaders should have all skills other leaders usually possess.

Information Technology leaders have to adapt and be able to work across teams and departments, and explain the value they bring to different stakeholders. If communication or any other soft skill does not come naturally to the individual, any skill, hard or soft, can be developed with ongoing work and effort. We can identify five strategies for building soft skills: do not expect quick fixes, seek out honest feedback, find a new mentor and make yourself uncomfortable (get out of your comfort zone), interact more with people outside of your company (Casey, 2018).

Well-known formula for success 'education, education, education' formulate differently says 'will, development, education'. IT leader (and all other leaders) should have these three conditions in place and they can develop all necessary talents for being a great leader.

The conclusion of this literature review is, unfortunately, that at the time of writing this thesis, the literature that describes the differences between IT leaders' and other leaders' talent does not exist.

2.3. The War for Talent

2.3.1. Talent on workforce market

According to McKinsey Quarterly global surveys (Guthridge et al., 2008), companies face a demographic landscape dominated by the looming retirement of baby boomers in the developed world and by the dearth of young people entering the workforce in Western World. Question marks still remains over the appropriateness of the talent in many emerging markets. These globally surveys are showing that business leaders are deeply concerned over the lack of talent on the workforce market and that is likely to be their single most important managerial preoccupation for the rest of the decade and competition for talent will be intensified as well over this period (Gurthridge et al., 2008).

As mentioned previously, impending retirements are concerning for companies, and new type of workforce is entering the market. Millennials may have a new vision of their work life and habits, they usually work for the same company for two to three years. In these challenging times for companies, human resources managers are highly underestimated and 50% less paid than other executives (Gurthridge et al., 2008). And it is really important to reverse this trend because HR does the greatest work (together with top management) in identifying and retaining talent in the company or institution.

Human Resources role is highly underestimated in different talent management areas and strategies related to talent management. In contrast to that fact, majority of interviewees (58%) believe that talent management is responsibility of human resources. Perfect balance point is the one in which all related departments work closely together and in synergy on finding, hiring and retaining best talent in the organization (Gurthridge et al., 2008).

Talent is no longer recognized only in top management layer, there is deep commitment to talent throughout the organization. Managers embed talent strategy into the overall strategy of the business (Gurthridge et al., 2008).

The fact is that not enough talent is produced through education system (Gurthridge et al., 2008). IT leaders and talents related to them are a special category which is highly deficient. Good IT leader with necessary talent is difficult to find and even more difficult to retain (even with all benefits offered to employees in IT sector in general).

2.3.2. The War for Talent

At the end of 20th century, it became obvious that companies lack talent needed to achieve goals and wanted growth rates (Chambers et al., 1998). It also became obvious that the search for talent, talent development, and talent retention and talent management have to become priority number one in companies. It is useful to have great strategy, but without talented employees, strategy cannot be successful. McKenseys' team of scientists also discovered that more successful companies are paying more attention to all aspects of talent in their environment. What is clear even without the research is that we have a 'War for Talent' which will only intensify in future periods because the economy is growing and talent is not growing at the same rate; it is growing, but at a significantly lower rate (Chambers et al., 1998).

Large companies also face three qualitative challenges. First, a more complex economy demands, more sophisticated talent with global acumen, multi-cultural fluency, technological literacy, entrepreneurial skills, and the ability to manage increasingly delayed, disaggregated organizations. Talent is not developing at the same rate as global market conditions are becoming demanding and complex. Probably not many leaders will match complex demands and the situation is even more serious for Information Technology leaders (Chambers et al., 1998).

Second, the emergence of efficient capital markets in the United States has enabled the rise of many small and medium-sized companies that are increasingly targeting the same people sought by large companies. Small companies exert a powerful pull across the whole

executive spectrum, offering opportunities for impact and wealth that few large firms can match (Chambers et al., 1998).

Third, job mobility is increasing. Some years ago, a high performer might have changed employers just once or twice in a full career. The average executive twenty years ago worked in five companies; in another 10 years, it might be seven. A war once conducted as a sequence of set piece recruiting battles is transforming itself into an endless series of skirmishes as companies find their best people, and in particular their future senior executives, under constant attack (Chambers et al., 1998).

In order to become a winner in this 'War for Talent' it is a must to create a winning employee value proposition. That means that we have to find the perfect answer to the main question - "Why would a talented person want to work in this company?"

Creating a winning employee value proposition means tailoring a company's "brand" and "products", the jobs it has to offer to appeal to the specific people it wants to find and keep. It also means paying what it takes to attract and retain strong performers (the "price"). A company's "brand" is the face it presents to the world. At its heart must be an appealing culture and inspiring values: qualities that apply to every activity and function within the company, and to every aspect of its behaviour (Chambers et al., 1998).

To conclude, trends on the workforce marketplace are constantly changing, new generations are coming and every generation has specific job and compensation expectations. Salary expectations are changing as well. Experts supply and demand are not balanced, SMEs are taking away wanted workforce from large companies and all these conditions are creating 'The War for Talent'; especially the war for IT leaders' talent. In these conditions, the company that wants to attract the best talents must have a great brand, must be a great place to work, with a great atmosphere, working conditions, company values and culture, created best 'offer' for talents; today it goes without saying. Today, companies have to be innovative in finding new ways and conditions to differentiate themselves from the competition and actually hire and retain best talents.

2.3.3. What motivates talent?

The research on what motivates talent was done on two hundred executives. For these executives it is absolutely essential to work for a great company (brand), to have a great job and to get appropriate compensation and lifestyle for that job.

In a great company executives expect: great values and culture, great management, exciting challenges, strong performance, that company is a sector leader, that company employs talented people, company should be good at development, should have an inspiring mission, relaxed atmosphere, and job security.

Great job for executives' means: freedom and autonomy, exciting challenges, possibility for career advancement and growth, have great relationship with a boss they admire (talented leader).

Compensation and lifestyle are third important talent motivation component. Surprisingly, the least important one compared to working for great company and to have a great job. In this last category executives expect high and differentiated compensation, respect for lifestyle and acceptable pace and stress level (Chambers et al., 1998).

Company should simply figure out who it is aiming for, and make sure its brand is tailored to the talent segment it seeks to attract. Companies should have a goal, a difficult one, to become a compelling place for employees, customers, and investors.

What a company can and should consider changing straight away are the particular products it offers: its jobs. If a company succeeds in attracting a target executive group with great jobs, the brand should take care of itself as the changing mix of employees reinforces the values the company is seeking to build (Chambers et al., 1998).

A great job has some half-dozen attributes: „elbow room“ to allow executives room to manoeuvre; "head room" to allow them to make decisions without seeking constant approval from above; a clear link between daily activities and business results; a position that stretches but does not defeat, while being something an executive can "get their arms around";

something new to work on as often as possible; and great colleagues, above, around, and below (Chambers et al., 1998).

And naturally, there is the question of money. Highly competitive compensation, particularly long-term wealth accumulation, is an essential ticket to the game of attracting and retaining top talent.

Talent is essential for every company's success. The fact is that the number of talented individuals is declining and that the demand for them is rising. Every company should find the best strategy to get, develop, manage and retain talent and should keep it high on priorities list.

By the end of 20th century it became obvious that generation's shift is happening at a faster pace than expected. Baby boomers are retiring and millennials and generation Z, who are coming or already are here, have completely different values, expectations and way of functioning. Systems should adopt to this change as soon as possible to be able to function successfully. Demand for talent is exceeding talent supply. New and advanced skills and talents are required. The biggest challenge is to hire, manage and most importantly retain talented employees. That is especially difficult to achieve with millennials who have a tendency to work for one employer for two to three years and then move on. What employees expect today is to work for a great company, to have a great, challenging job and get a great compensation for their work which will support their lifestyle. This is difficult task which has to be taken seriously by both human resources departments and whole management structure. This problem is present worldwide and in Croatia maybe even more because experts and talents are emigrating from Croatia to more developed countries looking for better salaries, strong brand companies and more challenging jobs.² This thesis research will help companies' HR departments and management to better understand talent, especially IT talent, and to get into 'The War for Talent' more prepared in order to be able to win 'The War for Talent'.

² <https://www.itbizcrunch.com/index.php/biz-itbiu-istrazivanja/item/4199-istrazivanje-it-tvrke-sve-se-teze-nose-s-problemom-nedostatka-kvalitetnih-it-strucnjaka-na-trzistu-rada> (June 10th 2016)

2.4. Literature overview summary

As mentioned at the beginning of this thesis, the literature on IT leaders' talent is scarce. The literature which compares IT leaders' talent with other leaders' talent is non-existent. Research results this thesis will present will make a significant contribution to the literature on this topic.

The conclusion is that talent has to be a combination of competence, commitment and contribution. IT leaders in particular, and all other leaders as well, should have well developed communication (oral and written), interpersonal, listening, creative, critical thinking and problem-solving skills. They have to be great motivators, influencers and salespersons. They have to be able to sell their ideas to their subordinates, superiors and clients. IT leaders have to be relationship oriented, energize their environment, they have to be able to clearly communicate the vision, notice different trends and patterns before others. IT leaders have to be able to quickly adopt to change and to give and receive clear and honest feedback. It is important to get out of the comfort zone to be able to see things from other perspectives and to be able to bring more value to all stakeholders.

Of course, all leaders should pay attention to avoid talent derailers which are all self-centred and self-oriented behaviours and actions which do not bring positive results. These leaders only see themselves and their communication is one-way instead of two-way.

Companies' burning issue in the past decades is 'The War for Talent'. Generations are changing, their habits and demands are constantly changing. On the other hand, knowledge and skills are becoming more and more complex and not that many employees can meet that demand. We can win in 'The War for Talent' in a way that we learn all about leaders' talent in general and about the specific differences in leaders' talents in different industries. This thesis will provide this valuable talent knowledge for Information Technology sector. We have to know what to look for in the leader in order for this leader to be the great leader we need. On the other side, we have to know what this talent expects from the company and make sure to provide these conditions (company culture, values, great work atmosphere, great colleagues and management, challenging tasks, job security, lifestyle, compensation

they expect, certain level of autonomy...). It will be much easier to win the war if we know more about the 'enemy'; especially in Information Technology sector.

Information Technology sector in Croatia is facing the same or similar problems as the rest of the world related to talent understanding and especially IT talent understanding, finding, managing and retaining. 'The War for Talent' in Croatia is even fiercer because Croatia is a relatively small country, a lot of foreign and domestic IT companies are present on the market. The demand for IT leader talent greatly exceeds the supply (available number of IT leaders). Almost 83 % of Croatian companies have problems with finding adequate IT leaders and experts. 82, 8 % of employers in Croatia believe that the lack of IT experts is a barrier for their future business success.³ These numbers are showing the magnitude of the problem and the need for winning 'The War for Talent' in Croatia, but worldwide as well. One of the ways to win this battle and then the war is to understand better IT leaders' talent and to approach the problem in a more informed way.

³ <https://www.itbizcrunch.com/index.php/biz-itbiu-istrazivanje/item/4199-istrazivanje-it-tvrtke-sve-se-teze-nose-s-problemom-nedostatka-kvalitetnih-it-strucnjaka-na-trzistu-rada> (June 10th 2016)

3. Method

This thesis examines the results and conclusions on how Information Technology leaders' talent and strengths are different from other leaders' talent and strengths. The research sample is taken from Talent Plus ® Senior Plus Interview database. The interview is designed to assess the talent necessary for high-potential job performance in organizational leadership positions.

Talent Plus is privately held, internationally recognized management consulting firm, established in 1989, with over 400 clients in 20 countries delivering interviews in more than 30 languages. Company is located in Nebraska (USA) with branch office in Singapore.

Talent Plus is the Leading Talent Assessment PartnerSM with organizations committed to growth. Talent Plus identifies people with the potential for near-perfect performance (identifies talent) through various interviews and assessments (both online and written), so clients can make wise decisions in the selection and development of their teams.

It is important to clarify further why Talent Plus is the most important partner in this IT talent research. Talent Plus is dealing with The Science of Talent ® and this focus on talent itself makes Talent Plus and its tools a perfect partner for this IT leaders' talent research. Executive Interview Interpretive AnalysisSM covers ten themes listed in the paragraph below. Talent Plus conducts these interviews with all leaders' profiles. IT leaders are one of them. This is very convenient due to the fact that IT leaders' themes results can be compared to other leaders' themes results and valuable conclusions can be drawn from these results.

Senior leaders should be aware what kind of talent they need in their teams. Talent can and should be observed through the prism of ten themes identified by Talent Plus Company in Executive Interview Interpretive AnalysisSM: Ego Drive, Focus, Intelligence, Conceptualization, Relationship, Persuasion, Individualized Approach, Growth Orientation, Response to Negativity, Executive Skill. Different types of leaders have different combinations of strong themes.

These themes are similar to Cohen's twelve essential talents of leadership (section 2.1.1): 1) demonstrate acute awareness, (2) encourage a challenging environment, (3) think with vision, (4) create alignment, (5) act decisively, (6) engage others, (7) exude powerful energy, (8) build relationships for success, (9) communicate and listen, (10) see patterns and trends, (11) create high-energy teams, (12) display consistency and integrity through authenticity.

They are mostly overlapping with Talent Plus ten themes; the difference is that they are named differently. They are both focused on leadership talents such as: relationship, encouragement, growth, general positive approach and attitude towards colleagues and team members.

The following paragraphs are describing the methodology of creating themes, grading interview results and consequently getting research results.

Using focus groups, literature sources, and interviews with leaders, Talent Plus creates research questions that will differentiate between the Top (excellent) and Contrast (average) performers. These questions are based on the thoughts, feelings, and behaviours of Top performers (not their knowledge, skills and experience). The questions' answers must not be obvious to everyone. For instance, "Do you like to work hard?" is a poor question because both the Top and the Contrast will answer "yes."

The Executive Interview has 100 questions that differentiate between the Top and the Contrast. For each question, an analyst scores how closely the response is to what Talent Plus finds with Top leaders. The coding is based on a Likert-type scale. Therefore, the closer a respondent is to the "correct" answer, the higher their score is on each question.

The themes were created using exploratory factor analysis and Cronbach's Alpha. The exploratory factor analysis allows researchers to see how well questions "group" together. If they group together closely, then they are put together in a theme. On average, each theme has 10 questions (100 questions and 10 themes). The score for each theme, and the total score, is an average across each question. If within a theme, a leader answered all the questions very closely to what Talent Plus's research says is the "correct" answer, then the leader would receive a 100 on that theme (very rare).

It is very important to compare averages of groups to the averages of other groups; rather than comparing them to a score of 100 or 0. Information Technology leaders' averages per theme are compared to other leaders' averages per theme and these differences (positive or negative) make the research results this thesis is based on.

The sample was chosen from a Talent Plus database of senior leaders. For this research purposes, we are focusing on those leaders who were in their roles at the time of the interview (as opposed to those who were being assessed for hiring). January 2nd, 2008 is chosen as a start date because that is when Talent Plus started using TalentBank software to enter all results. Previous to that date, the data is not readily and electronically available.

The sample for this research consists of 4,280 leaders assessments conducted by Talent Plus Inc. IT leaders make 54 (1, 26%) of these 4,280 assessments. Other leaders make 3,766 assessments. Undefined interviews make 460 assessments (those assessments that did not have a title), Figure 3-1.

To conclude, total sample with correct titles is 3.820, IT leaders make 1, 41% of the best representative sample. Talent Plus sample combines many different nationalities, but this thesis delivers the fact that the problem of IT leader talent is global. Therefore, this research sample and its results are applicable to IT leaders in Croatia as well.

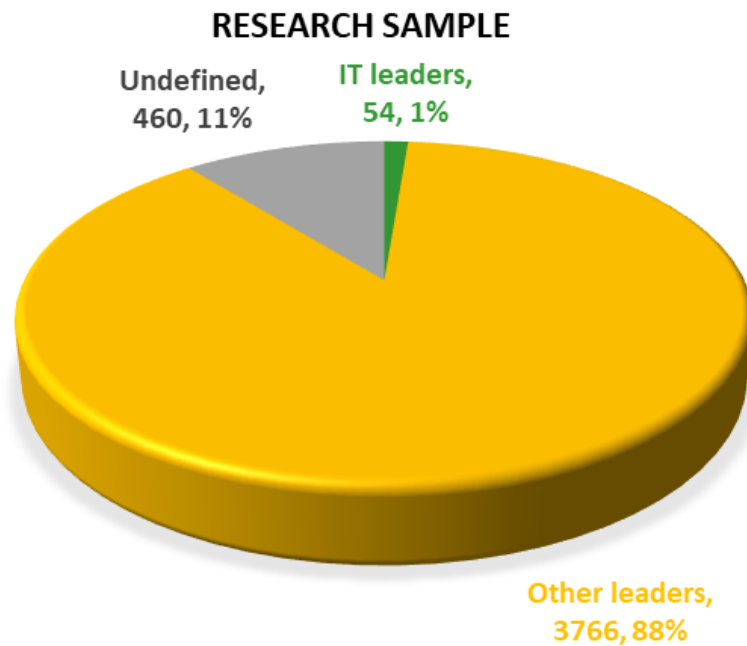


Figure 3-1 Research sample (Talent Plus, 2018)

Each of these leaders' interviews covers 10 themes: Ego Drive, Focus, Intelligence, Conceptualization, Relationship, Persuasion, Individualized Approach, Growth Orientation, Response to Negativity, Executive Skill⁴.

Ten themes listed will be described in more details. There are specific behaviours related to themes showing that the theme is strong and there are always coaching recommendations for making these positive behaviours even stronger. There are coaching recommendations how to make the best out of weak behaviours as well.

This strengths approach always focuses on positive behaviours rather than on weaknesses. This approach always wants to offer solutions how to turn weaknesses into strengths or to make the best out of weaknesses.

Theme 1: EGO DRIVE explores a person's self-concept, self-reliance, adjustment to others and individual competitiveness. Ego drive is the desire on the part of individuals to express their potential to perform an activity that will be intrinsically rewarding to them. This is

⁴ Talent Plus ® 2012 Executive Interview Interpretive Analysis SM, Theme Pages, Copyright © 2012 Talent Plus, Lincoln, Nebraska

made possible by the identification of their unique talent. Individuals with a strong ego have a good self-image and considerable self-confidence. Thus, people with a strong ego drive develop considerable independence and want to make their own decisions and run their own business.

Such individuals are competitive and want to excel in whatever activity they become involved. These individuals learn to identify the activities that will permit them to excel above others. They like to win and detest losing. These individuals want recognition whenever they win. They often identify models and emulate them. Such models are generally in the same activities which they do best. These individuals are individual achievers and can make their own decisions and live with them. When they do ask for advice, it is on their own terms to accept or reject it.

Some behaviours present when the theme is strong: superior achievers who make a difference and claim “world-class”, want recognition, have models and networks.

Theme 2: FOCUS examines a person’s energy level and how this energy has been and is channelled to achieve specific goals and outcomes. This theme also considers person’s future aspirations.

This theme is predicated on a high energy level which individuals can channel down a course of action to reach an objective. They are able to reach their goals. They have both lifetime goals and short-term goals. They seem to know how to keep control of their own lives and of themselves. They know the exhilaration of reaching a high-performance level.

They find out ultimately that only short-term vacations have any real place in productive living. They tend to be activists who never become bored because they have programmed their lives. They learn from every experience, and this helps them with the next one. They look for a certain kind of career and know when they have found it. In their spare time, they are thinking about how to improve what they are doing, their ultimate goals and their relationships with their families and their clients.

Some behaviours present when the theme is strong: maintain sharp focus in conversation or discussions, do not easily get side-tracked, set priorities and strategies in terms of goals.

Theme 3: INTELLIGENCE is defined by a person's intellectual curiosity, innovation, social awareness and judgment.

Intelligence is concerned with a constant desire to search for information, the ability to discriminate, and the ability to adapt to new situations. Outstanding performers are interested in finding out about other people. Generally, they have made good grades in school and like to read. They see learning as a continuous process. They welcome the chance to be evaluated by a competent person because they perhaps can learn about themselves and learn how to be more effective.

They have an excellent ability to discriminate between the good and the bad, the people they like and the people they do not like, and they can tell why. Thus, they can make discriminative responses to these differences and make wise decisions (most of the time) and live with them. However, if something is not working, they can always do something else that will work for them.

Some behaviours present when the theme is strong: more right decisions than wrong, resourceful, eager to learn.

Theme 4: CONCEPTUALIZATION is a theme in which professional and personal values, standards and the expression of ideals, desired outcomes or goals are considered. The ability to think in a multifaceted way is also included in this theme.

Conceptualization is the identification of a goal. When outstanding performers effectively conceptualize an outstanding performance, they know why and how it needs to be done. This leads one to the third ingredient of this theme which is to know what needs to be done to achieve the goal.

Some behaviours present when the theme is strong: have specific and clear goals, understand why and see the big picture, have images for the future, high customer conceptualization.

Theme 5: RELATIONSHIP is defined by the desire for and ease with which people establish rapport with others and the scope and intensity of their people interactions.

Outstanding performers need and will establish and develop relationships with the people they like most. To them, a relationship is the response one makes to the existence of another person. They know their success is dependent on building relationships with people who will benefit from this effort. They are generous and will do things for the people who are helped by this generosity.

They have a history of meeting different kinds of people and becoming acquainted with them. They know the value of communication and know how to ask the right questions. They are apt to listen more than they talk. They tend to build relationships with the people whom they can help the most, and these people are not necessarily the ones who need the most help.

Some behaviours present when the theme is strong: good, caring relationships, high rapport with others, good listener, understand others' needs.

Theme 6: PERSUASION relates to a person's approach to influencing others and their ability to move others toward the acceptance of new ideas using reason and emotion.

Persuasion is a kind of trust relationship. It is used to cause individuals to do something they had not thought of doing, did not want to do or were afraid to do, but needed to do. They recognize that in the process they help individuals to establish their values and realize what is important to them, so they must know the needs of the other individuals.

Some behaviours present when the theme is strong: like to move people to their point of view, are good at understanding how other people think, have the courage to overcome objections.

Theme 7: INDIVIDUALIZED APPROACH considers person's ability to be "other-centred" and to react to the requests and needs – expressed and unexpressed – of each person based on an individual's circumstances and characteristics.

These individuals believe that all people have a desire to become significant and make a difference by what they do. They recognize that each individual is unique and, consequently, the more knowledge they have of each individual, the greater the opportunity to understand

each person. People need and enjoy being understood, and this involves a continuous process which is the basis of all management relationships. They accept the law that the more you know about a person determines the effectiveness of all management efforts. A positive attitude is the key. These individuals must be able to recognize that management is interested in them and is trying to understand them. Individuals being managed will love this interest and concentration on their talents and will make good things happen.

Some behaviours present when the theme is strong: recognize each person is unique, care about their people, win or lose, recognize the more you know about a person, the better you can develop them.

Theme 8: GROWTH ORIENTATION assesses a person's grasp of strength management theory as it relates to company growth. Consideration is given to the practical application of an individual's approach to the selection, placement and development of others.

Growth of an organization takes place because these managers believe in identifying talent and developing it. Growth takes place because of the people in the organization. This is the driving force in these executives' activity patterns. This growth takes place most effectively when executives select the position in which individuals can express their talents most efficiently. Executives recognize they must not only provide a goal that will facilitate these individuals' growth, but executives point out this fact to these individuals who find this fact to be true. Growth is a continuous process for every individual. If this does not occur, individuals reach plateaus or go "downhill" in their productive performance. These executives always give recognition for growth whenever it occurs.

Some behaviours present when the theme is strong: recognize people make the organization, select highly talented people, help talent grow and develop.

Theme 9: RESPONSE TO NEGATIVITY explains how a person handles negative behaviour. This theme is most frequently ignored. When negativity occurs, management should discover the cause and replace it with positive suggestions. To react in kind to a negative situation reinforces the negative situation, which consequently becomes worse. It is best

discussed in private (one-to-one) and never before a group. If one perceives the situation in a positive attitude, positive action can be taken to solve it.

Some behaviours present when the theme is strong: find the cause and work toward resolution, meet negativity with objectivity and investigate the why, approach the challenge with positivity.

Theme 10: EXECUTIVE SKILL is focused on the specific ways in which a person thinks about the executive role as well as their conduct in that role.

Outstanding performers develop the vision of what the organization can become. This vision is in the realm of possibility. These individuals have the capacity to lead, and this includes an ability to persuade others to accept what they propose to accomplish. When this theme is intense, they will select the right people from among those available in order to ensure the success of the organization. They persuade their managers, who in turn persuade their associates, that they will be making a significant contribution in achieving the total picture as described.

Some behaviours present when the theme is strong: have clear vision, guest or customer driven, select the right people.

In order to support these research findings, additional small qualitative research was made on a small sample of four Information Technology highly positioned leaders (CEO, Management Advisor, company owner, head-hunter) from Croatian IT companies. Their statements, presented in the point 1.4 of this thesis, are showing the status of IT leaders' talent in Croatia and are additionally confirming that this thesis research results are applicable to Croatia, but worldwide as well. Also, they are describing the overall situation with IT leaders' talent in Croatia.

4. Results

At the beginning of Results section it is important to show that it is extremely valuable to hire individuals based on assessing their talent. Correlations run from -1.0 (perfect negative correlation) to +1.0 (perfect positive correlation). Talent assessment shows a 0.52 correlation (blue line in the Figure 4-1 (Talent Plus)) which is very beneficial correlation according to U.S. Department of Labor (Table 4-1 (U.S. Department of Labor)).

What You Want ≠ Typical Selection Methods

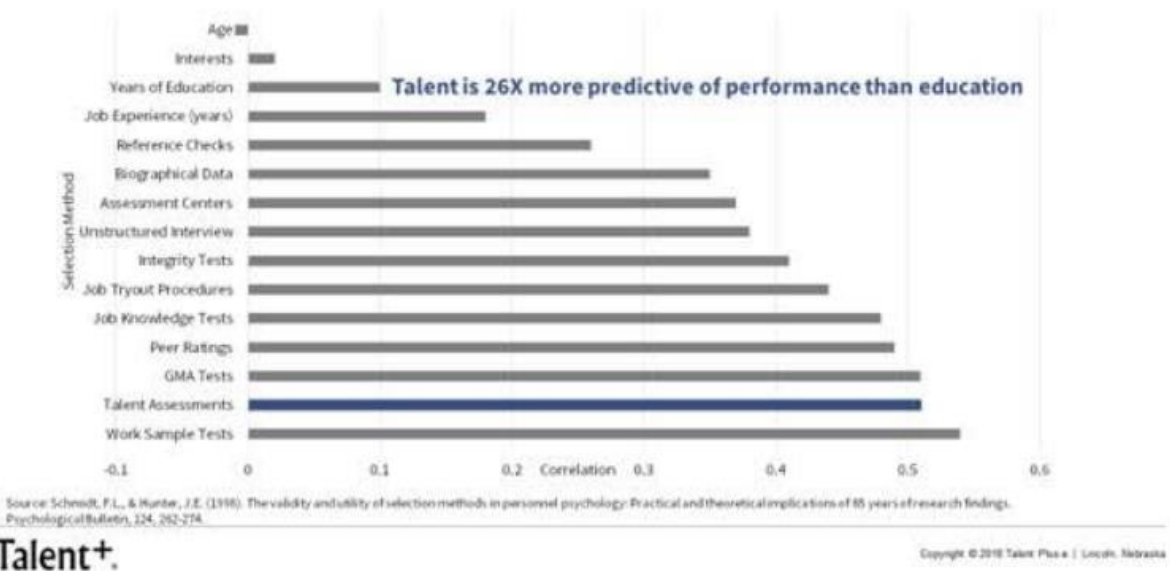


Figure 4-1 Importance of hiring talent (Talent Plus)

Validity Coefficient	US DOL Interpretation
Below .11	Unlikely to be Useful
.11-.20	Depends on Circumstances
.21-.35	Likely to be Useful
.36 and Above	Very Beneficial

Table 4-1 U.S. Department of Labor

Research results are presented in the table (Table 4-2) and graph (Figure 4-2) below. The aim of this research was to find out how well IT leaders perform across 10 executive interview themes compared to other leaders: Ego Drive, Focus, Intelligence, Conceptualization, Relationship, Persuasion, Individualized Approach, Growth Orientation, Response to Negativity, Executive Skill.

Talent Plus Themes	IT Leaders n=54	All Leaders n=3,766	Difference
Ego Drive	45.17	44.30	0.87
Focus	55.46	54.27	1.19
Intelligence	51.94	52.12	-0.18
Conceptualization	54.02	54.69	-0.67
Relationship	48.83	42.72	6.12
Persuasion	30.89	34.78	-3.90
Individualized Approach	43.00	44.80	-1.80
Growth Orientation	3.22	11.79	-8.57
Response to Negativity	41.81	39.00	2.81
Executive Skill	37.98	38.93	-0.94
Total Score	44.69	44.88	-0.19

Table 4-2 Research results table (Talent Plus, 2018)

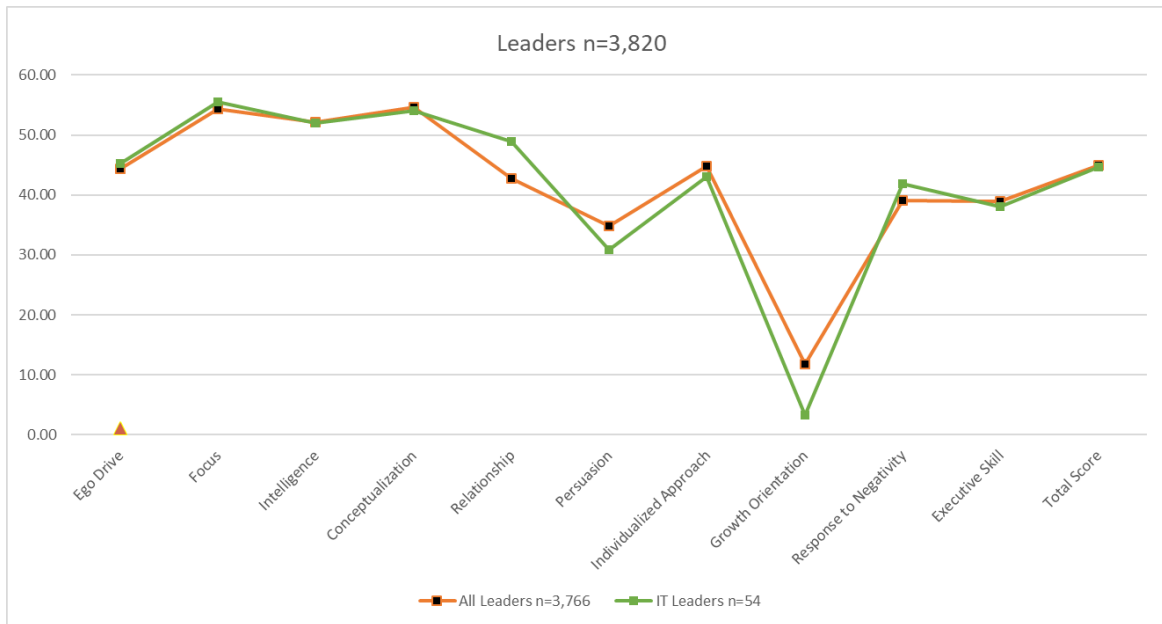


Figure 4-2 Research results graph (Talent Plus, 2018)

It is clearly visible from the table (Table 4-2) and graph (Figure 4-2) that IT leaders are for more than 1.0 point better than other leaders in three Talent Plus executive interview themes: Relationship (6.12 points), Response to Negativity (2.81 points), Focus (1.19 points).

IT leaders are better in Ego Drive theme as well, but for less than 1.0 point, they are better than other leaders for 0.87 points. Differences less than 1.0 point are not considered substantial. That is why we are discussing only strong and weak IT leaders themes which are different for more than 1.0 point.

In all other themes IT leaders are inferior to other leaders. For more than 1.0 point other leaders are better in three themes: Persuasion (3.90 points), Individualized Approach (1.80 points) and significantly better are in Growth Orientation theme (8.57 points).

4.1. IT leaders' strong themes

As listed in chapter 4. Results, it is clearly visible that IT leaders are superior to other leaders in three themes: Focus (1.19 points), Relationship (6.12 points), Response to Negativity

(2.81 points). For better results understanding, these three themes will be described in more details.

4.1.1. Relationship

IT leaders are, surprisingly, superior to other leaders in Relationship theme (6.12 points). Outstanding performers need and will establish and develop relationships with the people they like most. To them, a relationship is the response one makes to the existence of another person. They know their success is dependent on building relationships with people who will benefit from this effort. They are generous and will do things for people who are helped by this generosity.

They have a history of meeting different kinds of people and becoming acquainted with them. They know the value of communication and know how to ask the right questions. They are apt to listen more than they talk. They tend to build relationships with the people whom they can help the most, and these people are not necessarily the ones who need the most help.

Behaviours we can observe when Relationship is strong: good, caring relationships, high rapport with others, good listener, understand others' needs, work very well one-to-one, are liked by their associates, people want to help these individuals, higher morale due to these individuals' relationships, high motivation, continuously doing things for the benefit of others, know a great deal about the uniqueness of every associate, know how people think and feel, are generous, are discriminating in the relationships they establish.

Coaching recommendations for leaders whose Relationship is strong: arrange opportunities so they can mentor, coach and teach others and get recognition for their effort, ask them to give you their input as to the morale of individuals or groups of individuals or the organization as a whole, affirm their relationship skills, let them know their leadership is motivational to other associates, appreciate the fact that their contribution and morale correlates to productivity and profit (Talent Plus Executive Interview Interpretative analysis, 2012).

4.1.2. Response to Negativity

IT leaders are superior to other leaders in Response to Negativity theme (2.81 points). This theme is most frequently ignored. When negativity occurs, management should discover the cause and replace it with positive suggestions. To react in kind to a negative situation reinforces the negative situation, which consequently becomes worse. It is best discussed in private (one-to-one) and never before a group. If one perceives the situation in a positive attitude, positive action can be taken to solve it.

Behaviours we can observe when Response to Negativity is strong: Find the cause and work toward resolution, meet negativity with objectivity and investigate the why, approach the challenge with positivity, allow people to express their feelings in an accepting atmosphere, recognize the positive worth of each individual, help set positive goals and encourage people to improve, learn from and are open about mistakes, can push the “clear button” and move forward with minimal “excess baggage”.

Coaching recommendations for leaders whose Response to Negativity is strong: ask why and listen, affirm their positive approach, keep people involved looking for solutions, always see the cup as half full, instead of half empty, look at the good and successes, focus on the hygienic, establish the positive goals and encourage their attainment, when meeting extremely difficult situations, coach them by using this line, “What would you do if you were in my shoes?”, then - listen, listen, listen (Talent Plus Executive Interview Interpretative analysis, 2012).

4.1.3. Focus

IT leaders are superior to other leaders in Focus theme (1.19 points). Focus theme is predicated on a high energy level which individuals can channel down a course of action to reach an objective. They are able to reach their goals. They have both lifetime goals and short-term goals. They seem to know how to keep control of their own lives and of themselves. They know the exhilaration of reaching a high-performance level. They find out ultimately that only short-term vacations have any real place in productive living. They tend to be activists who never become bored because they have programmed their lives. They learn from every experience, and this helps them with the next one. They look for a certain

kind of career and know when they have found it. In their spare time, they are thinking about how to improve what they are doing, their ultimate goals and their relationships with their families and their clients.

Behaviours we can observe when focus is strong: maintain sharp focus in conversation or discussions, do not easily get side-tracked, set priorities and strategies in terms of goals, have a great deal of energy, are work-a-like-its, continuously thinking about improvement, correcting device is rarely involved in diversionary activity, very intense, programmed work history, take short, intense vacations, belong to a number of outside affiliations which help them grow in their own profession, stellar ability to plan short- and long-term.

Coaching recommendations for leaders whose Focus is strong: challenge their energy system, ensure they have a diet of goals with some stretch to extend their productive performance, seek their advice on ways to improve the quality of processes in the organization, recognize their ability to overcome obstacles and their relentless energy system, recognize contributions made by their expertise which continually grows each year because of their efforts, give them opportunity to take more frequent, intense and shorter vacations as opposed to several weeks at a time, encourage their pursuit of professional associations and membership (Talent Plus Executive Interview Interpretative analysis, 2012).

4.2. IT leaders' weak themes

As listed in chapter 4. Results introduction part, IT leaders are weaker in three themes compared to other leaders: Growth Orientation (8.57 points), Persuasion (3.90 points), Individualized Approach (1.80 points). For better results understanding these three themes will be described in more details.

4.2.1. Growth Orientation

IT leaders are inferior to other leaders in Growth Orientation theme (8.57 points). Growth of an organization takes place because these managers believe in identifying talent and developing it. Growth takes place because of the people in the organization. This is the driving force in these executives' activity patterns. This growth takes place most effectively

when executives select the position in which individuals can express their talents most efficiently. Executives recognize they must not only provide a goal that will facilitate these individuals' growth, but executives point out this fact to these individuals who find this fact to be true. Growth is a continuous process for every individual. If this does not occur, individuals reach plateaus or go "downhill" in their productive performance. These executives always give recognition for growth whenever it occurs.

Behaviours we can observe when Growth Orientation theme is weak: threatened by the growth and development of others, select mediocre people, are functionary people concerned with details, often all form, no substance, "Pickle managers" who are overly concerned with "administration", like the average performer rather than the highly productive performer.

Coaching recommendations for leaders whose Growth Orientation is weak: cast this person into a position where they can be more involved in administration than the growth and development of people, match them with talent that fits their management abilities so they are not threatened and force good people to leave the organization, place in "status quo" situations, ensure that someone is talking with the individuals about their personal growth plans (Talent Plus Executive Interview Interpretative analysis, 2012).

4.2.2. Persuasion

IT leaders are inferior to other leaders in Persuasion theme (3.90 points). Persuasion is a kind of trust relationship. It is used to cause individuals to do something they had not thought of doing, did not want to do or were afraid to do, but needed to do. They recognize that in the process they help individuals to establish their values and realize what is important to them, so they must know the needs of the other individuals.

Behaviours we can observe when Persuasion is weak: have difficulty in closing, do not lead people to see things their way, have difficulty in getting people to pay attention to their ideas, lack courage to overcome objections, do not establish trust which is critical to persuasion, have difficulty in matrix organizations, have difficulty in asking for and obtaining commitments.

Coaching recommendations for leaders whose Persuasion is weak: align them to positions where persuasion and courage are not critical, do not place them in difficult situations where their success is dependent upon their ability to get other people to follow them, cannot sell, therefore, do not place them in an area of non-talent which causes them to fail (Talent Plus Executive Interview Interpretative analysis, 2012).

4.2.3. Individualized Approach

IT leaders are inferior to other leaders in Individualized Approach theme (1.80 points). These individuals believe that all people have a desire to become significant and make a difference by what they do. They recognize that each individual is unique and, consequently, the more knowledge they have of each individual, the greater the opportunity to understand each person. People need and enjoy being understood, and this involves a continuous process which is the basis of all management relationships. They accept the law that the more you know about a person determines the effectiveness of all management efforts. A positive attitude is the key. These individuals must be able to recognize that management is interested in them and is trying to understand them. Individuals being managed will love this interest and concentration on their talents and will make good things happen.

Behaviours we can observe when Individualized Approach theme is weak: often oblivious to the feelings and concerns of others, fail to anticipate the needs of individuals, insensitive, often out of alignment, treat people as groups rather than individuals, uncomfortable knowing about the personal lives of individuals, pessimistic attitude, often inaccessible to others, often miss the point and can irritate people, may often be corrective and lack understanding.

Coaching recommendations for leaders whose Individualized Approach is weak: help them study each individual's talents, talk about the right supervision for an individual, establish a game plan for all individuals, work on some attitude adjustment when they seem to be negative, understand the person will have some limitations in truly understanding the motivation of individuals, accept the limitations of this theme, as it is one of the most difficult to grow and develop (Talent Plus Executive Interview Interpretative analysis, 2012).

5. Discussion and Conclusion

Going through literature and theory part of this thesis was the most difficult part to do because literature on IT leaders talent is by now 'very thin' worldwide and almost does not exist in Croatia. There is large literature on talent management, but IT leaders' talent has a very small literature. Therefore, I am placing here a call for further research on this important topic in order to extend and deepen the Information Technology leaders' talent related knowledge base and to expand the Information Technology leaders' talent literature base.

This thesis aims to give the contribution to IT leaders' talent field of research which can then be used by companies in Croatia and worldwide as well. It is important because Information Technology sector is the fastest growing sector in 21st century. IT leaders have to be experts in IT and simultaneously have to be able to manage people, their teams or departments. This is a huge problem, especially in a small country like Croatia, because majority of IT leaders simply don't have this talent, it doesn't come natural to them. Demand for this employee profile is growing rapidly and is much greater than the number of good available leaders.

This is not a general rule, but IT experts are mostly introverts, experts in their field of expertise, live in their universe of technology, very intelligent, they are deeply honest people, sometimes naive, having structured way of thinking, they like challenges and for them the glass is always half full, they are generally very positive people.

From that perspective it is not surprising that IT leaders have Focus as their strong theme compared to other leaders (for 1.19 points). They are structured, goal oriented, learn from their mistakes and always look how to do things in a better way and to improve procedures and products. They have a lot of energy, especially for the things they are really interested in.

It is also not surprising that IT leaders have better results in Response to Negativity theme (2.81 points) because IT leaders who are successful are great listeners, always look how to solve problems in a positive way, offer constructive and structured solutions. They are not negative in their core and they need a balance without negative situations. They are capable

of creating a clean start position after solving a problem and start from the beginning, forgetting the past issues if they are positively solved.

Perhaps, the greatest surprise in research results was significant difference in points in Relationship theme between IT leaders and other leaders (6.12 points). As being mostly introverts, we could never guess that IT leaders will have such advantage over other leaders in Relationship theme. IT leaders are always perceived as closed, hard to reach and hard to communicate with people. The most obvious explanation for this result is that there is a significant difference between IT experts and IT leaders. Successful IT leaders are obviously completely different from common perception of IT expert. Successful IT leader should be extrovert to some extent, should be able to establish relationships with other people, his colleagues and his team. It is essential that they understand them and can manage them successfully and to a right direction. Successful IT leader asks the right questions, is a great listener, has to be on top of everything if he wants things to function well.

Also, good IT leader has to be a great mentor and coach (IT expertise and on the team leader position). Without being able to build relationships successfully, he can't fulfill this role. IT leader has to be able to motivate his team, has to make atmosphere of trust and knowledge in which his team and a company as a whole will be able to grow and make higher profits.

On the opposite side, research results show that IT leaders have weaker results in the following three themes: Persuasion, Individualized Approach and Growth Orientation. Is this finding a surprise? Actually, it is completely true.

Persuasion theme is for 3.90 points weaker for IT leaders than for other leaders. IT leaders do not actually know how to persuade people to follow them, to follow their ideas. They are poor sellers and great builders and solutions makers. From this perspective, a great thing would be not to give them assignments which include persuasion because they will not perform at the expected level. On the other had, from people management perspective it is not good that leader does not have that persuasive power, he always has to have a power to persuade his team to follow the idea, the path he wants to follow. Also, IT leaders and IT people do not like hierarchy in the company management structure, they like informal, flat, agile way of working.

Individualized Approach theme is another theme in which IT leaders have weaker result than other leaders have, but the difference is very small, only 1.80 points. Difference is small because successful IT leader should be able to recognize individuals, their uniqueness, their unique needs and attitudes. Team members like to be understood and be accepted as individuals. Sometimes, IT leaders fail to recognize every individual in their team due to the fact that sometimes they are enthralled by some idea or project and stop noticing individuals and their individual needs, they rather look at them as a group and group needs. All this can result in bad understanding and communication. Luckily, this result is not that bad compared to other leaders since this theme is difficult to grow and develop.

Growth Orientation theme is significantly weaker for IT leaders than for other leaders, (- 8.57 points). This is the most significant different across all themes. This result indicates that IT leaders are less capable to recognize team member's position, to recognize on which position individual will be most effective and will be able to grow and develop its potentials and show his talents. This is true to some extent, but I would disagree with the theory which says that leaders fail to support their team's growth because they are afraid for their positions and are too oriented to administration. IT leaders do not feel threatened by their teams and their growth, they are simply not noticing it because they are concentrated on products development and development in their technology expertise. It is normal that leaders cannot be great in all themes. Growth Orientation theme poor results can be neutralised by delegating personal development plans creation to employees who have Growth Orientation as strong theme and they can share it with team members and IT leaders. These employees can also remind IT leaders from time to time to give performance feedback to team members signaling them if they are developing in right direction or not. Also, these employees should from time to time remind IT leaders about the importance of 1-on-1 meetings during which two sided feedback can be achieved and many potential problems can be avoided in advance.

5.1. Research results and literature

After explaining research results themselves, it is important to apply them to what existing literature has to say about talent in general and about IT talent in particular.

In section 2.1.1 Cohen has identified twelve talents of leadership: (1) demonstrate acute awareness, (2) encourage a challenging environment, (3) think with vision, (4) create alignment, (5) act decisively, (6) engage others, (7) exude powerful energy, (8) build relationships for success, (9) communicate and listen, (10) see patterns and trends, (11) create high-energy teams, (12) display consistency and integrity through authenticity. These can be linked to Talent Plus themes this research is based on. Talent of demonstrating awareness is linked to Intelligence theme. Leaders with strong Intelligence theme have higher levels of awareness. Second, third and tenth talent Cohen is mentioning are encourage a challenging environment, think with vision and see patterns and trends. These talents can be linked to two themes simultaneously – Relationship and Conceptualization. In order to successfully create challenging environment, leader has to be able to establish relationships (strongest IT leaders theme compared to other leaders) and has to be able to see the vision, to set the goal and know the concept and the direction. With all these stable conditions, challenging environment can be created. Think with vision talent can also be linked to Executive Skill theme because leaders with strong Executive Skill have clear vision and see the big picture. Talents four, five and seven - create alignment, act decisively and exude powerful energy can be linked to Focus theme which is IT leaders strong theme. Cohen's talents eight and nine – build relationships for success and communicate and listen are closely related to Relationship theme. Cohen's themes eleven and twelve – create high-energy teams and display consistency and integrity through authenticity can be linked to Focus and Executive Skill themes which are also IT leaders' strong themes (especially Focus).

Social Exchange Theory (Björkman et al., 2013) states that employee's motivation, performance, work satisfaction are different in different scenarios: if they are recognized as talent and it is communicated to them or they are not identified as talent or they don't know if they are recognized as a talent. IT leaders should not have this problems because, according to this research results, they are great at making relationships, superior to other leaders, consequently, they are good communicators, do not have a problem with giving feedback and they are extremely focused. On the other hand, according to SET, they should also get feedback that they are recognized as talent in order to have a sense of recognition and maximise their talent potential (Relationship, Focus, Response to Negativity...). Giving feedback and recognition by leaders is mostly related to Relationship theme (high rapport

with others, good listener, work very well one-on-one) and Individualized Approach theme (recognize each person is unique, have positive attitude, are good teachers and mentors). Research results show that IT leaders perform significantly better in Relationship theme and slightly worse in Individualized Approach theme than other leaders, so there is a room for improvement and development.

This research findings are important for talent management, the whole workforce market (Gurthridge et al., 2008) and especially for IT talent workforce market because it is important to know what talent really looks like, what should be looked for in IT leader and what talents have to be developed (Persuasion, Growth Orientation,...), how to make optimal working conditions to use talents in which IT leaders are better than other leaders and maximise their effects.

For the existence of every leader's talent it is important to have competence, commitment and contribution acting together. In other words, it is talent in a formula, talent = competence x commitment x contribution (Ulrich et al., 2012). If we take IT leaders' most successful theme compared to other leaders – making Relationships, they could not be great at it if they did not have the competence to make relationship (know-how), commitment in a sense that they are working hard on developing this talent and contribution meaning that they see a purpose of their work. This perspective is important for every theme; in order to be strong, all three components have to be present for success.

Of course, it is always possible that leader is overly self-centred (Ego Drive's Talent Plus theme possible characteristic, which is at the same value level for IT leaders and other leaders), that he does not notice other people around him. This disorder can derail talent and leaders are not able to show, for example, their Relationships making talent; and this is where IT leaders are superior according to research results. By definition, talent derailers are all self-centred actions and behaviours (Ross, 2013). It is important to work on minimizing talent derailing behaviours in order to use all benefits of themes when they are strong.

Natural process for majority of leaders is that they have transitions to higher positions during their careers (usually we are talking about six stages), from managing other employees to managing the whole company (Charan et al. 2011). Of course, talent is needed for successful

functioning on every management level, but as higher positions bring more responsibility, talent has to develop as well and possibility for talent derailment is raising with individual going up in management positions. For example, Focus talent level can not be the same at the first level and at the sixth level. Talent is individual's natural ability to perform better than others, but this ability can always be further developed. All leaders' strong and weak themes have to be supervised during every transition stage and develop according to specific level needs. From that perspective, it is extremely important to know every theme in detail, to refer to research results, to examine management level talent requirements and develop accordingly in order to maximise talent potential and overall success.

Literature has identified that IT leaders specifically, but it can be applied to all leaders as well, should embody three personas: communicator, salesperson, influencer (Bedi, 2018). Research results show that IT leaders should not have problems with being great communicators because this is their strong, dominant theme (successful communication is a part of a Relationship and Individualized Approach theme, and partially even a part of Executive Skill theme). But, being influencers and salespersons will be more difficult for IT leaders because Persuasion, Individualized Approach and Growth Orientation are their weak themes (Persuasion 3,9 points weaker for IT leaders than for other leaders, Individualized Approach is 1,80 weaker theme and Growth Orientation is significantly weaker theme for IT leaders than for other leaders – for 8,57 points) and should work on improving their persuasion talent. From that perspective, IT leaders are, according to research results better in one third of required personas and a lot of work and development should be invested that Persuasion, Individualized Approach and Growth Orientation become IT leaders' strong themes.

As the line between the business and Information Technology is almost non-existent in modern times, (Casey, 2018) has identified soft skills IT leaders cannot function without in this new demanding era: communication and openness, curiosity and tenacity, patience, clear and concise verbal and written communication, empathy, emotional intelligence (EQ), situational awareness and collaboration. Communication and openness, patience, empathy and collaboration are related to Relationship theme and Individualized Approach. As mentioned previously, Relationship is IT leaders' strong theme compared to other leaders, but Individualized Approach is slightly weaker for IT leaders. Clear and concise verbal and

written communication is somehow related to Relationship theme, but it is definitely more related to Conceptualization (ability to clearly communicate vision and message) which is at similar level for IT leaders (-0,67 points) than for other leaders. Emotional intelligence and situational awareness are linked to Intelligence theme which is almost at the same level for IT leaders (-0,18 points) as for the other leaders. To conclude, all IT leaders' soft skills Casey is mentioning are stronger for IT leaders than for the other leaders or almost the same for IT leaders and for other leaders.

Maglione (2018) talks about which talents successful IT leaders should possess: critical thinking, creativity, communication talent, collaboration, commitment and change acceptance. These requirements match perfectly with research results because majority of these can be considered as Relationship (communication, collaboration), Focus (commitment), Response to Negativity (change acceptance) and Intelligence (critical thinking and creativity) themes and these are IT leaders' strong themes, themes in which they are superior to other leaders (except Intelligence theme in which IT leaders perform almost the same as other leaders do (-0,18 points). According to this research findings, IT leaders will easily adopt to new demanding environment because they possess majority of identified talents. Great research value is that it has identified talents in which IT leaders are significantly weaker than other leaders. This is a great starting point for development plan creation and action.

To comment in short 'The War for Talent' problem, it is important to start with the fact that the main problem is that Information Technology leaders are the most wanted employee profile at the beginning of 21st century. Demand for their profile on the world workforce market is far greater than the supply is. Chambers et al. (1998) have identified that trend at the end of 20th century in their famous 'The War for Talent' writing. Situation has nowadays become even more serious and complicated because almost every process we are surrounded with is Information Technology dependant and requires great and specialised expertise. It is extremely important to direct young generations to Information Technology and to develop their talents accordingly. This research results will help in a way that this development goes to the right direction because it identifies IT leaders' strong themes, equally ranked themes and weak themes compared to other leaders. This is a great starting point for companies to

know what talents to expect in general from IT leaders and based on that fact create of development plans which will be adjusted to real situation on the market.

What motivates talent part from section 2.3.3 is almost all about Executive Skill, about having a talented leader who has a vision, understands people, sees the big picture, provides all that his employees need and want. This way talent is motivated in the company and it grows, becomes stronger and stronger. IT leaders perform slightly worse in Executive Skill than other leaders do (-0,94 points).

Literature identifies majority of talents related to IT leaders strong themes and most of them are repeated up to two to three times in different literature sources (meaning that they are really important), for example: communication, feedback, collaboration, listening (Relationship, strongest theme, 6,12 points stronger than other leaders); have a clear vision and direction, strong energy (Focus); dealing with change (Response to Negativity). Second category of talent which is most frequently mentioned is the one in which IT leaders perform almost the same as other leaders do, for example: know it all attitude (Ego Drive); critical thinking, emotional intelligence, awareness (Intelligence), see the big picture, do not use only the one metric for measuring KPIs (Executive Skill). The smallest category literature identifies is the one in which IT leaders perform significantly worse than other leaders and there is a lot of room for improvement, for example: Persuasion, Individualized Approach, Growth Orientation (biggest gap).

5.2. Research results application in Information Technology companies in Croatia

This research was motivated by certain problems noticed in Information Technology companies in Croatia and related to Information Technology leaders' talent. Majority of other sectors in Croatia are not facing these leaders' talent issues. This is probably due to the fact that Information Technology experts (who have eventually become Information Technology leaders) are a special profile of people, with different interests. These facts were in most cases not taken into consideration by now because in Information Technology sector leaders' technical skills are also very important and most of the attention when thinking about a potential leader was put to technical knowledge. Which is proven to be wrong.

Successful Information Technology leader should be both technical expert and have leadership talents developed. Just a minority of IT leaders have both from the start.

Companies in Croatia will benefit a lot from this research findings because they will finally know how the Information Technology leader's talent looks like, which are his strong themes and which are his weak themes. Different tests can be used during selection process to check how potential leader candidate performs in different aspects of talent. When recruiters will have this information, they will be able to see if that really is the right candidate for opened leadership position. They will know that they have to explain in more details what the job will look like and actually ask the candidate if he is ready and happy to do more managerial tasks and less technical tasks, discuss with the candidate the areas which can be further developed to create more successful leader. The whole picture will generally be clearer for companies and recruiters and they will be able to plan more directed actions which will result in promoting and hiring the right people on the right positions.

Information Technology companies in Croatia which will be willing to accept and implement these new findings and adjust their Information Technology leaders selection process to these findings, will for sure gain a lot with respect to the quality of Information Technology leaders' talent they are hiring, by implementing more efficient processes and by solving majority of problems related to Information Technology leaders' talent.

5.3. Thesis questions answers

Research results give complete and precise answers to thesis questions set at the beginning of this thesis and support them:

- 1. What does IT leaders' talent look like?*
- 2. How is IT leaders' talent different than other leaders' talent?*
- 3. How can research findings related to leaders' talent/IT leaders' talent help us win 'The War for Talent'?*

1. *What does IT leaders' talent look like?*

IT leaders' talent is specific since IT leaders are a special category of leaders with strong technical background and less leadership talents, which can be concluded if we look at the talent definition and compare it to the real situation - *"talent is a person's capacity for near-perfect performance that exists naturally within an individual"*. Main points of difference between IT leaders' talent and other leaders' talent is that IT leaders' talent is definitely the ability to focus, to have structure of thoughts and processes directed to goal achievement, positive thinking and, the most important research finding, it is extremely relationship oriented.

2. *How is IT leaders' talent different than other leaders' talent?*

IT leaders' talent is very different from other leaders' talent, research results show weaker results in six out of ten themes which were research subject: Intelligence, Conceptualization, Persuasion, Individualized Approach, Growth Orientation, and Executive Skill. IT leaders are stronger in: Ego Drive (negligible difference), Focus, and Response to Negativity and significantly stronger in Relationship theme. The finding that IT leaders are significantly stronger than other leaders in Relationship theme is the most important, most surprising and most valuable research result.

3. *How can research findings related to leaders' talent/IT leaders' talent help us win 'The War for Talent'?*

'The War for Talent' is described in detail in chapter 2.3 of this thesis. This is one of the most important questions in 21st century. We are facing the lack of talent in general, lack of leadership talent and especially lack of IT leadership talent. On the first sight, 'The War for Talent' is not directly related to this thesis theme, but actually it is closely related to this theme and its research results. If we understand the talent itself better, if we identify certain talent's strengths and weaknesses, we will be able to adjust our actions and tools we are using in trying to win 'The War for Talent'.

Related to IT leaders' talent, based on this research results we know that IT leaders' strong talents are (compared to other leaders' talents): Relationship, Response to Negativity and Focus. On the other hand, we know that we can expect that they will most probably perform poorly on: Growth Orientation, Persuasion and Individualized Approach. In other talent themes IT leaders are performing similar to other leaders.

First benefit of this approach is that we know exactly what to expect, we can prepare our expectations accordingly and we can adjust development plans for IT leaders based on these findings. If we really need talents IT leaders are performing poorly on, we can create education/development plans which will help us in transforming weaknesses into strengths to the extent to which it is possible to do so. This is especially valuable for many Croatian companies that are struggling with the lack of adequate IT leaders' talent. But, of course, it is applicable worldwide as well.

The conclusion is that questions posed in this thesis are founded, research results and findings are valuable and are answering thesis questions adequately.

This thesis sets the foundation for future IT leaders' talents research. It is essential to understand what IT leaders' talent looks like and what it consists of, discover talent aspects in which IT leaders are strong, but also the weak ones in order to develop them and make them strong as well. Workforce market needs great IT leaders and needs many of them. If we know what aspects of talent they already possess and what aspects of talent they still have to develop, the success is insured.

List of Abbreviations

HR	<i>Human Resources</i>	ljudski resursi
IT	<i>Information Technology</i>	informacijske tehnologije
KPI	<i>Key Performance Indicators</i>	ključni pokazatelji uspješnosti
SEL	<i>Social Emotional Learning</i>	društveno-emocionalno učenje
SET	<i>Social Exchange Theory</i>	teorija društvene razmjene
SME	<i>Small and Medium Enterprises</i>	mala i srednja poduzeća
U.S.	<i>United States</i>	Sjedinjene Države
4IR	<i>Industrial Revolution 4.0</i>	industrijska revolucija 4.0

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References

Asplund, J., Lopez, S. J., Hodges, T., & Harter, J. (2007). *The Clifton Strengthsfinder® 2.0 Technical Report: Development and Validation*. The Gallup Organization, Princeton, NJ.

Bedi, C., *Three Crucial Personas of Successful CIOs*, February 23rd, 2018, <https://enterpriseproject.com/Article/2018/2/3-Crucial-Personas-Successful-Cios> [accessed August 8th 2018]

Björkman, I., Ehrnrooth, M., Mäkelä, K., Smale, A., Sumelius, J., *Talent or Not? Employee Reactions to Talent Identification*, Article in Human Resource Management, March–April 2013, Vol. 52, No. 2. Pp. 195–214

Casey, K., *Top Soft Skills for IT Leaders and How to Master Them*, February 5th, 2018, <https://enterpriseproject.com/Article/2018/2/Top-Soft-Skills-It-Leaders-And-How-Master-Them> [accessed August 6th 2018]

Chambers, E. G., Foulon, M., Handfield-Jones, H., Hankin, S. M., Michaels, E. G. III, *The War for Talent*, The Mckinsey Quarterly: The Online Journal Of Mckinsey & Co., 1998, Number 3

Cohen, A., *The Twelve Essential Talents of Leadership*, http://apps.prsa.org/Intelligence/Tactics/Articles/View/9096/1029/The_12_Essential_Talents_of_Leadership#.Wzdvr6czzpy, March 31st 2011 [accessed August 9th 2018]

Čoklica, C., Business Development Manager, Manpower d.o.o. Interviewed by: Pavičić, M. (July 2nd 2019)

Gallardo-Gallardo, E., Dries, N., González-Cruz, T. (2013). *What Is The Meaning Of 'Talent' In The World Of Work?*, Human Resource Management Review, 23 (4), 290-300

Gurthridge, M., Komm, A.S., Lawson, E., *Making Talent a Strategic Priority*, The Mckinsey Quarterly (2008, Number 1)

Hrnjak, K., Owner and CEO, Yottabyte j.d.o.o. Interviewed by: Pavičić, M. (July 5th 2019)

ISTRAŽIVANJE: IT tvrtke sve se teže nose s problemom nedostatka kvalitetnih IT stručnjaka na tržištu rada (June 10th 2016);

<https://www.itbizcrunch.com/index.php/biz-itbiu-istrazivanja/item/4199-istrazivanje-it-tvrtke-sve-se-teze-nose-s-problemom-nedostatka-kvalitetnih-it-strucnjaka-na-trzistu-rada> [accessed June 18th 2019]

Kreković, G., Management Advisor, Visage Technologies d.o.o. Interviewed by: Pavičić, M. (June 18th 2019)

Maglione, J., *Want More Soft Skills in IT? Tweak your Interview Process*, May 03, 2018, <https://enterpriseproject.com/Article/2018/5/Want-More-Soft-Skills-It-Tweak-Your-Interview-Process> [accessed August 7th 2018]

Ross, S., *How Definitions of Talent Suppress Talent Management*, Industrial and Commercial Training, 2013, Vol. 45 Issue: 3, Pp.166-170

Ross, S., *Talent Derailment: A Multi-Dimensional Perspective for Understanding Talent*, INDUSTRIAL AND COMMERCIAL TRAINING, VOL. 45 NO. 1 2013, Pp. 12-17, Q Emerald Group Publishing Limited, ISSN 0019-7858 DOI 10.1108/00197851311296656

Stojanac, P., CEO, Visage Technologies d.o.o. Interviewed by: Pavičić, M. (July 4th 2019)

Talent Plus © 2012 *Executive Interview Interpretive Analysis*SM, Theme Pages, Copyright © 2012 Talent Plus, Lincoln, Nebraska

Talent Plus Senior Leader Interview Overview, Copyright © 2017 Talent Plus, Lincoln, Nebraska

Talent Plus, <https://www.talentplus.com/about-us/>, November 14th 2014
[accessed October 10th 2018]

Tansley, C., *What do we Mean by the Term ‘Talent’ in Talent Management?* INDUSTRIAL AND COMMERCIAL TRAINING J VOL. 43 NO. 5 2011, Pp. 266-274, Q Emerald Group Publishing Limited, ISSN 0019-7858 DOI 10.1108/00197851111145853

Ulrich, D., Smallwood, N., *What is Talent?*, Executive Forum, Leader to Leader, Winter 2012

Vlačić, E., *Izazovi talenata u galopirajućoj eri 4. Industrijske revolucije*, March 19th 2019, <https://lider.media/tehnopolis/ernest-vlacic-izazovi-talenata-u-galopirajucoj-eri-4-industrijske-revolucije/> [accessed July 5th 2019]