

# REASONS FOR PROFESSIONALS TO STAY OR LEAVE INFORMATION TECHNOLOGY ORGANIZATIONS<sup>1</sup>

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## ABSTRACT

**Purpose:** This study describes the reasons for professionals to stay or leave information technology (IT) organizations in Santa Catarina.

**Originality/value:** Technology organizations have experienced challenges in retaining professionals. Therefore, this study contributes to the literature on the subject by presenting the professionals' perceptions about their reasons for voluntarily staying or leaving these organizations.

**Design/methodology/approach:** Four hundred and forty workers from private technology companies freely answered two open questions in an online questionnaire (survey): "What are the reasons that maintain you working at this company?" and "For what reasons would you leave this company in the future?". The responses, collected in the second half of 2016, were inductively coded and subsequently aggregated into categories.

**Findings:** The results indicate that the professionals remain in the researched organizations primarily due to occupational (job satisfaction, organizational commitment, proper working conditions and perception of professional growth), organizational (adequate management practices) and environmental reasons (perception that there are no better work alternatives). The professionals surveyed would leave the organizations they currently work, primarily for occupational reasons (lack of job satisfaction and opportunities for professional growth, lack of an outlook on valorization and better working conditions), as well as for organizational (inadequate management practices), environmental (better job alternatives) and individual reasons (career planning). Based on the analysis of these results, an agenda for future research on the investigated topic is presented.

## KEYWORDS

Permanence in organizations. Exit from organizations. Retention. Intentions. Technology companies.

## 1. INTRODUCTION

Information technology (IT) organizations play a central role in creating and improving technological infrastructure that is transformative in a large portion of social life (Singh & Hess, 2017). They contribute to the development of technological (Bessick & Naicker, 2013) and social innovation (Gupta, Kumar, & Karam, 2020). The knowledge and professional experience within them are paramount resources for the operations of such organizations. When these professionals leave their organizations, they take with them their knowledge and acquired experiences. As such, the retention of professionals is a critical point (Mourmant, Gallivan, & Kalika, 2009) and the biggest challenge to the IT industry (Pant & Venkateswaran, 2019).

In the “Conference Board 2016” report on executives from global companies, the inability to attract and retain professionals was considered the main challenge, ranking above other topics, such as economic growth and competitive level (Keller & Meaney, 2017). This reality is evident in the expectation that in Brazil the demand will be for 70 thousand new IT professionals per year up to 2024 (Associação Brasileira das Empresas de Tecnologia da Informação e Comunicação, 2019). Concomitant to the lack of such professionals, evidence shows the impact of the voluntary exit of these professionals on the productivity and financial performance of these organizations (Massingham, 2018).

The technology hub in the state of Santa Catarina is the sixth biggest one in Brazil regarding the number of companies, the fourth in revenue, the second in productivity, and the third in number of employees. In 2019, 3.5 thousand new jobs were created. However, with the impacts of the pandemic, more than a thousand jobs in the technology area were closed in the state in April of 2020; even then, the negative balance (between job exits and entries) was only of 49 professionals (Associação Catarinense de Tecnologia – Acate, 2020). The lack of IT professionals in the workforce drives up the competition between organizations for the knowledge and experience of these professionals, which illustrates the importance of understanding why people choose to remain in an organization and why they would choose to leave voluntarily. Considering this context, this work aims to describe the perception of professionals that work in IT organizations in the state of Santa Catarina, on what their reasons would be to either remain or leave their jobs voluntarily. We aim to verify whether or not these professionals, when asked in an open format, present similar response categories to the ones identified by quantitative studies, detailed in the next section. With

knowledge of the perception of these professionals, managers in IT organizations will be able to develop practices and policies for the retention of such professionals and the knowledge they possess.

## 2. THEORETICAL FRAMEWORK

An analysis of the literature on this topic indicates a rise in the number of studies on determinants of intention and/or behavior of staying or of voluntarily leaving by professionals of technology organizations (Kim, 2012; Korsakienė, Stankevičienė, Šimelytė, & Talačkienė, 2015). Studies are still few in numbers in Brazil, with quantitative delimitation and involving few research groups (Luz, Paula, & Oliveira, 2018; Bello & Steil, 2020; Steil, Cuffa, Iwaya, & Pacheco, 2020).

The determinants of staying or voluntarily leaving from organizations can be classified into different categories: individual, occupational, organizational, and environmental. The *individual determinants* are sociodemographic characteristics, such as age, sex, marital status, education level, and the career plan developed by the individual. Studies from previous decades present more evidence for sociodemographic characteristics as determinants than recent ones. For example, Fottler (1978) identified that age was correlated with retention, while studies by Harden, Boakye, and Ryan (2018) and Bello and Steil (2020), developed in IT organizations, found that age did not influence a professional's decision to leave an organization.

In terms of sex, Sheridan (1992) identified a negative relationship between females and retention. On the other hand, studies by Harden et al. (2018) and Bello and Steil (2020) in IT organizations found no association between sex and intention to leave an organization. However, the study by Bello and Steil (2020) identified an association between marriage and having children with the intent to remain in an organization.

Career planning, from the perspective of the individual, is not a classical individual determinant. It was identified as a reason for voluntarily leaving the organizations more recently, especially by younger professionals (Gubler, Arnold, & Coombs, 2014). Identifying this variable as a reason for voluntarily leaving the organizations reflects a change in career planning by new generations (Amundson, Borgen, Iaquina, Butterfield, & Koert, 2010). These new generations tend to plan their careers independently of organizational boundaries and have different assumptions on the meaning of hierarchy and career progression (Arthur, 2008).

The *occupational determinants* encompass factors related to the work the individual performs in the organization and to their feelings towards these factors. The occupational determinants most prevalent in research on retention are satisfaction, motivation, and salary (Ghapanchi & Aurum, 2011; Steil, Penha, & Bonilla, 2016). However, the most prevalent ones in research on intention to leave are the absence of: satisfaction, commitment, feeling of support, quality of life, well-being, organizational identification and sense of success in their careers; and the existence of a work-family conflict (Steil, Floriani, & Bello, 2019).

Work satisfaction and organizational commitment are associated with both the effective stay and the intention to stay in professionals within technology organizations, while non-satisfaction is associated with the intention to leave (Ghapanchi & Aurum, 2011; Chang, Wang, & Huang, 2013; Brown, Fraser, Wong, Muise, & Cummings, 2013; Steil, Dandolini, Souza, Cuffa, & Costa, 2018; Bello & Steil, 2020). Satisfaction is one of the most researched variables in organizational behavior and represents the attitude of the individual, an evaluative state that expresses content and positive feelings towards work (Judge & Kammeyer-Mueller, 2012). Commitment can be characterized by at least three factors: “(a) a strong belief in and an acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) and a strong desire to maintain membership in the organization” (Mowday, Porter, & Steers, 1982, p. 27). As satisfaction and commitment are attitudes, these influence behavioral intentions and behavior, given that attitudes are one of three predictors of volitive behaviors (Ajzen, 1991). The behavioral intentions to stay or leave an organization relates to cognitive processes that entail thinking, planning, and the desire of the individual to stay or leave voluntarily the organization where they work (Cohen, Stake, & Goodman, 2016). However, staying and/or leaving the organization are the actualization of intentions in behaviors.

Other factors associated with retention and intention to stay include a sense of being valued, learning throughout life, professional development (Brown et al., 2013), projects that strengthen the bonds between employee and organization (Bastos & Menezes, 2010), a pleasant and respectful environment, autonomy, a challenging work, and recognition of the work (Carraira, Nunes, & Sarsur, 2014).

In relation to salary, research indicates that it is not sufficient to guarantee a professional’s loyalty to the organization (Taylor & Cosenza, 1998) and their staying; when perceived as inferior to what is expected, it may be a stimulus towards the intent of the individual to leave the organization

(DiMattio, Roe-Prior, & Carpenter, 2010; Singh & Loncar, 2010). Studies on professionals from Brazilian IT (Luz et al., 2018) and research and development (Steil et al., 2018) organizations reveal that the lack of salary satisfaction influences the intention to leave the organization in these professionals.

Professional growth, understood as the “intrinsic desire for personal development and preparation for future life” (Park, Park, & Hwang, 2019, p. 4), is also associated with retention (Oliveira, Ckagnazaroff, Silveira, & Moraes, 2013; Ceribeli, Ferreira, & Botelho, 2017). However, the absence of a sense of growth influences the leaving of the professional from the organization (Estryn-Behar, van der Heijden, Fry, & Hasselhom, 2010). Given that the basis for the perception of growth is the development of skills, and IT professionals need to update their knowledge continuously due to technological changes, professional growth is necessary for the maintenance of employability (Adams & Demaiter, 2008). This is also relevant to younger generations, who value opportunities for continuous learning (Lub, Nije Bijvank, Matthijs Bal, Blomme, & Schalk, 2012). A study in Canada reveals how the development of skills occurs for IT professionals, adding relevance to the perception of professional growth in the organization. When asked about how they developed their skills in the area, the Canadian IT professionals responded: via self-teaching activities (86%), informal training in the workplace (72.2%), and previous professional experience (67.8%) (Adams & Demaiter, 2008).

The existence of state-of-the-art IT infrastructure, especially in IT organizations, is associated with retention (Bossert & Laartz, 2018; Samuel & Chipunza, 2009) and increase in professional reputation (Dumont, 2017). This variable adds to the set of organizational actions to guarantee adequate working conditions. As a “set of circumstances in which labor activities are developed and influence significantly the experience of labor and the dynamics of work relations” (Blanch, 2003, p. 229), working conditions influence the attitudes and feelings of the professional in relation to their job.

Variables related to professional valorization are also associated with retention. For the individual, the perception that they’re being valued professionally entails subjective factors, such as “respect and trust, favorable institutional environment, pride in doing something important for themselves and for society, and pleasure in facing and conquering challenges” (Gabriele, 2001, p. 1). There is evidence pointing that the following variables, related to the perception of professional valorization, are associated with retention: the existence of variable pay and performance bonus (Samuel & Chipunza, 2009), work enrichment (Hlanganipai & Mazanai, 2014), and a career in the organization.

Organizational and environmental determinants are less researched. Nevertheless, the main body of evidence follows. The *organizational determinants* are the characteristics and practices of the internal environment in an organization (such as organizational culture and practices and policies on human resources). Within the organizational determinants, the ones most prevalent in relation to retention are: training, organizational culture with values focused on relations, promotions, and benefits (Steil et al., 2016). Appropriate management practices may also influence the retention of these professionals (Glaister, Karacay, Demirbag, & Tatoglu, 2018). However, when they do not meet expectations, these professionals are more likely to leave the organizations (Naim & Lenka, 2018).

Finally, the *environmental determinants* are the stimuli and phenomena external to the organization, which can influence the functioning and the retention of the individual within it (such as the existence of alternative employment opportunities, economic crisis, and administration changes in the government) (Ghapanchi & Aurum, 2011; Burakova, Ducourneau, Gana, & Dany, 2014). The following environmental variables were associated with retention in prior studies: recession periods, a high rate of unemployment, and government administration changes (Oliveira et al., 2012; Huang, Lin, & Chuang, 2006).

### 3. METHOD

Data came from open-ended questions from a survey study on the retention of professionals in technology-based organizations in the state of Santa Catarina. Participants were approached by contacting owners, human resources managers, and/or professionals within IT organizations. The link for the questionnaire was made available through e-mail, WhatsApp (an instant messaging application popular in Brazil), or Facebook. We utilized a term of free and informed consent, in accordance with Resolution CNS n. 510/2016<sup>5</sup>, informing the participants of the objectives, implications of participating in the research, guarantees of secrecy of responses, and request for consent.

The non-probabilistic sample comprised 440 professionals that work in IT organizations in the state of Santa Catarina. The collection of data

<sup>5</sup> Approved by the Conselho Nacional de Saúde (CNS) on April 7, 2016, Resolution n. 510, which lays out the protections and rights of research subjects.

happened during the second semester of 2016. The participants answered the following open-ended questions: “What are the reasons that maintain you working at this company?” and “For what reasons would you leave this company in the future?”.

The analysis and interpretation of data were based on the method of codification and categorization compiled by Saldaña (2009): pre-analysis of responses, the establishment of initial codes, definition of final codes, definition of categories, and analysis of results. Each code is a word or short phrase which summarizes and highlights outstanding elements of the participant’s response, intending to capture the essence of the data. As highlighted by Richards and Morse (2007, p. 137, as cited in Saldaña, 2013), “the coding is not merely to attach a ‘label’”, but to make a link: “the coding takes us from the data to the idea, and from the idea to all data belonging to that idea”.

The category consists of a representative synthesis of the codes that capture meanings, which have characteristics of mutual exclusion, homogeneity, relevance, objectivity, fidelity, and productivity (Saldaña, 2009). This process is inductive and subjective, as it is informed by the data, without “trying to fit into a preexisting coding frame” (Braun & Clarke, 2006, p. 10), opening the possibility for the achievement of new insights about the meaning of the empirical data contributed by the participants of the research.

The data were coded independently by the researchers and later discussed. The analysis of the 440 answers from the professionals to the question “What are the reasons that maintain you working at this company?” generated 475 codes, with 733 occurrences. The analysis of the answers from the professionals to the question “For what reasons would you leave this company in the future?” generated 407 codes, with 813 occurrences. A single answer can generate multiple codes, as coding by sentence or by line was used (Saldaña, 2009).

Figure 3.1 exemplifies the attribution of multiple codes to a single answer and presents the final descriptive codes. Adjustments were necessary when different codes were assigned for the same base text by the researchers. In such cases, a consensus was achieved on which final code was most representative of the essence of the data. After consensus was achieved, the codes were organized and grouped into categories.



(Figure 3.1)

## EXAMPLE OF THE PROCESS OF ANALYSIS AND CODING OF ANSWERS

Question	Answer	Initial code(s)	Final code(s)
What are the reasons that <i>maintain</i> you working at this company?	The opportunity for rapid growth. The autonomy to develop new projects. The alignment of the company's values and my values.	Opportunity for rapid growth	Professional growth
		Autonomy	Autonomy
		Alignment of values	Organizational culture
For what reasons would you <i>leave</i> this company in the future?	The opportunity to grow, career plan, the opportunity to develop new skills, a better salary, better benefits, flexible working hours, a more free environment, the opportunity to work from home.	Opportunity for growth	Professional growth
		Career plan	Compensation plan
		Opportunity for development of new skills	Learning
		Better salary	Salary satisfaction
		Better benefits	Satisfaction with benefits
		Freer environment	Working conditions
		Remote work	Management practices

Source: Elaborated by the authors.

In accordance with the principles of science (such as dependence on evidence, models, and parsimonious explanations of reality) and rationality (such as logic) (Gauch Jr., 2003), we added deductive reasoning to the process of categorization. The deductive strategy was utilized to aggregate the meanings of the codes based on the accumulated scientific knowledge on the categories used to comprehend organizational behavior. Thus, the codes were organized into the following categories of reasons to stay or leave the organization: individual, occupational, organizational, and environmental. The details of these categories are presented in the next section.

## 4. RESULTS AND DISCUSSION

### 4.1 Researched sample

The sample was composed of 440 professionals who work in private IT organizations in the state of Santa Catarina. The participants of this study were men (52%) and women (48%), the majority of them were between 21 and 30 years old (55.7%) and 31 and 40 years old (29.5%). They were mar-



ried/in a civil union (50%), single (45.2%), divorced (3.18%), or declared another marriage status (1.62%). The vast majority (71%) of professionals do not have children.

Most prevalent were the professionals with a degree at the undergraduate level (42.5%) and graduate level (specialization/MBA, masters or doctorate) (35%). Most professionals (67.7%) have up to four years of work in their current organization. Most prevalent were the professionals that work in organizations from southern Santa Catarina (35%), from the Florianópolis metropolitan area (30%), and from the Vale do Itajaí area (27%). As of the data collection date, 23% of professionals earned up to two times the Brazilian minimum wage; 35.2% earned between two and four times; 22% earned between four and six times; and 19.8% of professionals earned more than six times the Brazilian minimum wage. In the following section, we present the results and discussion around the reasons to stay or voluntarily leave organizations by these professionals in IT companies in the state of Santa Catarina.

## **4.2 Reasons for professionals to stay and to voluntarily exit organizations**

The reasons to stay and for voluntary leave of professionals were organized in categories and final descriptive codes, as Figure 4.2.1 shows. The categories and their corresponding codes are shown in the center of the table. The individual reasons are utilized to justify both staying and potentially leaving voluntarily the organization in the future, whereas the occupational, organizational, and environmental reasons may be responsible for the retention of professionals in the organization when their rating is positive. However, when their rating is negative, they are utilized to justify a potential voluntary leaving from the organization. We also identified unspecific answers and non-representative ones (low occurrence) that were allocated into the categories of reasons coded as “others”. These are very broad answers that do not allow for a precise interpretation of their meanings, such as: “failed acts only in my sector”, within organizational reasons.



(Figure 4.2.1)

### REASONS TO STAY AND FOR POTENTIAL VOLUNTARY LEAVE OF PROFESSIONALS, ORGANIZED BY CATEGORIES AND FINAL DESCRIPTIVE CODES

Reasons to leave		Categories and final descriptive codes	Reasons to stay	
Percent	Total occurrences		Total occurrences	Percent
100%	733	Total	813	100%
<b>4.0%</b>	<b>29</b>	<b>Individual reasons</b>	<b>8</b>	<b>1.0%</b>
4.0%	29	Career planning	0	0.0%
0.0%	0	Paying bills/survival	8	1.0%
<b>65.0%</b>	<b>477</b>	<b>Occupational reasons</b>	<b>660</b>	<b>81.3%</b>
1.2%	9	Learning	40	4.9%
13.5%	99	Professional growth	129	15.9%
2.3%	17	Organizational commitment	103	12.7%
7.4%	54	Working conditions	112	13.8%
0.0%	0	Stability	9	1.1%
2.2%	16	Impact on health	7	0.9%
0.3%	2	Interferences	0	0.0%
0.8%	6	Distributive justice	1	0.1%
1.6%	12	Motivation	4	0.5%
0.5%	4	Interpersonal relations	0	0.0%
3.4%	25	Satisfaction with leadership	13	1.6%
2.2%	16	Satisfaction with benefits	38	4.7%
17.5%	128	Satisfaction with salary	72	8.9%
1.5%	11	Satisfaction with work	55	6.8%
0.7%	5	Satisfaction with colleagues	59	7.3%
1.2%	9	Satisfaction with promotions	1	0.1%
8.3%	61	Valorization	15	1.8%
0.4%	3	Others	2	0.2%
<b>16.8%</b>	<b>123</b>	<b>Organizational reasons</b>	<b>113</b>	<b>13.9%</b>
2.5%	18	Organizational culture	37	4.6%

(continues)

**(Figure 4.2.1 (conclusion))**

**REASONS TO STAY AND FOR POTENTIAL VOLUNTARY LEAVE OF PROFESSIONALS, ORGANIZED BY CATEGORIES AND FINAL DESCRIPTIVE CODES**

Reasons to leave		Categories and final descriptive codes	Reasons to stay	
Percent	Total occurrences		Total occurrences	Percent
3.3%	24	Compensation plan	2	0.2%
9.5%	70	Management practices	70	8.6%
0.7%	5	Management organization	3	0.4%
0.5%	4	Operational budget cuts	0	0.0%
0.3%	2	Structural problems	0	0.0%
0.0%	0	Others	1	0.1%
<b>14.2%</b>	<b>104</b>	<b>Environmental reasons</b>	<b>32</b>	<b>3.8%</b>
1.5%	11	Entrepreneurship	0	0.0%
0.8%	6	Family and friends	2	0.0%
0.3%	2	Critical incidents	0	0.0%
2.3%	17	Place of residence	14	1.7%
8.3%	61	Better opportunities in the same area	10	1.2%
0.0%	0	Job market instability	6	0.7%
0.7%	5	Change	0	0.0%
0.3%	2	Goals	0	0.0%

Source: Elaborated by the authors.

A systematic review of antecedents of intention to leave different types of organizations showed that 95% of the variables associated with the intention to leave an organization are occupational and 5% are organizational (Steil et al., 2019). In regards to the potential voluntary leaving of professionals, in this study, occupational reasons were the most representative (65% of total codes), followed by organizational (16.8%), environmental (14.2%), and individual reasons (4%). Within these categories, the codes that stood out were: lack of an outlook on satisfaction (26.5%), with 17.5% of these specifically on satisfaction with salary; lack of an outlook for professional growth (13.5%); inadequate management practices (9.5%); lack of an outlook on valorization (8.3%); and better opportunities in the same area (8.3%).

In regards to the staying of professionals in organizations, occupational reasons also were the most representative (81.3% of total codes), followed by organizational (13.9%), environmental (3.9%), and individual reasons (1%). Within these categories, the codes that stood out were: satisfaction (29.3%), professional growth (15.9%), working conditions (13.8%), and organizational commitment (12.7%).

Prior studies on different types of organizations also found that the occupational factors are the most prevalent in determining retention. In a review that analyzed 26 studies about the precursors for retention, Steil et al. (2016) found that 73% of the studies identified occupational factors as determinants for retention, while 63% of the studies identified organizational factors, 23% identified individual factors, and 11.5% identified environmental factors.

The results of this qualitative study are in line with prior quantitative studies, specifically on the matter of higher prevalence of occupational and organizational factors as reasons for professionals to stay in organizations. In this research, specific to IT organizations, environmental factors were more prevalent than in prior studies with professionals and organizations of all types. Given their representation, the main codes for staying and voluntary leaving are analyzed below, following the categories of individual, occupational, organizational, and environmental reasons.

### **4.3 Individual reasons to stay or voluntarily leave an organization**

In this study, no participant reported any demographic reason as a justification to stay or voluntarily leave their organization in the future. However, there were identifiable reasons for potential voluntary leaving associated with career planning. Some professionals reported they would leave their current employment to change areas due to personal projects related to their work life. The following answers exemplify this type of planning:

I'm an undergrad student, it's possible that after graduating I'll follow a different path (Subject A).

For an opportunity in the area of People Management specifically. My current employment also entails administrative and financial work (Subject C).

Ambitious personal projects (Subject E).

In line with what was observed internationally (Kilimnik, Castilho, & Sant'Anna, 2006), this planning represents a more active role of the professional in their career and self-development (Arthur, 2008; Amundson et al., 2010). Involved in this planning are things like “psychological characteristics, ideological options, familial relations, emotional and material conditions, and social and economic commitments” (Tolfo, 2002, p. 48). The perception of professionals on these factors vary, which is reflected in their career plans.

The prevalence of young (ages 21 to 30) professionals (55.7%) in this study could have contributed to this result. Due to their work values, this generation shows a different work dynamic in comparison to older generations (Gubler et al., 2014; Naim & Lenka, 2017). Furthermore, one characteristic of IT professionals is their commitment to the profession, more than to the organization in which they work (Trusson & Woods, 2017). These results also highlight the growing mobility in the work of professionals in Brazil (Departamento Intersindical de Estatística e Estudos Socioeconômicos – Dieese, 2014).

#### **4.4 Occupational reasons to stay or voluntarily leave an organization**

Similarly to what was found in reviews on this subject (Ghapanchi & Aurum, 2011; Steil et al., 2016; Steil et al., 2019), in this study, occupational reasons are predominant, both for retainment of the professionals and for their potential voluntary leaving from the organization in which they work.

Codes related to *satisfaction* were the most referenced by the professionals as a reason to stay in the organization. Within the five dimensions of satisfaction (Siqueira, 2008), we identified the satisfaction with the nature of the work, with the work environment, with the relationship with leadership and/or colleagues, and the satisfaction with the salary, as exemplified by the following answers.

The company where I currently work brings me professional satisfaction, both in challenges and in benefits (Subject J).

I enjoy working at the company, team and salary are not below the market average (Subject L).

[...] I have autonomy and my boss' trust, and [...] the project I work on is very interesting (Subject G).

I like the people, the environment, and also what I do in my day-to-day work (Subject O).

On the other hand, a portion of the subjects highlighted the lack of satisfaction as a reason for possibly leaving the organization, as the following answer illustrates:

I could leave [company name] for a better opportunity, where I could have a better salary, a better post, better benefits, [...], here I may need to travel without notice, I can't plan my life, they don't help me with my courses, despite me having requested that (Subject S).

Within the dimensions of satisfaction, the lack of satisfaction with the salary was the most representative as a reason for exit, with approximately four times more occurrences than other dimensions. Prior research (Singh & Loncar, 2010; DiMattio et al., 2010; Ghapanchi & Aurum, 2011; Luz et al., 2018; Steil et al., 2018) with professionals of different areas support this result. For 8.9% of participants in this research, satisfaction with salary was seen as a reason for staying in their organization, while for 17.5% of them, it was considered as a reason for potentially leaving. This result indicates that the lack of satisfaction with salary had more representation as a reason for voluntary leave than as a reason to stay in an organization. There is also evidence that professionals between 30 and 39 years of age present lower levels of satisfaction (Hay Group, 2014), an age group similar to one of the participants in this research.

Another occupational and attitudinal reason that stood out was *commitment*. This reason was representative for professionals to want to stay working in organizations, but its negative rating was not representative as a justification for a possible voluntary leaving. The following answers illustrate commitment as a reason for individuals to stay in an organization

[...] it is a company committed to the growth of the people involved with it, be them clients or not. They have very clear goals and values. And those are the same as mine (Subject I).

The company seems to have a great commitment towards the projects developed by the team. [...] I will bet my bottom dollar on this company and hope to reap the benefits, be they financial, of learning, or well-being (Subject U).

The evidence presented in this study adds to the understanding that satisfaction and commitment contribute both for effectively staying and for the intention to stay for professionals in technology organizations, while the lack of satisfaction is correlated with the intention to leave an organization (Ghapanchi & Aurum, 2011; Chang et al., 2013; Brown et al., 2013; Steil et al., 2018; Bello & Steil, 2020).

Codes related to *professional growth* in the organization were also frequent as reasons to stay, as exemplified by the following answers.

[...] I've been given many opportunities and training, which has allowed me to grow professionally in a continuous and comfortable way (Subject K).

Because the company gives me the opportunity to apply 100% of my knowledge and work methodology, and I count on the constant supervision of my superior, in which he shares his experiences and thus we improve the process as a whole (Subject R).

On the other hand, the lack of an outlook for professional growth is a reason for the possible voluntary leaving, as the following answer illustrates.

As every young person, I enjoy constantly learning new things and having new challenges. Today, in the company where I work, I can no longer see these big challenges that would motivate me to absorb more and more knowledge and defeat obstacles imposed by the organization. Because of that, I'm on the lookout for new organizations, [...] where I'd be able to grow even more as a professional and have a more direct impact on the growth of the organization (Subject Z).

These results underline the evidence that the existence of growth opportunities is associated with retention (Oliveira et al., 2012; Ceribeli et al., 2017) and that the lack of opportunities for growth leads professionals to think about leaving their organization (Estryn-Behar et al., 2010). Given the evidence from previous studies (Adams & Demaiter, 2008), it is possible to infer that the subjects of this research search for opportunities for growth and development of skills where they work, building, in this way, their employability in the dynamic job market of IT. Owing to the age group of the subjects, there was a link between desire for growth, development, and opportunities for continuous learning (Lub et al., 2012).



Codes related to *working conditions* were linked to the reason for staying in IT organizations. The following answers illustrate the perception of some professionals about the relevance of working conditions for their staying in the organizations.

A work routine with little stress. Good infrastructure in the company (Subject N).

The environment is excellent, people always help each other, the company values responsibility and growth of its collaborators, always with flexibility for us to be able to negotiate in a way that will make things good for both sides, leadership and management are open to honesty and for us to share our ideas (Subject P).

In contrast, codes related to the inadequacy of working conditions represent a reason for the potential voluntary leave from the organization, as exemplified by the following answers.

Lack of organization in internal processes, wearing out the teams (Subject W).

For not providing adequate working conditions, like a silent environment, decent chairs, adequate equipment, not having a career plan, the working environment is bad. We can't have the best performance like we'd like to (Subject F).

This fact demonstrates the relevance of this code for IT professionals, who need to maintain their employability in a competitive job market. The reasons reported by the subjects align with evidence from previous studies, in special, evidence that links good working conditions with retention (Bossert & Laartz, 2018; Samuel & Chipunza, 2009).

Finally, codes related to the lack of an outlook on *valorization* also were pointed out as a reason for voluntary leaving technology organizations, as exemplified by the following statement: "bad payment, imposing excessive work and not paying for what's right, lack of appreciation for my work" (Subject B). This result is not surprising and adds to the evidence (Samuel & Chipunza, 2009; Hlanganipai & Manzanai, 2014) of the role of professional valorization for retention. This aspect becomes more evident in younger professionals, who are more likely to look for feedback on their performance and recognition of their work in the organization's development (Hurst & Good, 2009).

## 4.5 Organizational reasons to stay or voluntarily leave an organization

Codes associated with organizational reasons refer to characteristics and practices of the internal environment of the organization. In this study, *management practices* refer to the most representative codes within this category. For a portion of the participants in this study, the main management practices that contribute towards their staying in the organization are: “remote work, flexible working schedule, and to have a good organizational climate and collaborative team” (Subject T). On the other hand, some professionals highlighted aspects to be improved in regards to management practices in their organizations: “there is no well-defined compensation plan, there is no Human Resources department to support the company, to evaluate performance with indicators, to give feedback, to suggest and prepare training” (Subject D). These matters contribute to the leaving of these professionals from their organizations.

The management practices cited by the participants detail this wide category reported in the literature (Glaister et al., 2018; Naim & Lenka, 2018) for professionals that work in IT organizations. When they are present, they influence retention of these professionals, when absent, constitute reasons for a possible voluntary leaving from the organization.

## 4.6 Environmental reasons to stay or voluntarily leave an organization

Environmental reasons represent stimuli and phenomena external to the organization, but that can influence its functioning and the retainment of the individual in it. The accelerated growth of the IT sector entails more job offers, with a projection of a lack of such professionals in the state of Santa Catarina (Acate, 2020). However, there has been a behavior change, with a greater retention of professionals in their organizations, which can represent greater efficiency of the retention strategies due to the lack of these professionals and a higher level of competition for them in the job market. A study from Softex (2019) shows that, in 2007, professionals with less than 3 years in a single company represented 74% of the workforce, while in 2017, these represent only 60%. Moreover, the number of professionals with 3 to 10 years in the same organization grew from 17% to 33%.

In this category, the codes related to *job alternatives*, such as better opportunities in their job area, stand out as a reason for professionals to consider

staying or leaving a technology organization. The results reveal that the retention in the technology organizations is linked especially to the contrast between the professional's situation where they work and the job market, as the following answers illustrate:

Because today my salary isn't bad in comparison to the job market average, and I like the benefits, I can also execute my activities with precision and like the team I lead (Subject Y).

Because I still haven't received an offer that pays more and that makes that change worth it, considering the offered benefits and the quality of life in the city where the post is being offered (Subject Q).

Hofaidhllaoui e Chhinzer (2014) identified that professionals are less prone to leave their current job if they perceive the job market as unstable. When comparing data from the Brazilian economy, studies performed by Dieese (2011, 2017) reveal that turnover presents a procyclical tendency. That is to say, in times of crisis, turnover rates fall, and in times of acceleration of economic activity, turnover raises. This fact indicates that the employment opportunities and the job market situation perceived by the professionals are also related to their job perspectives. Thus, professionals may refuse job offers if those do not correspond to their expectations and career plans. Models on intention to leave an organization (Price, 1977) and turnover (Holtom, Mitchell, Lee, & Eberly, 2008) have considered job opportunities as influencing both of these phenomena (Rainayee, 2013).

## 5. FINAL CONSIDERATIONS

It is well recognized that there exists a deficit of professionals in the IT sector in the state of Santa Catarina and that the sector competes for the most qualified professionals. In light of that reality, this study described the reasons for professionals to stay or potentially voluntarily leave IT organizations, given by the perceived reality of these professionals.

The results show that both staying and potentially leaving an organization are linked mainly to occupational and organizational reasons, followed by environmental and individual reasons. These results agree with the results of previous studies about the relevance of satisfaction (specifically for this study, salary satisfaction) and commitment in the formation of the intention of both staying and voluntarily leaving an organization. Creating

conditions to promote satisfaction and commitment is still a challenge, in such a way that continued research on these themes contributes to an improved understanding on why some individuals are more satisfied with and/or committed to the organization than others in the same work context.

Codes related to the lack of an evaluation process for performance and efficient feedback, lack of innovation, training, and possibility of flexible schedules and remote work were the management practices most cited by the participants on why they could potentially leave their organization. On the other hand, codes related to the care of organizations for clients and collaborators, support for studies and professional growth, an incentive for creativity/innovation, and the possibility of flexible schedules and remote work were the management practices most cited by the participants on why they stay in their organization. The prevalence of younger professionals in this study contributed to these results, as the profile and expectations of this generation influence their perception of adaptation to the organization and its practices (Twenge, 2010).

Research from the Bureau of Labor Statistics showed that the average time workers stay in a company is 4.4 years (Keller & Meaney, 2017). In this study, most prevalent were the professionals with up to four years of work in their current company. The IT organizations' job market is alluring for young people and, at the same time, this is the age range that presents higher turnover. Data about turnover in the services sector, which encompasses IT organizations, reveal that 47% of the exits in 2014 were by professionals from 18 to 29 years of age (Dieese, 2014). This illustrates the importance of managers knowing which reasons lead their professionals to stay, and which lead them to leave the organization where they work.

Given our results, we recommend the development of further research about the matters of interest identified in this study. For example, we suggest an analysis of the relation between the identified reasons to stay and the effective time of retention of the technology professionals (Kyndt, Dochy, Michielsen, & Moeyaert, 2009). It becomes then pertinent to statistically verify, in the context of IT organizations, whether or not different generations, as well as professionals from different areas, present different perceptions about the reasons that lead them to consider staying in their organization or leaving it in the future. In view of its representativity in our results, future research should inquire about the contribution of satisfaction about salary on retention and voluntary leaving for these professionals.

Finally, it should be noted that here we analyzed the perception of professionals on their reasoning for staying in and voluntarily leaving private

technology organizations. Thus, these are estimates on the research matter. Furthermore, these results are specific to the researched context and, as such, are not generalizable. Due to the characteristics of this research, it is relevant to inquire if the reasons identified in this study are also seen in the reality of professionals from other areas.

## RAZÕES DE PERMANÊNCIA E SAÍDA DE PROFISSIONAIS DE ORGANIZAÇÕES DE TECNOLOGIA DA INFORMAÇÃO

### RESUMO

**Objetivo:** Este estudo descreve as razões de permanência e de potencial saída voluntária de profissionais de organizações de tecnologia da informação (TI) de Santa Catarina.

**Originalidade/valor:** Organizações de TI têm vivenciado desafios para reter profissionais. Diante dessa realidade, este estudo contribui para a literatura sobre o tema ao apresentar a percepção de profissionais sobre as suas razões para permanecer nessas organizações ou sair voluntariamente delas.

**Design/metodologia/abordagem:** Quatrocentos e quarenta trabalhadores de empresas privadas de TI responderam livremente a duas perguntas abertas em um questionário *on-line* (*survey*): “Por que você permanece trabalhando nesta empresa?” e “Por que você poderia deixar esta empresa no futuro?”. As respostas, coletadas no segundo semestre de 2016, foram codificadas indutivamente e depois agregadas em categorias.

**Resultados:** Os resultados indicam que os profissionais permanecem nas organizações pesquisadas prioritariamente devido a razões ocupacionais (satisfação no trabalho, comprometimento organizacional, condições de trabalho adequadas e percepção de crescimento profissional), organizacionais (práticas de gestão adequadas) e ambientais (percepção de que não há melhores alternativas de trabalho). Os profissionais pesquisados deixariam as organizações em que trabalham também prioritariamente por razões ocupacionais (ausência de satisfação no trabalho e de oportunidades para crescimento profissional, falta de perspectivas de valorização e por melhores condições de trabalho), bem como por razões organizacionais (práticas de gestão inadequadas), ambientais (melhores alternativas de trabalho) e individuais (planejamento de carreira). A

partir da análise desses resultados, é apresentada uma agenda para pesquisas futuras sobre o tema investigado.

## PALAVRAS-CHAVE

Permanência nas organizações. Saída das organizações. Retenção. Intenções. Empresas de tecnologia.

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