Workforce Sustainability and Leadership – a New Technology Industry Model Assessment

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Abstract: Asessed as a globalization primary result, (workforce) sustainability proved to be a difficult goal to be achieved by organizationas across the world, thus rising the question in regard to the role of leadership and employees creativity within the process. The current manuscript proposes the asessment of a new workforce sustainability model, designed to lock in the workforce sustainability advancements specific to the technology industry, in both theory and practice. By following a qualitative asessment, the quantitative approach iterates a 26 item survey used to collect data from 174 representatives of the managerial pyramid. Results prove that the eight workforce sustainability proposed latent variables are strongly connected to both leadership and workforce creativity. The proposed asessment tool in regard to workforce sustaianbility of the technology industry proves to have utmost importance, ever since the redesign of the technology advancements allow the perfect sincon of global workforce to be subject to no border leadership and creativity tools and practices. Contributions to literature counts one of the first attempts to design and asess the results of a technology workforce sustainability model and individually correlate the eight latent variables to two of the most valued elements of the international technology industyry: leadership and creativity.

Keywords: workforce sustainability; transformational leadership; creativity; PLS-SEM

JEL Classification: C15; M12

1. Introduction

As considering the practices in regard to the rapid evolution of the technology industry (IT), the organizational sustainability, equity and value are highly and more often invoked. The organizational maturity and sustainable wellbeing are subject to novel standards that enhance the economic, psychological and physical wellbeing of employees.

Workforce sustainability has been addressed as a regarding the demand for supply personnel that needs to be continuously supported and enhanced with specific skills or trade (Sing et. al., 2018). Moreover, according to Kossek et.al. (2014), workforce sustainability refers to a work community where employees are subjects to nurturing and valued while using sustainable arrays of employment practices in order to allow personnel to thrive.

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Earlier attempts to create a conceptual workforce sustainability model based on mixed methods approaches, included interviews and informal discussions with academics and professional coming from a variety of research areas and industries (Karakhan et. al., 2020) but none of them related to technology industry. In consequence, it was deemed necessary to create a new framework that will respond to the needs of creating a workforce sustainability assessment tool for the intended industry. Since the technology industry does not have predefined workforce sustainability assessment tools (Meyer et. al., 2017; Nuta et al., 2015; Nuta et. al., 2020), given the specific work conditions and the specificities of the industry, researchers only presented tools specific to other industries as for leadership (Karakhan et. al., 2021), corporate social responsibility, branding community practices or organizational culture.

A thorough literature review was also carried out, where were considered not only academic sources but also multi-industry specific reports and journals. The results support eight essential attributes that are not only specific to the technology industry, but that apply generally when about workforce sustainability (Flannery & May, 2000). The eight attributes identified emphasize the ability of companies to invest and educate, support and train their workers (as nurturing and guiding), along with the diversity of the team/working groups (as diversity); equity is the third workforce sustainability attribute that exclude discrimination and promote fair treatment and evaluation. Streams of thought on the characteristics that strengthen the workforce sustainability emphasize the health and wellbeing of the employees and collaborators at work, followed by the open possibilities to communicate not only on horizontal, but also vertical levels (as connectivity). The value of each individual as the respect and recognition for its achievements at work will ultimately transform into company loyalty (Karakhan et. al., 2020); as previously mentioned, an important aspect for workforce sustainability includes not only performance and visibility at work (Dyllick & Hockerts, 2002), (Onnis, 2019) but also the personal aspects and development as enhanced by the companies; for this reason, the spirit of community where camaraderie is encouraged is an workforce environment was proved to be productive, while the active members feel responsible toward each other and develop maturity and competency within the field (Murray, 2021).

It is important to notice that the necessity for creating a workforce sustainability framework is also emphasized within the Global Sustainable Development Report (2015), where industrial development trends express the necessity for labor market policies in order to build and develop the human (workforce) productive capabilities. Industries lack human capital sufficiently competent (Wolf, 2014) as to operate state of the art technologies, reason for which organizational private returns are scarce and under-developed. The eight workforce (similar) sustainability elements were also identified and analyzed (Jafari et. al., 2019, Gambatese et. al., 2019), (Raheem et. al., 2018, Baumann et. al., 2008).

The added value of the current study highlights the importance of the technology companies, where selected respondents detain top and middle management positions. Since the profile of the industry is based on creative and innovative outputs, the current research aimed for analyzing the workforce sustainability within the given organizations.

The current manuscript describes within a brief introduction the research problem, along with a brief literature review in regard to the discussed variables; further, the materials and methods are considered, where the emphasis regards the theoretical model along with an adequate description of the research instrument and its development. Moreover, the data collection and statistical analysis reveal the peculiarities of the transformational leadership and creativity relationship among organizational levels.

2. Matherials and Methods

In line with the practices of assessing theoretical models and developing statistic concepts, a series of specific materials and methods need to be hinted.

As one of the most controversial concepts present within the management literature and practice, organizational culture was assessed at first in 1980s and further developed (Hofstede, 1998), (Benn et. al., 2006), (Giberson et. al., 2009), (Linnenluecke & Griffiths, 2010). The term lacks a common definition (Ashkanasy et. al., 2000), existing a variety of acceptations under the form of shared behavioral norms, values and means of understanding (Schwartz and Davis, 1981), (Shahzad et. al., 2012). One of the largely accepted definitions adds to the abovementioned typologies cultural dimensions and various concepts (Linnenluecke & Griffiths, 2010) like corporate sustainability workforce sustainability.

Technology organizations include software and computer services, mobile, security and/or analysis (KPMG, 2020), along with internet and technology hardware and equipment. As for the current research, technology companies would be referred as IT and telecommunication organizations that develop activities within the range of Iasi city, Romania.

Considering the eight workforce identified categories, we developed a 26-item questionnaire that was applied on-line for top and middle management that act within technology companies in Iasi, Romania.

2.1. Theoretical Model

The purpose of the current research consists in the assessment of the effects of the Transformational leadership and Creativity on the eight dimensions of the Workforce Sustainability i.e. Nurturing, Diversity, Equity, Health and well-being, Connectivity, value, Community and Maturity.

For reasons of standardization, within the current study, when referring to the eight separate dimensions of the workforce sustainability, WS8 notation will be used; similar, for the Transformational Leadership (TL) and Creativity (Cr) abbreviations could be used.

The research is based on a model proposed for validation as based on a statistical survey (see Figure 1). The current study used a quantitative approach, and an online survey was used to collect data.
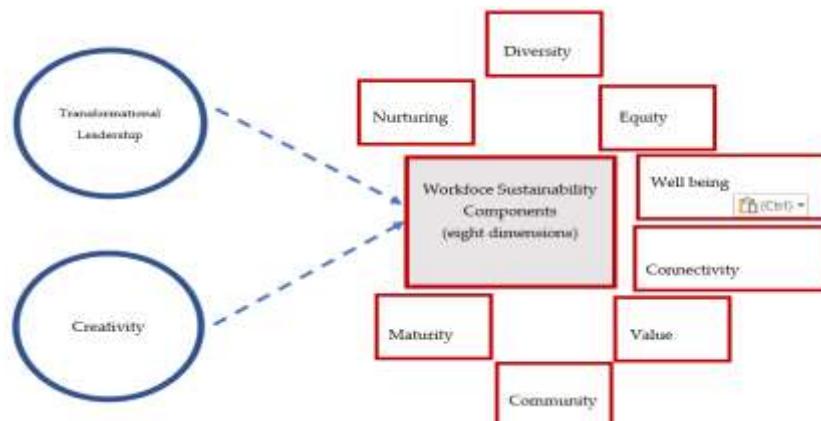
Figure 1. Workforce Sustainability – Leadership and Creativity Theoretical Model
Source: author contributions

Based on the literature, the theoretical model focuses the synthetic relationships between transformational leadership activities (as idealized influence, inspirational motivation, intellectual stimulation, individualized consideration) and creativity and innovativeness (as innovation on an organizational, team, individual levels, along with the innovative climate of the company) on the eight dimensions of the workforce sustainability as defined by literature (Gambatese et. al., 2019), (Kossek et. al., 2014), (Sing et. al., 2017), (Buchan, 2019).

The question of whether there is a connection among WS8 dimensions on one side aand TL and Cr on the other side, could only be answered by following the evolution of the two hypotheses: H1. There is a strong connection among the eight individual dimensions of workforce sustainability and transformational leadership of the top and middle managers from technology companies; H2. There is a strong connection among the eight individual dimensions of workforce sustainability and the creativity of the top and middle managers from technology companies.

One reason behind following the two hypotheses is that both management's transformational leadership practices and individual creativity induce on a horizontal but also on a vertical level a strong effect over the eight dimensions of organizational workforce sustainability.

2.2. Research Instrument

Towards achieving the purpose of the current research, a structured questionnaire was used as a research instrument. The questionnaire has 4 sections. The first section gathers general information like age, gender, position held within the organization, the achieved study level and seniority at work. The second section has 26 statements that gathered information about 8 factors that could influence the workforce sustainability. There are 4 statements under "Nurturing", 2 statements under "Diversity", 4 statements under "Equity", 2 statements under "Health and Well-Being", 3 statements under "Connectivity", 4 statements under "Value", 2 statements under "Community" and 5 statements under "Maturity". Third section regards the five statements in regard with transformational leadership practices, while the fourth section illustrates the four statements that define the creativity levels within the middle and top management technology industry respondents. Table 1 presents the items that were used for measuring the workforce sustainability, transformational leadership and creativity within technology companies.

Table 1. Constructs and Measurement Items

Construct Dimensions	Construct Items
NURTURING	N1. Innovation is closely connected to the business objectives my company has. N2. My workplace offers me systems and procedures so I can grow my abilities. N3. As from my work team perspective, I am the only one who presented new problem-solving ideas. N4. My superior devotes his time for teaching and helping me and my team.
DIVERSITY	D1. At my place of work, all my superiors take into consideration the team well-being and give up their own interests. D2. At my place of work, my superior is sharing with me and my team his/her most important values and beliefs.
EQUITY	E1. At my place of work, we are encouraged to develop strong personal goals. E2. My superior always takes into consideration the moral and ethical consequences of his/her decisions. E3. My company supports all my decisions. E4. At my workplace, innovative ideas are always rewarded.

WELL-BEING	WB1. At my place of work, we (the team) feel that it is important to achieve the daily goals.
	WB2. My superiors give us the necessary support and strengthen the idea that we will successfully reach our tasks.
CONNECTIVITY	CON1. At my place of work, I feel individually appreciated.
	CON2. I talk often to my superiortoto continue my work.
	CON3. As for my team perspective, I am considered to be creative.
VALUE	VAL1. At my place of work iachieved, ys getting feedback in regard with my creativity.
	VAL2. At my place of work, performance is strongly connected to one's creativity.
	VAL3. When at work, I am always able to make time and pursue my own projects.
	VAL4. My superior's behavior makes me respect him.
COMMUNITY	COM1. At my place of work, I have the liberty of expressing my opinions.
	COM2. At my place of work, performance is strongly connected to a problem-solving attitude.
MATURITY	MAT1. At my place of work, I am always able to try ishe current tasks.
	MAT2. My superior offers me the chance to learn from my mistakes.
	MAT3. Sometimes, at work, I have an original thinking.
	MAT4. My superior is always reaching for new perspectives for solving problems.
	MAT5. My superior makes me proud for working with him/her.
TRANDSFORMATIONAL LEADERSHIP	LIA. At work my superior inspires me with trust and respect for his/her behavior toward me and the group.
	LIC. At work my superior' values, ethics and morality are strongly enhanced.
	LMI. At work my superior's vision and ideas about the future create trust for successfully reaching the targets.
	LSI. At work my superior always seeks for new perspectives and angles for solving problems.
	LCI. At work my superior has a special attention for each member of the group.
CREATIVITY	ClimInov. At my place of work, we have a clear vision that helps reaching objectives.
	InovInd. At my place of work feedback is provided for encouraging new ways and perspectives for solving problems.
	InvEch. At my place of work, one's performance and originality are encouraged by the organizational procedures.
	InvOrg. At my place of work working in teams provides flexibility and reciprocal support.

Source: author contribution

2.3. Questionnaire Development

The first factor, Nurturing, aims for recognizing the organizational ability to enhance workforce training and education and show a continuous predisposition for continuing education. The second factor is Diversity. It refers to providing organizational workforce with skill diversity and promotion of corporate statements that require dedication and value sharing. A collection of four factors has been provided for measuring Equity. It searches to identify and promote non-discrimination and merit-based rewards, being a dimension that enables workers for sharing decisions and responsibility. As for the fourth factor, the Well-Being, it is considered to identify the results of social interaction during at work that can be quantified both as team or individual; moreover, meetings and trainings are being considered.

Connectivity, the fifth factor, appraises the efficiency of one-to one meeting with supervisors as well as the organizational team approach. A special interest is given to the Value dimension, since in regard

with workforce sustainability, it should enable an equilibrium state among work and personal life; while at work, an individual should feel appreciated, while getting fair appreciation and feedback. In this study, the Community dimension regards workforce integration within daily activities and ultimately within the industry. Performance and collegiality should be promoted. As for the last independent factor, Maturity, the internal competition perspective presents results based on multiskilling, competence-based education and training and provides employees with leadership and communication skills. Transformational leadership dimension was redefined and considers the five most relevant aspects of the theoretical construct as for the attributes and behaviors of idealized influence, along with the inspirational motivation, intellectual stimulation and individual consideration.

The creativity attributes regard the innovation on an individual, team and/or organizational levels, along with the specific climate created by the organization through the organization culture in order to nurture and enhance higher levels of creativity.

2.4. Sampling

The current research used a non-probability sampling method with a voluntary response; the sample is mainly based on ease of access. The design of the questionnaire implies the ease of access and fill-in in for top and middle managers from technology companies. The pre-test of the questionnaire on a batch of 30 respondents showed the appropriateness of the questions, and no modification was necessary. The final sample shows a total of 174 usable completed questionnaires as selected to be appropriate for applying the current method.

The respondents were required to respond by using a five point Likert-scale, where 1=strongly disagree, 2=disagree, 3=neither agree or disagree, 4= agree, 5= strongly agree.

2.5. Data Collection and Analysis

Data was collected by issuing an online questionnaire, via Google Forms and distributed to (non)specialized communication platforms. The research period covered a 2 months period of time (October 2021 – November 2021).

In order to better understand the link between Transformational Leadership practices and the management Creativity vs. the eight individual dimensions specific to Workforce sustainability, the structural equation modelling (SEM) based on least squares analysis (PLS) by using SmartPLS (V.3.3.9) software.

It is important to note that PLS-SEM models are an alternative to traditional SEM analysis; they are path models covariance-based, and rely on two different models: (1) the measurement model relate the observable variables to their latent variables – as hypothetical constructs (Alfarra et. al., 2017); (2) the causal relationship for the construct is related the relationship between the latent variables. The measurement model was tested by applying reliability and validity analyses; in order to validate the structural model, by using a bootstrap method, the path coefficients were estimated and further tested (Hair et. al., 2013).

By using the PLS techniques, we were able to model the latent construct even under the conditions of

non-normality and small and medium sample sizes. For the equation system there were two variables' categories implied: directly observed i.e. measurement variables, along with the unobserved i.e. latent variables, where a causal structure between the latent variables can be analyzed.

The current study has a number of 35 items that define three constructs: workforce sustainability (26 items), transformational leadership (5 items) and creativity (4 items), as in Annex 1.

3. Results

For a better understanding of the statistical processing, results should be interpreted at first from a socio-demographic perspective, and further explore the findings.

3.1. Respondents Profile

The profile of respondents regards a total number of 174 top and middle managers who returned a complete filled in questionnaire, whose profile can be consulted subsequently.

3.1.1. Respondents Distribution by Management Level

With regard to the withhold management level, 36.8% (64 respondents) were top managers within the technology companies they act, while 63.2% belong to the middle management.
It is important to notice that for the top management category, seniority at work must count between 8-11 years of experience (34.4%) while for the same category, the number of employees with more than 11 years of experience decreases, and counts only 26.6%. As for the middle management category, 50% of the respondents subscribe to the 4-7 years of experience in the field category, while >11 years of experience category that occupies a middle management position counts 29 respondents (10.9%).

3.1.2. Respondents Distribution by Seniority at Work

A majority of the respondents (43%) belong to the 4 to 7 years of experience in the field, while only 16.7% (29 respondents) have more than 11 years of experience. This percent is comparable to the group 0-3 years of experience that cumulates only 24 respondents. The minimum years of experience for the tenure of a middle or top management position within the technology companies is 1.5 years, while the most experienced manager might have 13,5 years. Seniority at work has a mean value of 7.33 years.

3.1.3. Respondents Distribution by Age and Gender

The minimum age for the given management categories is 25 years, while the oldest manager might be aged 45; the mean value for the Age category is 32 years.

As for the predominant respondents gender, results show a scarce difference between masculine (54%) and feminine (46%). It is important to notice that within both hierarchical categories (top vs. middle management) prevails the masculine gender, 60.9% to 50%. As for most of the top management

positions, the necessary number of years of experience within the field is higher, but as industry trend-lines evolve, gender does not seem to reflect the industry specificities anymore. Data reveals that there is no gender differentiation when about under-graduates and Bachelor that already started working within the industry. As for the Master's degree, employees count more feminine gender (62%) than masculine (50%). When about seniority at work, the only important differentiation is for the 0-3 years of experience category, where feminine gender prevails; the current results only confirm the fact that technology industry is no longer a man industry.

3.1.4. Distribution of respondents by Educational level

As for the educational level of the respondents, the range varies from post-doctoral (1%), to Phd. with a little over 9%, Masters as the largest category (55.7%) and Bachelor with 27%. Surprisingly, the technology industry acquires even High School members, namely 1.7%; it is very important to emphasize this characteristic of the industry, as the capacity to adapt to the economic and social new environment.

As expected, top management does not count any undergraduate, while the highest scores for this category reflect the Master's degree. When about middle management, 2.7% of the managers are still undergraduate, while 34% have a Bachelor degree and 53.6% graduated the Master's degree. The indicators reflect the dynamics of the technology industry, where organizations mainly subscribe to the SME category and where workforce predominantly accentuates the importance of education. When organizations name under-graduates, students or University graduates in middle and top management positions, data suggests that workforce sustainability with an accent on equity, gender diversity, well-being and especially nurturing starts to develop across the studied industry.

3.2. Smart PLS SEM Analysis

The goodness of fit model (SRMR) for SemPls software is an indicator that generally used as for avoiding the model missspecifications showing the approximate fit for the model (Hair et. al., 2019). Authors consider that a correct model can yeld values of 0.06 and even higher (Henseler et. al., 2014). A saturated model SRMR of 0.05 indicates a good fit (see Table 2). The normed fit index (as NFI) indicates values between 0 and 1 (Bentler, 1980); the closer NFI to 1 indicates a better model fit (Lohmöller, 1989) therefore an saturated model NFI value of 0.7 indicates an acceptable fit.

Table 2. Model Fit

	Saturated Model	Estimated Model
SRMR	0.056	0.060
d_ULS	1.977	2.236
d_G	1.989	2.152
Chi-Square	1765.947	1856.112
NFI	0.762	0.749

Source: authors' calculation with SmartPLS (v. 3.3.9) software

In order to determine the validity and the reliability of the measurement model, convergent reliability and validity indicators must be analysed (Hair et. al., 2017). Table 3 shows Cronbach's Alpha values as greater than 0.7, the AVE values are above 0.6 and the CR values for all constructs are above 0.8, therefore the convergent reliability and validity of the model indicate the mkodel adequacy.

Table 3. Construct Reliability and Validity

Construct (The model of Transformational Leadership and Workforce Sustainability)	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Community	0.731	0.880	0.786
Connectivity	0.806	0.886	0.721
Diversity	0.830	0.922	0.854
Equity	0.910	0.936	0.787
Maturity	0.884	0.915	0.684
Nurturing	0.871	0.912	0.723
Value	0.866	0.909	0.715
Well Being	0.897	0.951	0.906
Transformational leadership	0.946	0.959	0.824
Creativity	0.878	0.916	0.733

Source: authors' calculation with SmartPLS (v. 3.3.9) software

For reasons of exploring the hypothesized relationships, the model was tested along with using the bootstrapping procedure as for verifying the path coefficients significance levels. Table 4 shows that all the constructs in the model have significant path coefficients. The Path coefficient Creativity ->Community with 0.54 and Creativity ->Nurturing show that creativity practices have a positive effect on the eight dimensions of the workforce sustainability.

As for the perspective of the transformational leadership, Table 4 shows the path coefficients of Transformational Leadership ->Diversity with 0.9 and Transformational Leadership ->Well Being with 0.6, therefore transformational leadership has a high positive effect on the eight dimensions of the workforce sustainability.

Table 4. Test for the Significance of Path Coefficients

Relationships	Path Coefficients	T Statistics
Creativity_ -> Community	0.548	6.209
Creativity_ -> Connectivity	0.449	5.798
Creativity_ -> Diversity	0.008*	0.112
Creativity_ -> Equity	0.413	6.825
Creativity_ -> Maturity	0.333	4.628
Creativity_ -> Nurturing	0.505	7.666
Creativity_ -> Value	0.457	5.849
Creativity_ -> Well Being	0.254	4.638
Transformational leadership -> Community	0.328	3.401
Transformational leadership -> Connectivity	0.479	5.682
Transformational leadership -> Diversity	0.902	15.586
Transformational leadership -> Equity	0.548	9.073
Transformational leadership -> Maturity	0.619	9.108
Transformational leadership -> Nurturing	0.427	6.138
Transformational leadership -> Value	0.499	6.424
Transformational leadership -> Well Being	0.698	12.507

Note: * p value > 0.05

Source: authors' calculation with SmartPLS (v. 3.3.9) software

Moreover, results show a strong support for all the hypothesis of the current study, meaning that both creativity and transformational leadership have a positive and significant effect of each of the eight workforce sustainability dimensions. Figure 2 shows the coefficients of the structural equation model by using the SmartPlS Analysis.
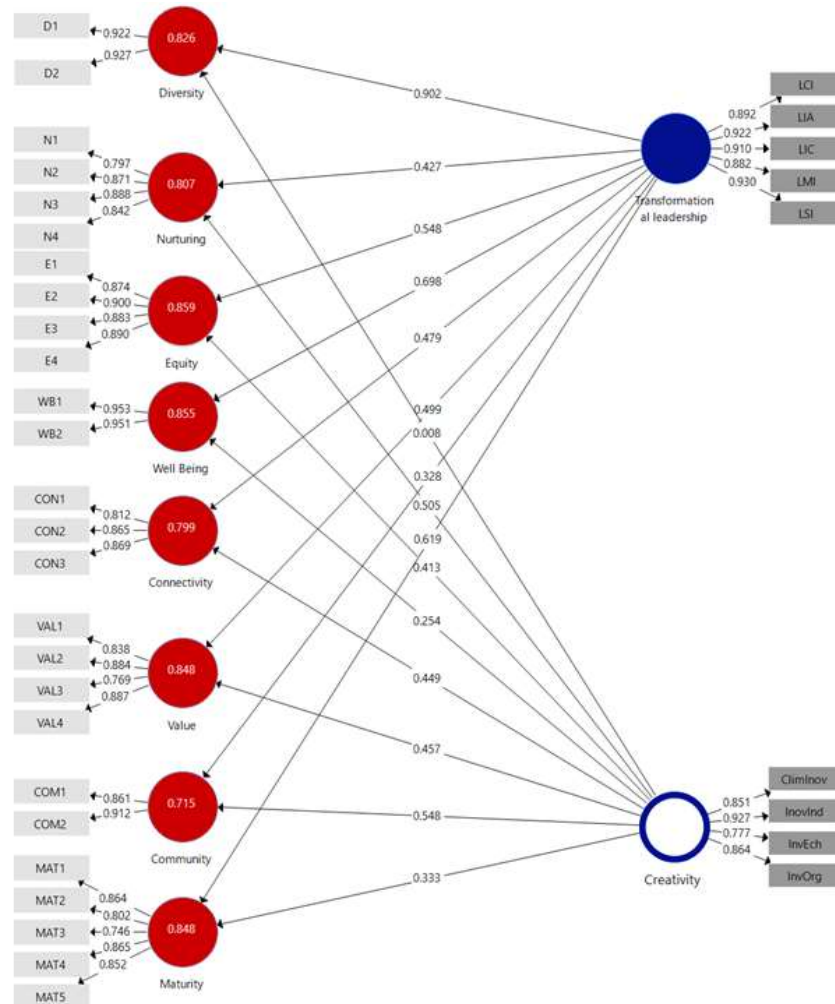
Figure 2. Structural Model

Source: Authors' Calculation with SmartPLS (v. 3.3.9) software

In order to assess the proposed structural model and verify the significance levels of the path coefficients, the bootstrapping procedure was used. Figure 2 shows the results for hypothesis testing; transformational leadership and creativity path coefficients in regard with the eight dimensions of the workforce sustainability show values that imply significant relationships. The current analysis has an exception where the path coefficient Creativity ->Diversity has a value of 0.08, meaning that it is not significant.

As for this perspective, Figure 2 shows that all the eight dimensions of the workforce sustainability are being explained more than 71% (Community) by Transformational Leadership and Creativity, so organizational management should manifest a great deal of attention on the transformational leadership practices inside the company, along with stimulating the innovativeness of both leaders and employees.

Diversity as the first of the eight WF8 dimensions explains the extent of the limits of respect and use of every member of an organization (Gambatese et. al., 2019) and it is explained by TL and Cr in a proportion of 82%, meaning that a company's culture should embrace inclusion and support diversity through leadership practices, a special attention being given to the organizational and moreover, to the departmental structure that should be friendly and permissive towards the new diverse members.

Another WS8 dimension which is highly impacted by TL and Cr is Equity; this dimension refers to the extent to which within an organization, employees are treated and evaluated (Gambatese et. al., 2019), along with the fairness as to which their values and beliefs are promoted and not discriminated. The current study shows that 85% of the organizational equity counts for transformational leadership practices and employee creativity.

Health and well-being is a WS8 dimension that the workforce feels and experiences at the workplace. A high level of physical and mental health appears to increase in importance for employees, especially for top and middle management. Therefore, transformational leadership practices should be supported by organizational culture strategies which should implement strategies for increasing the well-being of the employees at work and so increasing their productivity and physical status.

Additional to transformational leadership practices and enhancing the workforce creativity, literature suggests additional strategies for increasing the workforce sustainability attributes of a company; a certain approach should be proven for providing feedback and advisory sessions for employees, along with rewards and external recognition for helping behaviors (Kossek et. al., 2014), facilitating the internal and external professional development. One of the most recent highly valued practice at work that should enhance workforce sustainability is providing connection and network opportunities at work, along with time for relaxation and allowing employees to work by setting their own schedule (Dai et. al., 2009) and providing family-friendly corners at the workplace (Lingard et. al., 2007; Vatavu et. al., 2022).

4. Discussion

The technology industry plays an increasing vital role for the development of every country's economy. The accentuated technology evolution (as IT, mobile, security and analysis) created high waves of employee's migration, therefore companies need to solve the problem of employees retention. Sustainability as a concept implies the idea of improving businesses activities along with the performance of their employees, endeavoring to the need for use of a specific term when about sustainability and employees.

The concept of workforce sustainability emerged late in 2018 and supported the idea of maintaining, enduring and supplying personnel needs for a specific skill, and encouraging workforce for performing well on long time and thrive on both levels – professional and personal.

Long known as an ideal promotor for organizational performance, transformational leadership, already adapted to technology practices and specific industry needs, appears to be one of the best ways to enhance and influence the specific eight dimensions of workforce sustainability. Reflections on the specificities of technology industry brings into light the idea of employee's individual creativity and innovativeness, as so much valued by the tech industry. It is symptomatic to observe that the dual

independent actions of transformational leadership practices and the employees' creativity stimuli have an overwhelming effect of the eight dimensions of the workforce sustainability of the technology companies.

To answer the research questions, a systematic review of the literature and a quantitative analysis were undertaken. Findings of the study indicate that the eight attributes of the workforce sustainability require strong transformational leadership practices and nurturing the employee's individual creativity.

Research has succeeded in developing a model that enhances each of the eight workforce sustainability dimensions in regard with transformational leadership on one side, and creativity on another. Results show a strong connection among all the WS8 components and TL and CR, since the last two dimensions explain more than 70% of each of the workforce sustainability dimension.

In regard with the current study's practical implications, two directions emerge: at first, technology industry should improve the efficiency and practical manners of implementing the transformational leadership instruments, according to the specificities of the industry; secondly, the human resource departments should keep the door open for acquiring innovative and creative workforce, and moreover, implement standards that would enhance a permanent improvement of the human creativity characteristics of the employees.

By considering a practical standpoint, both organizational and microeconomic policies must consider the recent innovative global development trendlines that emphasize the role of electronic leadership and the transformative online work environments that encourage (tele) work. For this reason, many regional and governmental representatives were forced to enhance and correct altogether (inter)national legal systems that would result into a correct and impartial treatment for all the workers from all across the world, with no discrimination in regard to the arising changing work conditions. Additionally, from an organizational perspective, managerial representatives manifested cohesion and motivation in regard to the novelty of the new work arrangements, valid for all the pyramidal levels, sectors and industries.

5. Limitations and Future Developments

However, it should be mentioned that the current study has a series of limitations. At first, it is deemed to note the novelty of the subject, a very few authors realized studies in regard with workforce sustainability concept overall. A second view emphasizes the fact that the current study findings reside solely on a review of previous literature developments. Future research should develop and distribute an extensive survey within the technology industry representatives (professionals and practitioners) and emphasize effective strategies that already enhance the workforce sustainability attributes. A second aspect would require a study as to determine the exact practices of technology industry transformational leadership specificities. The third aspect needs to approach the practice and needed techniques for improving and encouraging employee's creativity (Gutu et. al., 2022). If all the three aspects should be overcome, a series of workforce sustainability improvement recommendations could be ensued.

A certain approach could be enhanced in regard with future research directions development; at first, the workforce sustainability construct items could use improvements in regard to the number of items specific to each dimension; further, organizational culture should directly adopt and implement workforce engagement recommendations, it therefore makes sense for further research to verify how

much the organizational culture could influence each of the eight dimensions specific to the workforce sustainability model. Since the current research regards middle and top management reactions in regard with the three dimensions of the construct, a future view should verify if the data is consistent with the current results in the case when respondents will be followers.

Ethical Considerations

This article followed all ethical standards in accordance to the Helsinki agreement

Name of the ethical review committee: Dean's Office of the Faculty of Economics and Business Administration of Iasi

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Manner of consent for human participants: oral

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