

## DIGITAL TRANSFORMATION AS EVOLUTION OF THE ORGANIZATIONAL COMMUNICATION MANAGEMENT IN THE TELECOMMUNICATIONS INDUSTRY

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### ABSTRACT

*We are facing increasing concerns of organizational management teams on expanding their information technology resources that have a major impact on innovating legacy communication services. This way data management flows' optimization is being aimed at; conclusive results being expected to be seen through a communication-based fine-tuning of management's five functions.*

*The purpose of our research is to identify solutions to fine-tune organizational communication in the current landscape of Telecom Industry practices. Thus, taking into consideration, as experience has managed to show us, that the communication process has become subordinated to Artificial Intelligence, one can see that it continues to validate the approach adopted towards its fine-tuning within large and very large organizations. Since the beginning of 2020, multinationals have been increasingly talking about fine-tuning organizational communication, though scientific input as to how this could be re-addressed are trial based only, while methods and technical means are put to test on a daily basis. The majority of successful managers, with rich organizational experience, would like to see a rapid and successful transformation, free of unforeseen consequences for the smooth unfolding of their production. Since the onset of SARS.COVID-2 pandemic to date, no mind-blowing solutions, able to accommodate artificial intelligence, information and communication technology (IT&C) under the umbrella of departmental or organization-wide management have been found. And there is this paradox of what seemed to be rather unlikely before is now the reality: increasingly more organizations are bringing back their employees to workplaces, or at least are offering this alternative. This is the context in which organizational and particularly internal communication play a critical role, in close connection with Human Resources, in planning and distributing back-to-work policies and procedures to employees. So, we make this attempt to propose potential solutions able to render, through fine-tuning organizational communication, Telecom Industry activities more efficient and more effective, without leaving sight of the new dynamic transformations (particularly digital) imposed by the SARS.COVID-2 pandemic, in a time of events that, beyond any doubt, have a strong and surprisingly decisive impact on our lives.*

**KEYWORDS:** *Digital Transformation, Organizational Communication, Telecom Industry, Artificial Intelligence, Hybrid Services, Strategic Management*

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Motto: *"Almost every problem, every conflict, every mistake, or every misunderstanding is, in its core, a communication problem."*

(Alessandra & Hunsaker, 2008)

### 1. INTRODUCTION

Digital transformation (DT) as evolution is imperative for all businesses, from the small and medium enterprises (SMEs) to the multinational companies. It is crystal clear that DT is more than just a concept, as today's experience has proven that no company is able to secure their competitiveness unless they manage to successfully transform and dynamically evolve in the digital era. Paradoxically, many business leaders are still not clear about what DT actually means, and take it as a purely theoretical, content devoid, and only seemingly appealing concept. To the contrary, this is so much the more evident as, while increasingly more business men and women reportedly agree

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**B) Trade policies** (from *advance payment* to *grace period*)

In early 2020, the global TM landscape can be summarized as follows (Table 4):

**Table 4. Global penetration rate in telecommunication industry**

Time period	Global penetration rate				
	Fixed phones	Mobile phones	Fixed Internet	Mobile Internet	Cable TV
1990-2000	14%	12%	1%	0	1%
2000-2010	23%	38%	9%	3%	42%
2010-2020	31%	104%	33%	62%	58%

Source: Areppim A.G.

Value wise, the difference between time periods is huge, but it finds an explanation in the efforts employed by equipment producers, and less by operators planning to prioritize customer retention before organic growth.

The need for communication has been and still remains constantly progressive, just as both sides (operators and producers) have quickly understood consume-oriented trend of the population, and have acted through rather creative means to penetrate the markets.

For instance, 1997 alone saw a positive balance of 100 thousand mobile subscribers, which points to two conclusions:

1. mis-projected sales;
2. the huge appetite of Romanians for mobile phones and, implicitly, for more efficient communication.

TM has become increasingly more mature and eager for value-added services (mobile Internet, mobile TV, banking apps, 4G coverage and, more recently, 5G, etc.), and this appetite must be satisfied with a developed, secure, and fast telecom network. In terms of the development pace, equipment manufacturers have overtaken telecom operators, and the ferocious appetite for business has shifted to the production line portfolio, with manufacturers incurring operating costs and granting operators grace period and payment terms that could not been even imagined a decade ago. We cannot overlook the excellent performance of the manufacturers from the People's Republic of China which anticipated the moment, prepared diligently for it, and have eventually managed to become the toughest competitors in this industry of inventions, innovations and equipment for fixed, mobile, terrestrial, maritime and satellite telecom operators.

The general finding is shown in the tables and charts above, where we see the Chinese producers holding a majority share of 57.6% on the global market.

**C) Technical strategy** (from "plug & play" products, to detailed customization)

Just as the majority of products are developed without anyone caring about what the end user wants, the same applies also in TI. The year of 2010, just before the global financial crisis, saw teams of experts succeeding, for the very first time in this industry, in developing products in a close cooperation with the end user (in particular the operators of telecommunication services). The chaotic delivery of products to the market, with rivers of financial resources flowing into a desert of conferences and roundtables, was replaced by expert meetings, with team-based technical thinking generating spectacular breakthroughs in technological efficiency. This is a telling sign of the manner in which the shift of paradigm has been brought, for more than 10 years already, value in both technical terms, but also, most importantly, in the budgets of TI players.

**D) From direct and indirect maintenance to AI-based maintenance**

We have become used to see that, when a piece of equipment no longer meets their technical data-sheet, they are given a diagnostic, and then is either repaired, or replaced. These steps require significant human, technical, logistical and time resources. Having looked again into the procedure

for response to technical alerts, the TI management teams decided to put in place the artificial intelligence system that examines, diagnoses, repairs and, at the same time, suggests solutions based on well-founded scenarios.

#### 4. CONCLUSIONS

The scientific objectives we have set for ourselves are represented by the driving, response and uncontrollable, for a number of reasons, factors. All these factors are represented by humans and computers (IT&C). If we are to look at how certain components evolve, leaving aside the TC profits, it needs to be said that, further to the shift of influence from the technology centers from North America and Europe to those of Asia (in particular of China), we see more power and desire for OC, more opening towards business and, also, a fine-tuning of the management elements in the executives' portfolio. In absence of this shift of paradigm, it is beyond any doubt that managers could have not successfully represented TI.

The in-scope analysis was also driven by the need to explore solutions to fine-tune OC, together with the TI practices. In this context, we built on the assumption that OC has two major prevailing characteristics:

- a) OC development is directly connected to management processes;
- b) harmonization of the development requirements entails: highly skilled human resources, technology and corporate differentiation

In our endeavor, we highlighted the potential to render more efficient individual and collective performance indicators by putting in place and in operation specific ways of virtual organization. Having studied the behavior of managers right after the pandemic went global, we reached the conclusion that the topic of our research explores various manners of creating, managing and also operating TI companies.

The research's main assumption is streamlining work environment with additional resources. On an ever-changing TM, the key challenge is the ability to keep performance controlled and transparent in a business environment with variable and complex sources, translated into state-of-the-art technology.

For instance, communication within multinationals follows a new axis, being that of hybrid services stemming from the technological and digital transformation of equipment and solutions providers. The majority of COOs have now the new task of aligning suppliers on a common business platform so that they can provide technical solutions that go beyond the complexity of the phenomenon (production times, lead-times, installation and commissioning times, and last but not least, times to respond to post-installation interventions).

The current challenge comes from integration of the "multisourcing" services since this requires alignment of the new operations with corporate governance principles in order to mitigate any impact of the security processes and policies that could affect the smooth pursuit of business. It goes without saying that OC in TI is accomplished with the aid of technology, and security breaches can be exploited by third parties.

More precisely, the platforms that integrate these new services are prevailingly intended to managing both external and internal suppliers (company's organizational subdivisions) by aligning demand with solution delivery, all ultimately leading to a more efficient intra- and inter-departmental cooperation, fostering innovation and efficiency of communication processes that are meaningful even for production processes, while keeping data secured.

The TI practice subtly, but unequivocally shows that of all the four types of management, the functional accessory that cannot miss from the portfolio of any manager is the adaptive type. However, in our opinion, beyond these four types of management, we also see a management of process platform transformation that falls under the expertise of the TI players.

## REFERENCES

- Alessandra, T. & Hunsaker, P.L. (2008). *The New art of Managing People, Updated and Revised: Person-to-Person Skills, Guidelines, and Techniques Every Manager Needs to Guide, Direct, and Motivate the Team*. New York: Free Press. ISBN: 978-1416550624
- Beshtawi, M., Jaaron, A. (2014). Change Management in Telecommunication Sector: a Managerial Framework, *Review of Contemporary Business Research*, 3(1):127-141. ISSN (online): 2333-6420. Doi:10.15640/rcbr
- Farla et al. (2012). Sustainability transitions in the making: A closer look at actors, strategies and resources, *Technological Forecasting and Social Change*, 79(6):991-998. Doi:10.1016/j.techfore.2012. 02.001
- Fischer, L.B. & Newig, J. (2016). Importance of Actors and Agency in Sustainability Transitions: A Systematic Exploration of the Literature, *Sustainability*, 8(5)/476:1-21. Doi:10.3390/su8050476
- Gartner Research (2020). *Organizational Communication During the COVID-19 Outbreak*. ID: G0 0723251. Analyst: Asia HR Research Team
- Hiatt, J. & Creasey, T. (2012). *Change Management: The People Side of Change*. Fort Collins, CO: Prosci Learning Center Publications. ISBN: 978-1930885615
- Kunze, F., Bohm, S.A., & Bruch, H. (2013). Age, resistance to change, and job performance: Testing for a common stereotype, *Journal of Managerial Psychology*, 28(7/8):741-760. Doi: 10.5465/ambpp. 2010.54495229
- Kotter, J.P., Schilesinger, L.A. (2008). Choosing Strategies for Change, *Harvard Business Review*, 57 (21):106-114. Doi:10.1007/978-1-349-20317-8\_21
- Lee, K., Ashcraft, B., & Allen, B.J. (2003). The Racial Foundation of Organizational Communication, *Communication Theory*, 13(1):5-38. Doi: 10.1111 / j.1468-2885.2003.tb00280.x
- Natale, S. (2020). Communicating THROUGH or Communicating WITH: Approaching Artificial Intelligence from a Communication and Media Studies Perspective, *Communication Theory*, 9:1-6. Doi:10.1093/ct/qtaa022
- Oakland, J.S. & Tanner, S. (2007). Successful Change Management, *Total Quality Management & Business Excellence*, 18(1-2):1-19. Doi:10.1080/14783360601042890