

Non-Formal Social Ties as Threat to the Implementation of Innovations

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Abstract: This paper aims to provide novel insights about the barrier associated with organizational development, namely, resistance to new management practices implementation which emerges from tightly knit social networks – the “blat”. We follow claims for more empirical studies as we provide Social Network Analysis to present a real-life study of how blat networks of operational management lead to the failure of digital transformation attempt at the Russian metallurgical enterprise. We analyzed underlying forces, but deliberately stayed away from developing theories from our case. The close association with CEO allowed us to benefit from the rich and deep “local knowledge” and present case that provided valuable insights into different forms of behavior of line management and the social dynamics at the time of digital transformation attempt.

Keywords: blat, employee resistance, innovation, digital transformation, readiness for organizational change

1. Introduction

It is only logical that western business community delved into innovation technologies long ago, since the latter can enable upgrading the industry and boosting the efficiency levels. The same rout has been chosen by the developing economies, such as those in China and India, that focus on business-process development based on IT.

In fact, all the management levels are affected by the complexity of implementation of new technologies. It implies that those processes are launched at upper levels, with their gradual descent and constant need to overcome resistance to change. The problem of resistance to change is not new as it has been thoroughly researched since 1948, (Coch, L. and French, J.R. Jr; 1948), “Overcoming resistance to change”, Human Relations, Vol. 1 No. 4, pp. 512-532.), however, the predominant majority of this research is based on the western practice.

It is common knowledge that the business environment in eastern Europe (consisting of the former Soviet countries and the countries of the Warsaw Pact) has a number of peculiarities that prevent one from using western best practices unabridged (Cohen, 2015). It is known for a fact that the implementation of innovative technologies and modern approaches to management in the post-Soviet continuum has been around as an ongoing process since the middle of 2000s. Nevertheless, the market with its specifics results in the cases that must be reviewed irrespectively of the western practice.

One of the peculiarities of this business environment consists in the importance of non-formal social ties (see Ledeneva, 2009) that are, nevertheless, typical of other communities (Smith, 2011; Chen, 2011; Ferreira, 2012).

Staff members tend to start non-formal social ties establishing special rapports that can manipulate and even push not only colleagues but also management. Thus, those members raise their social value and build a company within the company.

This factor may turn into a real threat when introducing innovations, since staff members, who possess a high level of non-formal status within the company, may reject innovation implementation or even try to undermine the workflow. Meanwhile, they clearly realize that the responsibility is highly unlikely to rest with them in the end as they are actually more powerful than their position suggests.

2. Blat as an obstacle to digital transformation

Getting ready for deep organizational change is a challenge for top management, which sets the framework for change, defines its means and goals, transmits the values of digital transformation to company employees and, as a result, receives the lion's share of attention in scientific papers and articles (Cortellazzo et al., 2019).

However, despite their crucial role, there are very few studies that would shed light on cases where company's transformation was threatened by informal personal connections of the employees, the phenomenon that called "blat" in ex-soviet countries.

Social life in the Soviet and post-Soviet world has long spun around finding ways to bypass formal procedures through the blat system (Arnstberg and Boren, 2003; Ledeneva, 2009; Michailova and Worm, 2003). The term "blat" is widely used in post-Soviet societies and describes an informal connection between people who expect special treatment and mutual benefit from each other (Michailova and Worm, 2003). Such social networks, aimed at helping friends or relatives, were indispensable during the Soviet Union time, when goods were in short supply, and direct access to them depended on informal relationships. Money as such was much less in demand than in the Western countries, since the amount of goods that could be bought with it was significantly limited. In a way, blat was a substitute for market mechanisms of exchange based on social status and the ability to help other people (Ledeneva, 2009; Onoshchenko & Williams, 2013). Therefore, blat also had a positive connotation (Ledeneva, 2013; Van Schendel & Abraham, 2005). A person who got a job in an organization through blat was associated with their patron. Thus, blat facilitates a network based on strong ties (Granovetter, 1973).

Although the urgent need to obtain scarce goods through personal networks is no longer relevant, blat is still a central part of social networks (Arnstberg & Boren, 2003). Nowadays personal networks have begun to play a substantial role in gaining access to such assets as, for example, a position in a company or a free-of-charge place in a university (Ledeneva, 2013). Empirical studies show that many Russian managers use blat to get their desired position in the organization (Clarke, 2002). Since the new form of blat is more money-related and aimed at enriching the members of its network (Smith & Stenning, 2006), it becomes much less socially acceptable and receives a negative connotation (Michailova and Worm; 2003). Blat is often mentioned in connection with corruption or nepotism (Ledeneva, 2009).

Personal connections are used to by-pass bureaucracy limitations. In the Arab world, for example, the term *wasta* is used (Smith et al, 2011); in China, these networks are called *guanxi* (Chen et al., 2011), in Brazil, *jeitinho* (Ferreira et al., 2012). Thus, it would be wrong to associate this phenomenon only with the post-Soviet space. Examples of personal networks are present in all societies, irrespectively of whether or not they have a specific term in the language. The organizational culture of "blat" is built on negative power that stops organizational development, rather than stimulating change. For example, managers in a firm may be heavily dependent on personal connections with their colleagues, clients, contractors, and subordinates.

3. Methodology

In order to quantitatively study the social space, the paper provides an Analysis of Social Networks (Social Network Analysis, hereinafter SNA).

This method is used in the framework of the current research, since it enables creating the concept of a network of the employees' ties with the social concept which would be deemed as impossible when using the individualistic approach. Nevertheless, all the particular features of each employee play an important role for the higher SNA accuracy, therefore, they should be taken into account as well (Knoke & Kuklinski, 1982). SNA regards the communities (denoted as a "network") as the connection of particular relationships (called "edges") that are supported and exploited by the employees (aka "objects") with the view to communication (C. Wetherell et al., 1994).

Based on the observation of the operational process for 30 days, a data pool (see Table 1) was collected to build a graph of social interactions of employees of the enterprise: the interactions of middle and top management, as well as key counterparties of the company, were analyzed, the number of employees' communications with each other and the degree of influence of each individual communication were taken into account for the company, which was estimated in accordance with the expert assessment of the CEO. For example, communication in the context of operational activities between the warehouse foreman and the warehouse

manager is less important than the communication of the “warehouse manager - counterparty representative” type. The frequency of communications and their significance are clearly displayed through the edges of the graph (see Figure 1), that is, the thicker the edge between the two individuals in the SNA, the more often and more important their connection is.

It is important to point out that the data concerning the quantity of edges is based on the information about the targets, i.e. showing the communication recipients of each object. However, due to the big volume of the original CSV-file and for the sake of transparent visualization of the result of the current research, Table 1 contains the total data about the quantity and weight of each object's interactions.

Table 1: Data pool based on observations and interview with CEO of the company

Object	Total Edges	Total Weight
The CEO	11	101070
The CFO	10	26365
The COO	10	14045
The Executive Director	6	5100
The head of sales department	10	12865
The head of the warehouse	47	60592
The head of the workshop	13	12850
The manager of the warehouse (1)	28	8836
The manager of the warehouse (2)	28	9676
The manager of the workshop(1)	11	4515
The manager of the workshop(2)	11	5360
The warehouse foreman(1)	8	3112
The warehouse foreman(2)	8	3028
The warehouse foreman(3)	8	2921
The workshop foreman(1)	11	2218
The workshop foreman(2)	11	2198
The workshop foreman(3)	11	2250

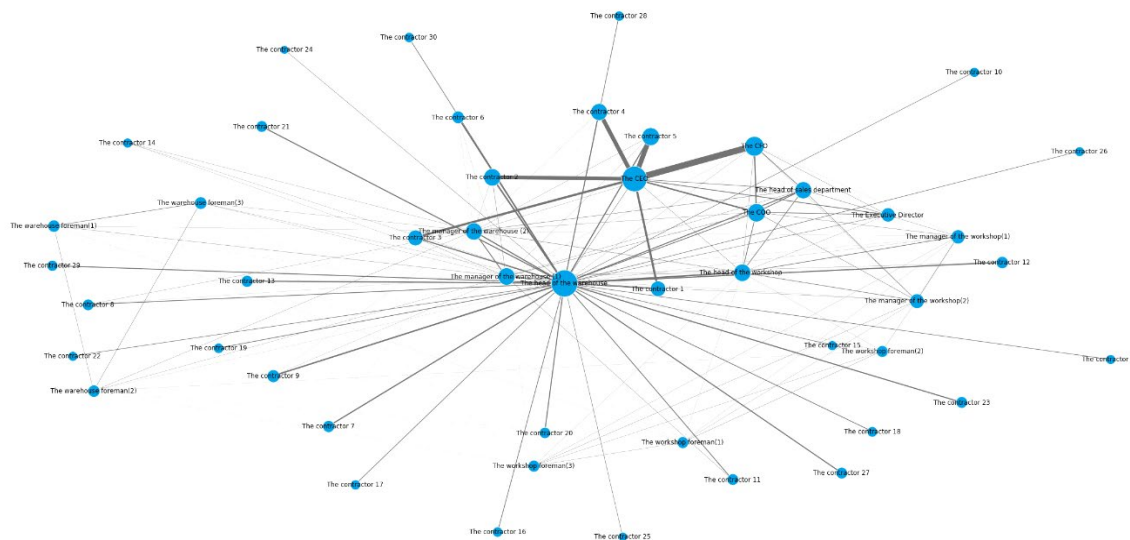


Figure 1: Social Network Analysis (SNA)

4. The company case

The enterprise for the processing of secondary resources (accumulator batteries, lead, copper, brass and bronze scrap) produced alloys and various products made on lead and copper base, and then sold both on the domestic Russian market and outside the country. Experiencing cash gaps at the stage of concluding contracts with different deferred payment terms with traders and buyer factories (a fairly typical situation for such enterprises) during the currency crisis of 2014–2015 in Russia, the enterprise was unable to meet its obligations and,

therefore, became an asset of a bank - the lender. Over the next few years, the bank carried out anti-crisis management in the enterprise, and as a result, sold it to a large trader in non-ferrous scrap.

After the departure of the crisis management team, the new owner of the enterprise, together with his partners, set up a new top management team, as well as appointed new managers in key positions, which includes the general director, operating director, financial director, as well as initial sales departments. Moreover, the owner started to independently ship part of the raw materials to the enterprise. Together with him, 2/3 of the total volume of raw materials was supplied by his colleagues, who were ready to provide a certain fixed tonnage in short term with a 3-month deferred payment. The remaining 1/3 of the volume was shipped to the enterprise by means of local suppliers, contacts with whom were established by the warehouse manager. The warehouse manager and the chief executive of the company were hired by the anti-crisis management team and were kept to carry out their functions with the new owner's team.

Thus, after the purchase of the enterprise by the owner, the new management of the company consisted of the top management team invited by the owner, as well as part of the employees who remained at the enterprise after the bank's anti-crisis team.

A few months later, the owner and his partners decided to digitally transform the enterprise. At the first stage, it was supposed to digitize the processes of receiving metal at the plant, followed by the introduction of an ERP system for the entire enterprise. However, when the information about the upcoming digital transformation was sent down to the employees, the CEO and his team were surprised at the internal resistance caused by those changes.

For example, during an attempt to install the necessary programs on the computers of the warehouse manager, one of the porters damaged the Internet wire, thereby postponing the installation of the programs for some time. After restoring access to the network, the installer team faced aggression from the deputy heads of the warehouse and refused to provide services to the enterprise to implement the necessary items.

Thus, local confrontations that hindered the implementation took place for over the course of 2 months. The owner, who learned about the ongoing difficulties, ordered to suspend the digital transformation due to inefficient spending of funds (payment of a penalty under the contract of the first company and advance payment of the second).

The peak point of the escalation of the conflict was an open threat from the head of the warehouse that 1/3 of the volume of raw materials supplied by local counterparties would cease to flow to the enterprise in case of external intervention with his usual duties.

After this incident top-management realized, that behind the resistance there was the personal interest of the warehouse manager and his subordinates, caused by blat, that was created during company's hard-times, when top-management and bank representatives were not focused on the lower-level operating activities.

5. Triangulation and analysis

According to the CEO of the company, blat plays a rather serious role in the resistance of the company's employees to digital transformation, because employees constantly interact with each other with the view to solving problems and dubious issues. Moreover, there is communication outside the organization with suppliers and competitors to exchange information and monitor existing market trends.

Although such close interactions traditionally receive a positive connotation, in this case they move to a qualitatively different level - the level of blat networks. As part of the SNA, monitoring of the number of iterations of communication between employees was used. After the acquisition of the enterprise by the new owner, a close-knit team came to the position of top management, including the general director, financial director, head of the sales department, operating director, as well as a number of raw materials counterparties, who were to supply about 2/3 of the total volume of raw materials used at the enterprise. It can be well seen how big the points formed by the new command are and how wide the lines between the clusters in the respective spots of the graph are (see Figure 1).

However, the warehouse manager and his deputy, who retained their positions due to the lack of people in the new team capable of performing indispensable procedures, have as large a spot as the new management team does. It means that the warehouse manager and the general manager are almost equally able to influence the communication network. Moreover, although the thickness of the lines in the graph at the points related to the head of the warehouse and his deputies are thinner, however, they are bigger in quantity, which means the ability to "activate" the resistance of a significant number of employees of the enterprise.

Turning to the overall picture of the communication network, it is clearly understandable that some of the company's counterparties, supplying 1/3 of the total volume of raw materials, communicated directly with the warehouse manager and his deputies, bypassing the general director and his team: local counterparties had not yet managed to establish strong ties with the management. Consequently, the shipment took place through the usual communication channel - the head of the warehouse.

Thus, the warehouse manager and his deputies turned out to be the bottleneck between the two large communities: the contractors-suppliers and the new team involved into the internal processes. When the owner of the enterprise made an attempt at digitalization, the warehouse manager realized that increasing the transparency of processes would significantly impair his ability to implement his own plans at the junction of the two communities, which led to resistance on his part.

6. In conclusion

Summing up, the lack of control on the part of top management allowed the lower-level managers to form enterprises in the internal and external environment controlled by the head of the warehouse of a blat network. The blat networks allowed the community that had formed around the warehouse manager to derive additional benefits that were contrary to the interests of the enterprise. The increase in process transparency, which usually accompanies digital transformation, posed a direct threat to the established communications network.

It is highly likely that the value of the informal structure turned out to be more important than the need to follow institutional norms for the participants in the process. This led to open resistance from the warehouse manager and his subordinates.

Thus, resistance to innovative practices implementation is likely to be expected from managers who, due to the introduction of new business technologies, are afraid of losing their role in the networks of blat that previously used to secure their position. As can be seen from the study, the head of the warehouse by all means tried to protect his networks of blat. Consequently, the problem of studying the obstacles and impediments to digital transformation is less a subject of technological applications and rather a matter of organizational development.

The top managers intending to introduce modern technologies or western management models should monitor social networks of the company in terms of the non-formal social ties and their influence within the company. The introduction of new management models may not only face resistance to change, but also ruin the company if "blat" networks prove to be highly influential in reverting company's processes at all levels.

In order to avoid dramatic measures, such as firing the staff members who show a high level of influence using their non-formal ties and even sabotage day-to-day operations, it is recommended to hold training sessions, which are to clarify why changes in the company are indispensable and cannot be altered. It could make the development strategy understandable for all the whole team including the members with the active involvement into non-formal ties. There is a great possibility to convert those members into the agents who are not resistant, but prone to change.

However, not all the cases can be positively resolved in terms of resistance, which was proven by the case reviewed in the article. Sometimes the managers of a company with a high level of informal influence turn out to have pursuits that openly conflict with the current interests of the company. It means that the top manager of the company is likely to be forced to take more serious steps aimed at changing the system of power relations. Should the situation be neglected, the entire future of the company will be under threat of stagnation, and the company will solely function for the interests of a narrow circle of informal leaders who are not interested in introducing any changes that may decrease the level of their influence. The search for new methods to outrule

the influence of the informal leaders determines the relevance of studying the topic of non-formal social ties and ways to control them within the framework of the available nominal management system.

As follows from the current article, there was a real case of resistance to the digital transformation constellated by staff members of a Russian metallurgical enterprise who had non-formal social ties and were involved in an informal social network within the company. Despite the fact that the situation did not have any positive outcome and turned out to be beneficial neither for employees nor the company, the authors of the article believe that further study of this topic will allow them to come up with the solution that could contribute to a more productive resolution of such and similar contingencies. Other researchers are also welcome to share their case studies related to non-formal ties and informal social networks within companies, substantial and relevant experience in resolving them and theoretical knowledge on how to reduce the effect on the existing management system in the company.

References

- Ajwani-Ramchandani, R., Figueira, S., de Oliveira, R. T., Jha, S., Ramchandani, A., & Schuricht, L. (2021) "Towards a circular economy for packaging waste by using new technologies: The case of large multinationals in emerging economies", *Journal of Cleaner Production*, Vol. 281: 125139.
- Arnstberg, K. O., & Boren, T. (2003) *Everyday Economy in Russia, Poland and Latvia*, Södertörns högskola.
- Bennett, J. W. (1976) "Anticipation, Adaptation, and the Concept of Culture in Anthropology: A synthesis for a "preparadigmatic" science is suggested by the philosophy of AN Whitehead", *Science*, Vol. 4242, No. 192, pp 847-853.
- Bocken, N. M., Olivetti, E. A., Cullen, J. M., Potting, J., & Lifset, R. (2017) "Taking the circularity to the next level: a special issue on the circular economy", *Journal of Industrial Ecology*, Vol. 21, No. 3, pp 476-482.
- Chauhan, C., Parida, V., & Dhir, A. (2022). "Linking circular economy and digitalisation technologies: A systematic literature review of past achievements and future promises", *Technological Forecasting and Social Change*, Vol. 177: 121508.
- Chauhan, C., Sharma, A., & Singh, A. (2019) "A SAP-LAP linkages framework for integrating Industry 4.0 and circular economy", *Benchmarking: An International Journal*, Vol. 28, No. 5, pp. 1638-1664.
- Chen, Y., Friedman, R., Yu, E., & Sun, F. (2011) "Examining the positive and negative effects of guanxi practices: A multi-level analysis of guanxi practices and procedural justice perceptions", *Asia Pacific Journal of Management*, Vol. 28, No. 4, pp 715-735.
- Clarke, S. (2002) *Making ends meet in contemporary Russia*, E. Elgar.
- Cohen, S., (2015) "Humanizing Soviet Communication: Social-Psychological Training in the Late Socialist Period", *Slavic Review*, Vol. 74, No. 3, pp. 439-463
- Cortellazzo, L., Bruni, E., & Zampieri, R. (2019) "The role of leadership in a digitalized world: A review", *Frontiers in psychology*, Vol. 10:1938.
- De Medeiros, J. F., Ribeiro, J. L. D., & Cortimiglia, M. N. (2014) "Success factors for environmentally sustainable product innovation: a systematic literature review", *Journal of cleaner production*, Vol. 65, pp 76-86.
- Denzin, N. K. (1989) *Interpretive interactionism*, Newbury Park, CA: Sage.
- Ellen MacArthur Foundation. (2013) "Towards the circular economy: Opportunities for the consumer goods sector", *Ellen MacArthur Foundation*, pp 1-112.
- Ferreira, M. C., Fischer, R., Porto, J. B., Pilati, R., & Milfont, T. L. (2012) "Unraveling the mystery of Brazilian Jeitinho: A cultural exploration of social norms", *Personality and Social Psychology Bulletin*, Vol. 38, No. 3, pp 331-344.
- Forsman, H. (2013). "Environmental innovations as a source of competitive advantage or vice versa?", *Business Strategy and the Environment*, Vol. 22, No. 5, pp 306-320.
- Geertz, C. (1973) *The interpretation of cultures: Selected essays*, New York: Basic Books.
- Granovetter, M. S. (1973) "The strength of weak ties", *American journal of sociology*, Vol. 78, No. 6, pp 1360-1380.
- Humphreys, M., & Brown, A. D. (2002) "Narratives of organizational identity and identification: A case study of hegemony and resistance", *Organization studies*, Vol. 23, No. 3, pp 421-447.
- Ingemarsdotter, E., Jamsin, E., Kortuem, G., & Balkenende, R. (2019) "Circular strategies enabled by the internet of things—A framework and analysis of current practice", *Sustainability*, Vol. 11, No. 20: 5689.
- Jaffe, A. B., Newell, R. G., & Stavins, R. N. (2005) "A tale of two market failures: Technology and environmental policy", *Ecological economics*, Vol. 54, pp. 164-174.
- Jones, R. A., Jimmieson, N. L., & Griffiths, A. (2005) "The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change", *Journal of management studies*, Vol. 42, No. 2, pp 361-386.
- Knoke, D., Kuklinski, J.H. (1982) "Network Analysis", *Sage University Paper Series on Quantitative Applications in the Social Sciences*, No. 07–028.
- Ledeneva, A. (2009) "From Russia with blat: can informal networks help modernize Russia?", *Social Research: An International Quarterly*, Vol. 76, No. 1, pp 257-288.
- Ledeneva, A. V. (2013) *Can Russia modernize?: sistema, power networks and informal governance*, Cambridge University Press.

- Maxwell, J. (1992) "Understanding and validity in qualitative research", *Harvard educational review*, Vol. 62, No. 3, pp 279-301.
- Michailova, S., & Worm, V. (2003) "Personal Networking in Russia and China: Blat and Guanxi", *European Management Journal*, Vol. 21, No. 4, pp 509-519.
- Onoshchenko, O., & Williams, C. C. (2013) "Paying for favours: evaluating the role of blat in post-Soviet Ukraine", *Debatte: Journal of Contemporary Central and Eastern Europe*, Vol. 21, No. 2-3, pp 259-277.
- Rennings, K. (2000) "Redefining innovation—eco-innovation research and the contribution from ecological economics", *Ecological economics*, Vol. 32, No. 2, pp 319-332.
- Reuter, M. A. (2016) "Digitalizing the circular economy", *Metallurgical and Materials transactions B*, Vol. 47, No. 6, pp 3194-3220.
- Saarikko, T., Westergren, U. H., & Blomquist, T. (2020) "Digital transformation: Five recommendations for the digitally conscious firm", *Business Horizons*, Vol. 63, No. 6, pp 825-839.
- Sadeghi, A. R., Wachsmann, C., & Waidner, M. (2015) "Security and privacy challenges in industrial internet of things", *2015 52nd ACM/EDAC/IEEE Design Automation Conference (DAC)*, pp 1-6.
- Smith, A., & Stenning, A. (2006) "Beyond household economies: articulations and spaces of economic practice in postsocialism", *Progress in human geography*, Vol. 30, No. 2, pp 190-213.
- Smith, P. B., Torres, C., Leong, C. H., Budhwar, P., Achoui, M., & Lebedeva, N. (2012) "Are indigenous approaches to achieving influence in business organizations distinctive? A comparative study of guanxi, wasta, jeitinho, svyazi and pulling strings", *The International Journal of Human Resource Management*, Vol. 23, No. 2, pp 333-348.
- Teulier, R., & Rouleau, L. (2013) "Middle managers' sensemaking and interorganizational change initiation: Translation spaces and editing practices", *Journal of Change Management*, Vol. 13, No. 3, pp 308-337.
- Van Schendel, W., & Abraham, I. (2005) *Illicit flows and criminal things: States, borders, and the other side of globalization*, Indiana University Press.
- Vial, G. (2019) "Understanding digital transformation: A review and a research agenda", *The journal of strategic information systems*, Vol. 28, No. 2, pp 118-144.
- Wetherell, C., Plakans, A., & Wellman, B. (1994) "Social networks, kinship, and community in Eastern Europe", *Journal of Interdisciplinary History*, No. 24, pp 639-663.