**ORGANIZATIONAL CULTURE AND EFFECTIVENESS:
THE CASE OF FOREIGN FIRMS IN RUSSIA**

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ABSTRACT

This paper extends the literature on organizational culture and effectiveness by examining a set of foreign-owned firms operating in Russia. Beginning with an existing model of organizational culture and effectiveness, the paper presents two linked studies. The first study is a survey of 179 firms designed to test the applicability of the model in the Russian context. The second study presents four case studies designed to ground the empirical results in the Russian context and identify areas where the model may need to be extended or reinterpreted. The results of both studies are interpreted with respect to the literature on Russian management practices. The discussion includes several recommendations for future research.

KEY WORDS

Organizational Culture

Russia

Effectiveness

The relationship between the culture and effectiveness of organizations has drawn attention from researchers for many years. A number of authors have investigated culture from a strategic perspective and have presented culture as a source of competitive advantage (Barney, 1986; Ott, 1989; Wilkins & Ouchi, 1983). Unfortunately, those authors who have developed explicit theories of organizational culture and effectiveness (Denison, 1990; Denison & Mishra, 1995; Kotter & Heskett, 1992; O'Riley, 1989) have focused almost exclusively on the American context. Cross-cultural research by Adler (1991), Hofstede (1980), Trompenaars (1994) and others, however, has suggested that most management theories need modification for different national contexts.

To begin to address these issues, this paper presents two linked studies of foreign firms operating in Russia. Beginning with an existing model of organizational culture and effectiveness (Denison & Mishra, 1995), the paper presents a quantitative study of 179 foreign firms operating in Russia and compares the results with those from the USA. This is followed by case studies of four firms designed to ground the empirical results in the Russian context and to suggest ways that the model and the measures may need to be extended, refined, or reinterpreted when applied in the Russian context.

Foreign firms have shown increased interest in Russia, but they often encounter cultural problems after they enter that market (Cattaneo, 1992; Fey, 1997). Thus, research on this topic should have value for both theory and practice. As Luthans, Welsh, and Rosenkratz (1993: 742) have noted, "The assumptions coming out of the news media are that the Russians are failing badly because they know little about modern management techniques and, in fact, US and Russian management systems are quite different. The time has come to assess these assumptions."

THE RUSSIAN CONTEXT

Russia's transformation to a market economy has not been easy. In 1994-1995 the annual inflation rate was 100-200% per year. In 1997 inflation declined to 10% but quickly increased to 50-80% due to the August 1998 financial crisis (RECEP 1998; 1999). GDP has continued to decline throughout the 1990s. Official unemployment has doubled to 18% since the financial crisis. Until the most recent crisis, exchange rates had stabilized, varying less than 10% during 1996-1997. However, in 1998 the ruble was devalued again (RECEP, 1999). Foreign direct investment has been allowed in Russia since 1987, and since 1991 wholly-owned foreign firms have been legal in Russia. Despite this change in policy, foreign direct investment in Russia has remained fairly modest at about $47 per person (BISNIS, 1997).

With vast natural resources, a well-educated and inexpensive labor force, and 150 million people, Russia has attracted many foreign firms. Nonetheless, doing business in Russia can be very risky. Risks include factors such as organized crime, intractable bureaucracy, uncertain legislation, an arbitrary tax system, and an unstable political and economic system. These environmental factors are characteristics of the market place and are difficult for any single company to influence. In contrast, this paper seeks to examine the influence of enterprise factors such as organizational culture on the success of foreign firms operating in Russia.

Because previous management research conducted in Russia has not explicitly focused on the relationship between organizational culture and effectiveness, the remainder of this section reviews some of the more important Russian management studies to provides a useful background for the current study. The most extensive study on comparative US-Russian management practices is Lawrence and Vlachoutsicos' (1990) book *Behind Factory Walls* and two related articles (Lawrence & Vlachoutsicos, 1993; Vlachoutsicos & Lawrence, 1990). Their project was based on data collected by the Harvard research team and their Russian colleagues at four US and four Russian electronic and truck factories. The study provided several powerful insights into managerial decision making in Russia, but their focus on case studies places limits on the generality of their findings.

A second influential stream of Russian management research is that done by Luthans and his colleagues at the Tver Cotton Mill. Luthans, Welsch, and Rosenkratz (1993) systematically observed the activities of 66 Russian managers. Welsch, Luthans, and Sommer (1993) tested several human resource management theories developed in the USA and found that extrinsic rewards and behavioral management increased worker performance, but that participative techniques resulted in decreased performance.

Puffer has also made several important contributions to the Russian management literature. She has investigated issues such as compensation (Puffer, 1993a, 1997), differences between Russian and US business ethics (Puffer & McCarthy, 1995), Russian business leaders (Puffer, 1994), and Russian managerial motivation (Puffer, 1993b). Her work has included both qualitative case studies and quantitative surveys such as her 1997 comparison of the preferences of Russian and American managers for allocating rewards.

Another significant contribution to the Russian management literature comes from a recent series of studies of the restructuring of Russian firms following privatization. These studies (Buck, Filatotchev, & Wright, 1998; Filatotchev, Buck, & Wright, 1993; Filatotchev, Hoskisson, Buck, & Wright,1996; Wright, Hoskisson, Filatotchev, & Buck,

1998) have benefitted from several large-sample surveys, rare to find and difficult to conduct in countries like Russia.

Other important articles also help define the field of Russian management studies. For example, Sedaitis (1998) has investigated the link between alliance strategy and structural relations among networks of new firms. Cattaneo (1992), Fey, (1991; 1997; 1999), and Rosten (1991) have examined the management of joint ventures. Shama (1993, 1997) has investigated the changing patterns of foreign direct investment in Russia. Holt, Ralston, & Terpstra (1994) have studied the evolution of the Russian psyche, Johansson, Ronkainen, and Czinkota (1994) have examined some negative “country-of-origin effects,” and McDonald (1994) has examined the Russian raw-materials sector. In addition, Ivanavich, DeFrank, and Gregory (1992) have explored Russian leadership issues, Kvint (1994) has investigated the promises of various Russian geographic regions, and Randall and Coakley (1998) have examined the Russian defense industry. Enterpreneurship has been examined by Zhuplev, Konkov, and Kiesner (1998) and Hisrich & Grachev (1993), and human resource issues have been studied by May, Young, and Ledgerwood (1998), Longenecker and Popovski (1994), and Ralston, Holt, Terpstra, and Cheng (1997).

Of particular importance for this paper are several previous studies that have investigated Russian national culture. Bollinger (1994), Naumov (1996), and Elenkov (1998) have all used Hofstede’s (1980) dimensions of national culture in Russia. Their results for Russia are compared in the table below to Hofstede’s (1980) results for the USA since much management theory has been developed in the USA and because this study will present and compare data collected in Russia and the USA on the relationship between organizational culature and effectivnes.

	Naumov Russia	Bollinger Russia	Elenkov Russia	Hofstede USA
Individualism	41	26	45	91
Uncertainty Avoidance	68	92	80	46
Masculinity	45	28	---	62
Power Distance	40	76	88	40

Although there is some variation in the results, with the exception of Naumov's result for power distance (which Naumov himself questions), results are generally consistent. They show that Russians are group oriented, a characteristic with a long history that was encouraged by communism (Vlachoutsicos, 2000). Russians also prefer to avoid uncertainty, which might be expected given the security of the communist system and the surprises dealt to Russia in the past. Russians report moderately low masculinity since they consider that they have moderately low control over events. Finally, Russia appears to have a fairly high power distance illustrating the large differences that exist between workers and managers in Russia. This summary of Russian national culture provides a useful reference point for our study of organizational culture. Bradley (1999) and Veiga, Yanouzas, & Buchholtz (1995) have also made important contributions to our understanding of Russian national culture.

Further understanding of Russian national character is offered by the well-known 19th century Russian historian Kliuchevskii (1990). He describes a set of stereotypical Russian behaviors including resourcefulness, patience in the face of adversity and deprivation, and spurts of energy, combined with a tendency to dissemble and an inconsistency in seeing things through. He also describes Russians as circumspect, cautious, and ambiguous and having a tendency to look back instead of forward. Finally, he describes Russians as having a tendency to work in groups, and to monitor results rather than set goals.

ORGANIZATIONAL CULTURE AND EFFECTIVENESS

A number of scholars have developed integrative frameworks of organizational culture (Allaire & Firsirotu, 1984; Hatch, 1993; Martin, 1992; Ott, 1989; Schein, 1985, 1990), but little consensus exists with regard to a general theory of organizational culture. In addition, since culture is a complex phenomenon that ranges from underlying beliefs and assumptions to visible structures and practices, healthy skepticism exists with respect to whether organizational culture can actually be “measured” in a comparative sense. Furthermore, research on the link between organizational culture and effectiveness is limited by lack of agreement about the appropriate measures of effectiveness. Despite these challenges, better understanding of this topic seems critical to the development of organizational studies.

Although the connection between organizational culture and effectiveness has a long history, most current literature has its key roots in the early 1980s. Deal and Kennedy (1982) and Peters and Waterman (1982) focused attention on the strategic importance of organizational culture and created interest in the topic that is still visible today. Kotter and Heskett (1992) expanded on this by exploring the importance of the ”fit” between an organization and its environment and emphasizing adaptability.

This study relies on the organizational culture model developed by Denison and his colleagues as a general framework (Denison, 1984, 1990, 1996; Denison & Mishra

1995, 1998; Denison & Neale, 1996; Denison & Young, 1999). This stream of research has made an important contribution by developing an explicit model of organizational culture and effectiveness and a valid method to measure organizational culture. Using this approach with top executives in 764 organizations, Denison and Mishra (1995) showed that the four different cultural traits were related to different criteria of effectiveness. For example, this research found that the stability traits of mission and consistency were the best predictors of profitability, the flexibility traits of involvement and adaptability were the best predictors of innovation, and the external orientation traits of adaptability and mission were the best predictors of sales growth.

The Denison model is based on four cultural traits of effective organizations. These four traits are described briefly below with references to their place in the organizational studies literature. A more complete review linking these traits to the literature has been provided by Denison and Mishra (1995).

> **Involvement**. Effective organizations empower their people, build their organizations around teams, and develop human capability at all levels (Becker, 1964; Lawler, 1996; Likert, 1961). Executives, managers, and employees are committed to their work and feel that they *own* a piece of the organization. People at all levels feel that they have at least some input into decisions that will affect their work and that their work is directly connected to the goals of the organization (Katzenberg, 1993; Spreitzer, 1995).
>
> **Consistency.** Organizations also tend to be effective because they have "strong" cultures that are highly consistent, well coordinated, and well integrated (Davenport, 1993; Saffold, 1988). Behavior is rooted in a set of core values, and leaders and followers are skilled at reaching agreement even when there are diverse points of view (Block, 1991). This type of consistency is a powerful source of stability and internal integration that results from a common mindset and a high degree of conformity (Senge, 1990).
>
> **Adaptability.** Ironically, organizations that are well integrated are often the most difficult ones to change (Kanter, 1983). Internal integration and external adaptation can often be at odds. Adaptable organizations are driven by their customers, take risks and learn from their mistakes, and have capability and

experience at creating change (Nadler, 1998; Senge, 1990). They are continuously changing the system so that they are improving the organizations' collective abilities to provide value for their customers (Stalk, 1988).

Mission. Successful organizations have a clear sense of purpose and direction that defines organizational goals and strategic objectives and expresses a vision of how the organization will look in the future (Mintzberg, 1987; 1994; Ohmae, 1982; Hamel & Prahalad, 1994). When an organization's underlying mission changes, changes also occur in other aspects of the organization's culture.

Like many contemporary models of leadership and organizational effectiveness, this model focuses on the contradictions that occur as organizations try to achieve internal integration and external adaptation at the same time (Hatch, 1993; Schein, 1990). For example, organizations that are market-focused and opportunistic often have problems with internal integration. On the other hand, organizations that are well-integrated and over-controlled usually have a hard time adapting to their business environment. Organizations with a powerful top-down vision often find it difficult to focus on the empowerment and "bottom-up" dynamics needed to implement that vision. At the same time, organizations with strong bottom-up participation often have difficulty establishing direction. Effective organizations are those that are able to resolve these contradictions without relying on simple trade-offs.

At the core of this model are underlying beliefs and assumptions. These "deeper" levels of organizational culture are typically quite unique to each firm and are thus difficult to measure and harder to generalize about. They are often best understood from a qualitative perspective. Nonetheless, they provide the foundation from which behavior and action spring (Schein, 1985).

The four traits of organizational culture presented by Denison & Mishra (1995) have been expanded by Denison & Neale (1996) and Denison & Young (1999) to include three sub-dimensions for each trait for a total of 12 dimensions. This version of the model is presented in Figure 1.

[insert Figure 1 about here]

This model serves as the starting point for the two linked studies of organizational culture and effectiveness that are presented in this paper. The first study presents an empirical test of the model by examining the relationship between the culture and effectiveness measures and comparing that to the pattern observed among US firms. The second study then examines four case studies. This second study serves two purposes. First, the case studies offer the opportunity to examine the culture of a small set of organizations in greater detail to provide illustrations of how the concepts described in the model are represented in the realities of the Russian context. Second, the case studies allow us to focus on aspects of culture that are not well represented in the model and use those to help suggest revisions, refinements, and reinterpretations that may be necessary when applying the model in the Russian context.

TESTING THE MODEL IN THE RUSSIAN CONTEXT

The first part of this study analyzes survey data from 179 foreign firms operating in Russia to examine the impact of organizational culture on effectiveness. These results are then compared to similar results for a sample of US firms. Following a brief statement of our hypotheses and a description of our methodology, the results are presented in terms of correlation and regression analysis of the culture and effectiveness measures.

Hypotheses

Since our review of the literature suggests that the Denison model may be applicable in the Russian context, our first hypothesis simply states that the four core culture measures in the model will be related to effectiveness in the Russian context.

> ***Hypothesis 1:*** *Involvement, consistency, adaptability, and mission are cultural traits associated with organizational effectiveness for foreign firms operating in Russia.*

This study also hypothesizes, as was found in the US context, that different aspects of culture will impact different elements of effectiveness. We predict that the same pattern will be found in the Russian context.

> ***Hypothesis 2:*** *Different culture traits will impact different criteria of effectiveness. Specifically,*
>
> *a) The externally focused traits of mission and adaptability will be the best predictors of sales growth and market share.*
>
> *b) The internally focused traits of involvement and consistency will be the best predictors of quality and employee satisfaction.*

Our third hypothesis, however, suggests a key difference between the expected pattern in the US and Russian contexts. Since the beginning of Perestroika in 1987, the business environment in Russia has been turbulent and unpredictable (Holt, Ralston, & Terpstra, 1994; Puffer, McCarthey, & Zhuplev, 1998; Sharma, 1993; Taucher, 1992). As a result, it seems to be particularly important for firms operating in Russia to be able to adapt rapidly. In addition, the trait of involvement also appears to be more important in the Russian context. Groups were one of the central building blocks of communist society (Elenkov, 1998), and Russian managers feel that it is important to work with and contribute to a group (Puffer, McCarthey, & Naumov, 1997; Vlachoutsicos, 2000). As a result, creating an organization that uses many groups is likely to be especially desirable in Russia. Second, since managers and employees need to learn how they can work well in a market economy (Puffer, 1992), creating an organizational culture that values training and capability development for all employees seems to be very important. In contrast, the stability traits of mission and consistency would appear to be difficult to achieve in the turbulent Russian environment and perhaps even a liability as firms struggle to adapt. For these reasons we pose our third hypothesis:

> ***Hypothesis 3:*** *Adaptability and involvement are the two most important dimensions of organizational culture necessary for a firm to be effective in Russia.*

Methodology

Sample. The sample for this study included all foreign firms operating in Russia with a parent firm headquartered in Canada, Germany, Finland, France, Sweden, or the USA. Combining the lists of firms obtained from the commercial section of each country's embassy gave us a total of 789 firms. 186 of these firms could not be contacted because of incorrect information, and 478 of those contacted met our criteria of having at least 15 employees in Russia, operating in Russia before June 31, 1995, and being located in Moscow or St. Petersburg.

Data collection occurred between October 1997 and January 1998. Following a telephone call to confirm that the firm met the sampling criteria, a questionnaire was personally taken to the firm for a senior manager to complete. Upon meeting the senior manager, the researcher gave a verbal description of the project. Whenever possible, the senior manager completed the questionnaire at that time. However, many times the senior manager promised to complete the questionnaire and return it later by fax. If questionnaires were not received within one week, an extensive follow-up procedure was undertaken which included making three telephone calls, faxing a replacement questionnaire, and making a fourth telephone call as a final reminder. Companies whose questionnaires had not been returned at the end of this procedure were considered non-respondents. This procedure yielded 179 usable questionnaires completed by a senior manager in each firm, for a 37% response rate. Respondents were either general managers or deputy general managers (80%) or human resource managers (20%). 122 of the senior managers were Russian and 57 were foreign. A dummy variable for the position of the respondent was initially included in the regression equations but proved non-significant and was dropped from subsequent analyses.

Using a single respondent to depict a firm's culture has several limitations that should be kept in mind. It would, of course, be much better to have a large sample of respondents or (better yet) in-depth case studies of each of the 179 firms. But that would be a highly time-intensive undertaking. We carefully considered the trade-offs involved in targeting a sample with 10 respondents from each of 20 firms, for example, rather than one respondent from 179 firms, as well as other combinations. But because the focus of the first study in this paper is comparison, we opted for the approach that would result in as large a sample of firms as possible. Single respondent studies are also quite common in the recent organizational and strategy literature (Delery & Doty 1996; Denison & Mishra, 1995; Geringer & Hebert; 1989; Lee & Beamish, 1995; Shaw, Delery, Jenkins, & Gupta, 1998).

Some readers may also be concerned that a single top executive respondent may be so focused on performance that his or her response may be biased. However, using the same approach, Denison and Mishra (1995) showed even higher correlations between culture dimensions and objective measures of effectiveness than with subjective measures of effectiveness. Given the well-known dominance of most directors of firms in Russian, we would also argue that it is more accurate to have the general director or deputy general director as a single respondent in Russia than it would be in most other countries.

Measurement and Analysis

Survey items were used in this study to measure organizational culture, organizational effectiveness, and several control variables. The items were translated into Russian using an extensive back translation process, checked by Russian experts and pilot tested. After the data were collected, we performed a factor analysis on the culture items and examined the relationship between the culture and effectiveness measures using correlations and ordinary least squares multiple regression.

Independent Variables. The questionnaire items measuring organizational culture and effectiveness were drawn from the Denison Organizational Culture Survey (Denison & Neale, 1996; Denison & Young, 1999). The four main dimensions of this model--involvement, consistency, adaptability and mission--each have three sub-dimensions as shown in Figure 1. Each of these sub-dimensions was measured with three Likert scale questions ranging from 1=strongly disagree to 5=strongly agree. The twelve indexes were constructed by computing the mean of the three component items for each index. For example, the statements for the "Creating Change" sub-dimension of adaptability are as follows:

1) This organization is very responsive and changes easily.
2) This organization responds well to competitors and other changes in the external business environment.
3) This organization continually adopts new and improved ways to do work."

Dependent Variables. Following Denison and Mishra (1995), firm effectiveness was measured using seven five-point Likert scale questions ranging from 1=poor to

5=excellent. These scales measured the following dimensions: overall performance, market share, sales growth, profitability, employee satisfaction, quality of products and services, and new product development.

While some scholars have criticized the use of perceptual measures of effectiveness, we found these measures useful for several reasons. First, since Russian accounting standards are still emerging, it is virtually impossible to obtain comparable financial information from firms. Second, since firms operating in Russia have diverse goals, it seems unwise to compare the short-term financial performance of firms with differing goals. Third, virtually no centrally-collected financial information is available in Russia. Fourth, Russians are very secretive and unwilling to share financial information. Thus, in the Russian context the benefits of using perceptual measures outweigh the drawbacks. Furthermore, there is precedence for using perceptual measures (Delaney & Huselid, 1996; Denison & Mishra, 1995), and prior research has shown that subjective measures of performance correlate well with objective measures of performance (Powell, 1992).

Control Variables. This study includes control variables for size, concentration in manufacturing, industry, firm age, country of origin, and nationality of the respondent. We measured firm size as the number of employees in the firm and also controlled for the percentage of a firm's activity that is in manufacturing. Firm age has little variance in this study since foreign firms were not allowed into Russia prior to 1987. Nonetheless, we controlled for firm age in number of years.

We also include dummy variables to control for industry. Based on SIC classification, we created categories that were prevalent in our sample and placed the remaining firms in “other manufacturing” or “other service.” These groupings were:

1. Electrical, industrial, and precision instrument manufacturing
2. Wood, paper, textiles, food, and metal manufacturing
3. All other manufacturing
4. Banking, insurance, real estate, advertising, and accounting
5. Wholesale and retail trade
6. Other services

Some researchers have also suggested that performance differences might be expected based on the home country of the parent firm. Thus we control for parent firm home country with a series of dummy variables. Finally, a dummy variable was included to control for the nationality of the respondent.

RESULTS

To establish the validity of the culture measures using the Russian translation, we performed a factor analysis on the twelve organizational culture sub-dimensions. These results are presented in Table 1. The data factor nicely into the four expected dimensions with relatively low cross loadings (all but two under .26 and all under .37). All of the Cronbach alphas are greater than .70 (Nunnally, 1967). Thus, the factor analysis demonstrates good discriminate and convergent validity.

[Insert Table 1 about here]

Table 2 summarizes the correlations between the dimensions of organizational culture and the effectiveness measures. In general the correlations provide good support for the model of organizational culture and effectiveness with 27 of 28 correlations between organizational culture dimensions and effectiveness measures being significant.

Thus, Hypothesis 1--that involvement, adaptability, consistency, and mission are correlated with organizational effectiveness--is supported. Table 2 also shows the results for previous research on 136 firms in the USA using respondents from both middle management and executive ranks (Denison & Young, 1999). This comparison shows that the culture data, in the Russian context, are somewhat weaker predictors of overall performance, employee satisfaction, quality, and product development, than in the USA, but are somewhat stronger predictors of market share, sales growth, and profitability.

[Insert Table 2 about here]

The predictions of Hypotheses 2 and 3 can also be addressed through Table 2. The data show that different culture traits do indeed predict different criteria of effectiveness, but it is a different pattern than that observed in the USA data. In the Russian context, involvement and adaptability are the strongest predictors of overall performance and as well as profitability and product development. Involvement and Mission are the strongest predictors of market share, sales growth, employee satisfaction, and quality. This is in contrast to the results from the USA which showed that criteria such as employee satisfaction , quality, and overall performance are best predicted by involvement and consistency and criteria such as market share, sales growth, and profitability are best predicted by mission and consistency. Product development is best predicted by adaptability and mission.

A more refined look at the relationship between culture and effectiveness is provided by the regression results. The regression results for the Russian data are presented in Table 3 and for the USA data in Table 4.

[Insert Tables 3 & 4 about here]

The regression results, with two minor exceptions, show that the control variables are insignificant. Those two exceptions show that the firms in one industry (electrical, industrial, and instrument manufacturing) are slightly less profitable and that larger firms tend to have somewhat higher quality ratings. These results also show that all of the culture traits except consistency are significant predictors of some aspect of effectiveness, providing substantial support for Hypothesis 1.

The regression results present a similar picture with respect to Hypotheses 2 and 3 as the correlations that were presented in Table 2. The Russian data do support the idea that different aspects of culture are linked to different elements of effectiveness. For example, Table 3 shows that mission is the most important organizational culture characteristic for firms focusing on sales growth. Mission had a beta of .357 which was significant at $p<.001$. Table 3 also shows that adaptability is the most important dimension of organizational culture for firms primarily concerned with profitability. Adaptability has a beta of .308 which is significant at $p<.001$. Finally, Table 3 also shows that involvement is the most important dimension of organizational culture for firms whose primary goal is employee satisfaction. It has a beta of .332 which is significant at $p<.001$.

The results show that some culture measures are better predictors of some aspects of effectiveness than others and that the Russian data do not show the same pattern as would be expected based upon the USA data (See table 4 for a comparison with Regressions on the US data).

In addition, support is provided for hypothesis 3, that adaptability and involvement are the two most important dimensions of organizational culture necessary for a firm to be effective in Russia. Adaptability and involvement account for 10 of the 13 significant relationships predicting effectiveness and are also the organizational culture traits which are significant in the model for overall performance.

These results are also encouraging with respect to the risk that response bias and correlated error between the independent and dependent measures may have accounted for most of the significant results. If bias were a major problem, we would expect to find all of the variance claimed by the first variable entered into the regression equation and thus only one predictor would be significant. Since all of the equations with significant predictors have more than one significant predictor, this fact suggests that the results are quite robust. A correlation matrix of all the variables used in the regression analyses is presented in Appendix A.

TAKING A CLOSER LOOK: FOUR CASE STUDIES

The empirical study of 179 firms has shown that many of the general concepts in the Denison model can be measured accurately and appear to have an impact in the Russian context. But even where the results appear to indicate a similar impact in the US and Russian contexts, it would be a mistake to conclude that the concepts in the organizational culture model have the same *meaning* in the Russian context as they do in the US environment. For example, empowerment may be a salient aspect of culture in both contexts, but this should not be taken to mean that the same behaviors will constitute empowerment in both contexts. For this reason, the first objective of these case studies is to ground the model's concepts in the Russian context through more detailed description.

The second objective of these case studies is to identity aspects of the cultures of the four firms that appeared to have an important impact on effectiveness but did not fit so easily with the model. This approach helps to suggest several extensions, refinements, and reinterpretations that may be useful when using this model in the Russian context. These themes can also make an important contribution to future theory-building about culture and effectiveness in the Russian context.

This section begins with a description of the case study methodology, followed by a brief description of the four firms and a table summarizing their culture and level of effectiveness. These accounts are followed by a discussion, framed in terms of the model, which grounds the abstract concepts of the model in the Russian reality of the cases. The final part of this section focuses on two key themes that emerged from the case studies that help to provide a more grounded understanding of organizational culture and effectiveness in the Russian context.

Case Study Methods

To select firms for the case studies, we first identified a subset of the 179 firms that had at least 70 employees and manufacturing and sales operations in Russia. To control for the national culture of the parent firm and to facilitate access, we identified 13 Swedish firms that met these criteria. Several of these firms had been part of previous research projects conducted by the first author. Based on the authors' knowledge of the firms and additional sources of public data, four case study firms were chosen to represent a wide range of effectiveness.

Ten interviews were conducted in each firm. In each case study one expatriate was interviewed (either the GM or Deputy GM), and the remaining nine interviews were with Russian natives. In each firm, we interviewed the GM, the Human Resource Manager, two production employees, one production manager, one marketing employee, one marketing manager, one financial or accounting employee, one engineer, and one engineering manager. Eighty percent of the interviews were conducted in English. Remaining interviews were conducted in Russian with a translator present to clarify misunderstandings.

The interviews were semi-structured, following the approach described by Merton, Fiske, and Kendall (1963). A core set of questions facilitated comparisons across organizations, and also allowed flexibility for specific topics to be explored in greater depth in each interview. The core questions focused on the following topics: the interviewee's identity and career history, the values of the organization, the unique aspects of the organization and its history, the presence of sub-groups in the firm, the organization's management and business practices, and the interviewee's perception of the link between their organization's culture and its effectiveness. The purpose of these interviews was to obtain a broad description of the organizational culture and its impact on the organization's effectiveness.

Present at each interview were two researchers (the first author and a research assistant) who took notes independently and typed them up each night. Any inconsistencies in notes were discussed and resoled promptly. We followed the recommendations of Yin (1984) and Eisenhardt (1989) for the write-ups: 1) researcher's impressions were kept separate from the interviewees' impressions; 2) all data were included in the write-ups even when not specifically requested in the interview guide; and 3) researchers continually asked themselves questions such as, "What did I learn from this interview?" and "How does the data from this interview compare to the other interviews?" Interview notes from the two researchers were then compared to highlight any differences and produce a master set of interview notes. The memoing process described by Glaser (1978) was the next step in the analysis of the qualitative data. This process involves recording patterns that the researcher notices within each unique site and then recording those that appear across sites to identify both matches and mis-matches between the empirically based pattern and the predicted pattern (Yin, 1984).

The presentation of the case studies begins with brief background descriptions of each of the four firms. This is followed by a discussion of these cases in terms of the four basic concepts defined by the model, illustrating the concepts with examples from the cases. The final section focuses on two themes that emerged from the case studies that suggest several ways in which the concepts in the model which may need to be extended, refined, or reinterpreted for application in the Russian context.

Four Case Studies

AGA. Headquartered in Stockholm, Sweden, AGA is one of the world's leading producers of industrial gasses with 1996 sales of US$1.6 billion and over 10,000 employees in 40 countries. AGA has a new matrix structure with three business areas (manufacturing industry, process industry, and health care industry) and country organizations.

AGA entered Russia in 1908. Despite an interruption during the 1917 Russian revolution, AGA began supplying the Russian market via its Finnish subsidiaries in 1934. Today, with a head office in Moscow and a large sales office in St. Petersburg, AGA has added two factories, one in Kaliningrad in 1993 and one in Moscow in 1995. With over 500 employees in Russia, AGA is losing money and shareholders are demanding improved results. Despite a loss of 4 million USD in Eastern Europe in 1996 and 6 million USD in 1997, management points out that these losses can be seen as a cost of developing AGA's presence in the Russian market.

In 1995, AGA Moscow invested 10 million USD in a new production facility producing oxygen, hydrogen, and argon with a capacity of 100 tons per day. The factory was an old AGA factory from Finland that AGA disassembled, shipped to Russia, and then reassembled—a major logistical feat! The factory was reassembled at an old gas production plant in Balashikha, just outside of Moscow. This local factory was supposed to bring a cost advantage to AGA, but by mid 1997, the factory was producing 80 tons of gas per day and had cost AGA 15 million USD. To assist in distributing, AGA Moscow set up 20 distribution stations throughout Russia. The Moscow office in Balashikha is divided into the sales department mainly made up of new personnel, and the production side, mostly comprised of workers from the acquired production company. AGA Moscow has had difficulty because it is poorly organized, its price is too high, and the industry has over capacity.

Alfa Laval. Alfa Laval produces separators (e.g., for separating milk and cream), dairy equipment, and heat exchangers and has13,800 employees in 110 subsidiaries in 50 countries producing annual revenues of USD 1.8 billion. Today, Alfa Laval has a matrix organization and is part of the Tetra Laval group.

Alfa Laval acquired the Potok factory outside Moscow in 1993. Alfa Laval spent much money to renovate this factory to create a modern-looking factory that began new production in early 1996. To the disappointment of Alfa Laval Russia's general manager Bengt Celsing, this factory is somewhat too large for Alfa Laval Potok's current needs. Today the factory has approximately 300 employees.

Alfa Laval Potok had poor initial results and many challenges to overcome. However, it appears that Alfa Laval has adapted well to the Russian environment and has turned the corner to financial success. Alfa Laval Potok was originally supposed to focus on producing separation equipment, but this market had over-capacity. As a result, Alfa Laval Potok switched the majority of its efforts to producing heat exchange equipment for district heating which is a promising business in Russia. This move took considerable courage on the part of Alfa Laval and shows a good ability to adapt to the Russian market. Today, Alfa Laval Potok consists of three units—separation, thermal (heating), and beverage. Currently, the thermal division accounts for approximately 60 percent of the total turnover. Beverages make up 30% of turnover and the separation unit accounts for the remaining 10% of sales.

Alfa Laval Potok sells through 20 different distributors to different regions of Russia. In Novosibirsk Alfa Laval Potok has a successful distributor covering most of Siberia and accounting for 50 percent of the total Alfa Laval Potok revenues in heating. Choice of distributors has been driven by where good people could be found rather than by the location.

Though initially the performance of Alfa Laval Potok was poor, it has improved markedly as it has shifted its focus towards heat exchangers and trimmed excess personnel and assets. The heating division is now running at full capacity with net sales growing by 50 percent during 1997 and the same rate of growth expected for 1998. Thus, despite the poor profitability in the early years, Alfa Laval Potok's general manager is pleased with the current performance and believes the initial investments will be paid back within the next two years.

AssiDomän. The Swedish firm AssiDomän is one of Europe's largest forestry companies with 18,000 employees and sales of USD 2.5 billion, 60 percent of which comes from outside Sweden. AssiDomän is divided into 5 business areas: forestry, packaging, craft products, cartons, and barrier coating. It first entered Russia through its subsidiary, the Stratton Paper Company of which AssiDomän owns 50 percent. Stratton acquired 57 percent of the paper-producing company Segezhabumprom in Karilea. This company ran into serious problems, and AssiDomän has only recently managed to get out of this company.

Nonetheless, AssiDomän still saw opportunity in the Russian market and invested USD 25 million to open a 100% owned greenfield packaging factory in St. Petersburg in 1997. This modern factory focuses on the production and sale of corrugated packaging in northwestern Russia. Russian native Dennis Belkovsky (Managing Director) and his Danish wife Malene Ratajczak (Finance and Administration Director) manage the plant with a very enlightened management style. Prior to this, Ms. Ratajczak worked for two years at AssiDomän in Denmark.

According to AssiDomän, the Russian market for corrugated cardboard is growing rapidly. AssiDomän aims to serve both Russian firms and foreign firms operating in Russia. Its factory, which covers 15,000m^2, is capable of producing 60 million m^2 of cardboard box material when working three shifts. However, presently only one shift is used. AssiDomän hopes that the plant will be operating at full capacity within five years. Today the factory has 70 employees.

Lift. Lift (a pseudonym) is a global firm that develops, produces, sells, and services elevators. It is a division of a firm with over 200,000 people and an annual turnover of over US$30 billion. Lift is organized in a matrix structure with national companies in one dimension and 30 business areas organized into 4 business segments in the other dimension.

Lift Moscow is officially a joint venture formed in 1994 with Lift owning 80 percent equity and the Moscow Mechanical Complex owning the remaining 20 percent. However, in reality, Lift Moscow functions like a wholly-owned subsidiary of Lift. Lift Moscow was supposed to be Lift's golden door to Russia, but its potential has not been reached since it has been unable to sell many elevators. Fortunately it has been able to adapt by cutting the work force from 550 to 350 employees and by aggressively pursuing service contracts.

Since Lift Moscow produces only small elevators designed for residential use, local governments are their primary customers and they have limited resources.

Thus, Lift has had great difficulty selling elevators for cash and has resorted to barter. For example, in one recent deal, Lift "sold" a US$1.2 million elevator system to a town. The town administration paid for the system by bartering US$1.15 million in electricity to a pulp and paper company, that bartered US$ 1.1 million in paper to a trading company that paid Lift US$1 million in cash.

Adapting to the local environment with barter deals and service contracts has saved Lift Moscow. Many foreign firms refuse to consider barter deals even though they are an effective way of doing business in Russia. But barter deals do have several drawbacks. For example, it often takes two months to arrange a deal and a 20 percent markup needs to be added to the selling price.

Grounding the Model

To begin examining the link between the qualitative case studies and the model, we made summary ratings of the cultural traits and overall effectiveness of each of the firms based on the data gathered in the case studies. This summary is presented below.

	Involvement	Consistency	Adaptability	Mission	Overall Effectiveness
AGA	low	low	low	low	low
Lift	low	high	medium	medium	low
Alfa Laval	high	low	high	medium	medium
AssiDomän	medium	medium	high	high	high

Each of these cases provides examples that fit the model. Some of the examples show direct similarities to firms in a Western context, while other examples appear to illustrate the general concepts outlined in the model, but show many differences from firms in the West. This section of the paper presents qualitative findings that help to ground the concepts in the model to the realities of the Russian context. This section is framed in terms of the four main traits in the model.

Involvement. Several of the cases provide examples of involvement that are very similar to what might be found in a Western firm. For example, the AssiDomän Production Manager rewarded workers who developed the capability to operate multiple machines and put a chart on the wall where workers could see how many machines they were certified to operate. But the same manager exerted very tight control over workers and would not allow them to make personal calls home, even if they had a sick child. Workers complained that management often made them clean their aging machinery over and over again when work was slow. Strong leaders who exert tight control are an enduring Russian tradition. Interestingly enough, in AssiDomän, this tradition is far stronger in production than in any other functional area. Nonetheless, in this same organization, when workers were asked whether they would prefer an extra month's pay or the chance to attend a high-quality one-week training course in Russia, most said that they would choose the training course. This indicates that they may attach higher value to capability development than many of their counterparts in the West. This finding coincides with the view of Puffer (1992).

But other examples of involvement have a far different feel and appear to be more unique to the Russian context. For example, top management at Alfa Laval would often delegate decisions to middle management. Because top management had an "open-door" policy, the middle managers would come back over and over again to get top management to "decide" on an issue that had officially been delegated to middle management. Top management would respond by asking for the pros and cons of different alternatives but, in the end, would try to force middle managers to decide. Top management thought that this was better than abruptly telling middle management that it was their job to decide. Over time the middle managers slowly learned. Alfa Laval, in fact, was probably the best example of high involvement among the four case studies.

AGA also provided a useful example of how expectations of involvement and the sense of belonging to a team often followed functional lines. AGA was made up of two very different sub-cultures. People in the top management, sales, and accounting departments were largely young, new to the firm, open to trying new ways of working, and highly motivated. People in the production department were mostly older and had been working at the Balashikha plant for many years. Many of this second group of employees primarily wanted a stable job with a salary they could live on and were not eager to change the way they had worked for years. Both groups were highly motivated by membership in their own functional sub-groups but not by their membership in the organization as a whole. While this general phenomenon occurs in Western firms as well, it was clearly more extreme in AGA. For example, the first time we interviewed two factory workers, we asked, "How does it feel to work for AGA?" They replied, "We don't work for AGA." Upon further examination what they meant was that they worked for the Balashikha plant and regarded AGA as being merely an investor. The management/sales/accounting group viewed the production workers as ineffective employees that they inherited with the plant, many of whom wanted their salaries without having to work hard. But the factory employees saw the management group's high salaries and fancy offices as a major problem that was preventing AGA from being profitable. "After all," one of the production workers commented, "The sales employees are not producing anything, but they cost money."

These examples help to show how the concepts from the model may translate reasonably well into the Russian context even though the actual behavior that illustrates the concept may be quite different in the two contexts.

Consistency. Several of the cases also illustrate aspects of consistency that are similar to those that exist in Western firms. As the AGA and Alfa Laval examples from the previous sections illustrate, these Russian firms both had considerable problems with coordination and integration that stemmed from the differing mindset across functions and the poor communication between departments. This deficiency is also a familiar problem in Western firms, but once again, there is a substantial difference in the scale and scope of the problems in these two contexts. Several other examples help to illustrate.

In each case study, we asked questions about the core values of the firm. In Lift, several of the employees gave the same answer, "The core value of the firm is to maintain the formal system." The responses to this question generally indicated that core values were important to the interviewees. But this particular response essentially indicates that the primary purpose of the firm is to maintain the integrity of the existing authority structure – not a response that an employee of a Western firm would typically give. Another example that illustrates both the applicability of the general concept and the specificity of its application in the Russian context came from AGA. When we asked one lower level employee whether he agreed with management's decisions, he replied, "Right now, people really have no other choice than to agree." This response shows the applicability of a general concept like alignment across levels, or value consensus, but also illustrates the scope of the differences that exist in the Russian context.

Adaptability. The case studies also illustrate a number of interesting aspects of adaptability. As the empirical results have shown, adaptability is a critical trait in the Russian business environment. Once again, the qualitative data regarding adaptability reflect dynamics similar to those encountered in a Western organization, but other aspects of adaptability are quite different. AssiDomän's use of two-person sales teams provides an example that is perhaps closest to the types of dynamics that would illustrate adaptability in a Western environment. In order to respond more quickly to its customers, AssiDomän paired one sales person on the road with another sales person who remained in the office. Such pairing assured that customers would be able to contact someone even when their sales representative was on the road. The pairing was also helpful in that the sales person on the road could rely upon his or her partner in the office to make certain that orders were placed with the production department on a timely basis. Although the more likely situation in a Western organization would be one salesperson on the road with a lap top and cell phone, this example shows the use of a small team with shared responsibility to make the system respond quickly to a customer's needs.

Examples of more extreme forms of adaptability that is more specific to the Russian context came from Alfa Laval and Lift. In an effort to survive, Alfa Laval changed the focus of their Russian business quickly from separation equipment to heat exchangers. In Lift, the original concept of producing, selling, and servicing elevators in Russia was quickly abandoned for a focus on servicing any manufacturer's elevators. The few elevators that Lift was able to "sell" were increasingly arranged through barter deals. Drastic changes such as these certainly occur as a part of restructuring and re-organizations in the West as well, but in the Russian context, they are clearly a more integral form of "business-as-usual." Nonetheless, they underscore the importance of adaptability as a concept, even if it takes a different form in the Russian context. The approaches taken to creating change are also interesting. On the one hand, Russians appear to be able to endure anything with their combination of resignation, fatalism, and use of ingenuity in the service of survival. But on the other hand, their concept of a proactive approach to change in which individuals shape their own future appears quite limited. Interestingly enough, the most adaptable firm, AssiDomän, used an “open to changing mindset” as a key criterion in the recruitment of new employees.

Mission. Because of the continuous state of turbulence in the Russian business environment over the last ten years, a clear sense of mission is unusually difficult to establish. Thus, with a few exceptions, the positive examples in our case studies had to do with the way that drastic organizational changes were communicated to employees. For example, the two least effective organizations, Lift and AGA, both changed direction quickly, but did little to communicate these changes to their employees. In Lift’s case, the change from production, sales, and service to only service was not communicated throughout the organization in terms of strategy, goals, or vision. Changes were simply made on the operational level, and employees were expected to follow. In AGA’s case, a series of unmet sales targets quickly changed its strategic goals from expansion to survival. But employees seemed largely unaware of the rationale for these changes.

The other two cases, Alfa Laval and AssiDomän, are both examples of more effective organizations. The qualitative data that reflect on the sense of mission in these two organizations appear to support the importance of having clearly articulated and communicated the firm’s mission. In Alfa Laval, the strategic rationale for the change from separation equipment to heat exchangers was well communicated and well understood throughout the firm. In AssiDomän, we saw what was one of the few examples of an attempt to create a positive proactive sense of mission. AssiDomän was led by a husband and wife team who made a deliberate attempt to create an organization that was, in their words, “a good place to work.” This effort was reflected in employees’ comments in many different ways.

Our analysis of the data from these four case studies also supported the quantitative findings in another important way. There were far more examples of adaptability and involvement, which appeared from the quantitative study to be the best predictors of effectiveness, than there were of consistency and mission, which appeared to be less powerful predictors in the Russian context. Involvement and adaptability also appeared to offer many examples that represented creative solutions to the problems posed by the Russian context. Consistency and mission provided some interesting examples, but were clearly areas that received less attention given the turbulent nature of the Russian business environment.

Applying the Model in the Russian Context: Key Themes and Dynamics

Several themes emerged from the case studies that appear to illustrate important cultural dynamics in the Russian context. These themes can be interpreted with respect to the concepts in the model, but are important to recognize in their own right. This section of the paper focuses on two key themes identified through the case studies: the concept of time as a resource and the extreme nature of functional subcultures.

Managing Time as a Resource. One of the most striking differences in firms operating in the Russian context was their concept of time as a resource. In many Western firms, competitive strategies based on time as a resource are well established (Stalk, 1988). There is also a significant literature on national differences in the concept of time and their influence on management and organizational issues (Giddens, 1990; 1991; Hall, 1976; Hofstede, 1991; Trompenaars, 1998). But in the Russian context, the perspective is very different. It is not unusual, for example, for a busy Russian executive to take one hour off to go and purchase an item at a store or mail a letter at the post office rather than having an assistant do that task. Several examples help to illustrate the impact that time can have on effectiveness.

In AGA we interviewed several production workers who complained because only one of their four new fork lifts was working. When we inquired further, we learned that the fork lifts that were purchased three months before had been idle for the last five weeks because some of the sparkplugs were broken. As we traced this problem through the system, the operators told us that they had informed their management of the problem. Those managers told us that they had reported the problem to the repair center managers. The managers in the repair center told us that those parts were difficult to get in Russia. Each person felt that he had done his job and thus that there was little left to do but wait for the sparkplugs to eventually appear. While the workers were certainly upset that they did not have three of their four fork lifts, no one took the initiative to ensure that the sparkplugs would arrive. Further, no one seemed upset that a major investment in the fork lifts was going to waste and that workers' time was being used ineffectively. In reality, a phone call to Germany would have had a couple of boxes of sparkplugs delivered FedEx to Moscow in a few days. Top management at AGA Russia were unaware of this problem and may well have taken action if it had been brought to their attention.

A second example from Alfa Laval was presented earlier in the section on involvement. Top management allowed middle management to come back again and again to discuss decisions that had already been delegated to them to decide. Neither top nor middle managers mentioned this as a major waste of time in the decision process. Instead, they viewed this tendency as an issue about authority and responsibility rather than about the effective use of time as a resource.

Most of the positive examples of the use of time as a resource came from AssiDomän. As noted earlier under the adaptability section, the creation of two-person sales teams was a means to respond quickly to customers' needs. In addition, workers in AssiDomän reported, "We are always made to feel in a hurry by management."

These examples can be at least partially understood by using the concepts in the model. In the AGA "sparkplug" story the problems clearly illustrate a lack of coordination and integration between departments and also a lack of empowerment and adaptability by each of the departments involved. The Alfa Laval example can also be interpreted as a case of empowerment and the ability to create change. But simply interpreting these examples in terms of the model ignors several insights that can be very useful when working with organizational culture in the Russian context.

Although none of the cases we studied viewed time as a scarce resource in the same way as a well-managed Western firm, AssiDomän was close. The problem, then stems from the extreme range of time perspective that one encounters working in the Russian context. The long tradition of responding only to central authority means that many organizations, on the surface, still react in ways that appear to place little value on responsiveness, the pursuit of the goals of the firm, shared responsibility of employees, or the mechanisms by which unresolved problems are surfaced for managers to address. This dynamic influences many of the concepts in the model but still appears to exist as an independent factor that should be taken very seriously by researchers operating in the

Russian context.

It is also important to note that this is not primarily an issue of national differences in time perspective. Our case studies uncovered huge differences in time perspective among the four firms. This suggests that, for example, time as an aspect of organizational culture may be highly influenced by the level of competition in the industry and region a firm operates in as well as their degree of exposure to Western firms. Future research should focus more carefully on the issue of time perspective and its influence on effectiveness. Furthermore, when the model and measures are used in the Russian context, the indexes should be revised to include items that have time specific content and allow for a much wider range of response.

The Nature of Functional Sub-Cultures. The dynamics of sub-cultures are well established in the organizational research literature (Hatch, 1993; Martin, 1995; Van Maanen & Barley 1984). Indeed, one of the inherent difficulties with general models of organizational culture such as Denison and Mishra (1995), Hofstede (1991), or Kotter and Heskett (1992) is that they tend to create the impression of organizations as unitary cultures. Researchers using such approaches need to be aware of their limitations in order to understand the dynamics of sub-cultures and dominant cultures.

In the Russian context, however, our case studies revealed that it may be even more misleading to assume the existence of a unitary enterprise culture. Kliuchevskii's (1990) comments on the Russian "tendency to dissemble," "preference for working in groups," and "circumspect nature" outlines a potent combination that gives rise to organizational sub-cultures that live in very different worlds. Our case studies give several examples of the nature of sub-cultures in the Russian context.

One of the first impressions of AGA is of two worlds co-existing. As noted earlier, top management and the sales and accounting departments make up one world, while the manufacturing department makes up the other. Most employees in the former group are young, new to the firm, and highly driven. The second group of employees is older and has been working at the factory in Balashikha for many years. To make matters worse, the first group was originally located in the center of Moscow and recently moved out to the Balashikha plant. But it is still located in a separate building, much nicer than the factory building where manufacturing managers have their offices. Communication between the two groups is very poor.

A similar picture comes from Alfa Laval. Since several of Alfa Laval's top management is of Swedish origin, they have poor knowledge of Russian and tend to work with English-speaking Russians. An obvious language barrier exists creating an "us" and "them" feeling leading to a lack of team spirit. The "us" are the people at the fourth floor who speak good English and who are new at the production plant or worked at Alfa Laval prior to the acquisition. The "them" are the older management from Potok who have limited knowledge of English and are located on the third floor.

One employee at the Potok plant told us about the difficulty he had understanding the Alfa Laval culture at the time of the merger. Prior to Alfa Laval's acquisition of Potok, meetings were very formal with different chairs for people of different positions. Now, Alfa Laval Potok employees are encouraged to work closely together as equals to try to solve problems. This is difficult for older managers because, for them, communication between people of different levels is unnatural. To learn the new style, the old managers were sent to Sweden for a week to see for themselves how the new management style in action. As one participant said, "I understood right then how work was to be done. It is like the old Russian proverb that says it is better to see something once than to hear it one hundred times." In Lift, we received a picture of authority distribution which was more traditional in Russia. When we asked one manager whether an average worker could make suggestions about product modifications. The manager answered, "You don't understand: Workers work; engineers know everything."

These examples illustrate an important challenge faced by firms in the Russian context. Many firms, in effect, have two workforces. The first group consists of older workers who have a traditional Russian mindset and are resistant to change. Such workers are primarily found in production and engineering where there is no substitute for the experience they have accumulated from years of work. The second group of employees is typically younger and consists of aggressive "New Russians" who are generally eager to adapt. The "New Russians" are driven by career ambitions and often have some training in business, English, or a few years experience working for a foreign firm in sales or marketing. It also appears to be a common pattern to have younger workers placed in charge of older workers at a very early point in their careers.

Once again, these examples could be explained by reference to the concepts in the model**.** Consistency and coordination, empowerment, and the presence of a firm-level mission are all influenced by the lack of integration among functional sub-cultures. But to discuss these examples only with respect to the concepts in the model would miss an important theme that is very useful in understanding the dynamics of organizational culture in the Russian context. Several observations from our case study data may be useful in understanding this dynamic.

First, it is important to recognize the “functional incompleteness” that is the starting point for many firms operating in the Russian context (Newman, 1998). During the Soviet era, the functions of strategy, finance, and sales and marketing were largely performed by the State. Thus, one of the major transformations of the transition era of the 1990s has been to establish these functions at the firm level. From a cultural point of view, these changes often feel more like a merger or acquisition (of the new functions) than like typical cross-functional differences in Western firms. Thus, they influence all aspects of firm operation that require cross-functional coordination.

Second, the tradition of central control and authority means that the strength of any cross-functional concept of the value chain is weak to non-existent compared to the power of the functional boss. Firm level goals and priorities are a distant and unfamiliar second priority compared to retaining the integrity of the function. These observations suggest a similar set of priorities for future research as our observations about time perspective. This issue needs to be studied in a qualitative manner in several firms to understand how cross-functional integration evolves over time and how the differences between functions can best be resolved while working in the Russian context. In addition, researchers who use the model as a basis for studying firms in the Russian context, need to consider revising the indexes to include more specific content about functional sub-cultures, and analyzing data separately for functional sub-cultures to obtain a better feel for their differences.

The four case studies presented in this section have served to ground the findings of the empirical study in the realities of the Russian context. In general, they support the idea that the model is a useful starting point for understanding issues of culture and effectiveness in the Russian context. But more importantly, the case studies serve as a powerful reminder that concepts can have different meanings in different contexts, even as they have wide applicability across those different contexts. The case studies also help to illustrate several important themes that are useful to researchers trying to understand organizational culture and effectiveness in the Russian context and to suggest ways in which future research may begin to address those issues.

DISCUSSION

This paper has presented two linked studies examining the influence that organizational culture has on the effectiveness of a set of foreign firms operating in Russia. The study began with an existing model of organizational culture and effectiveness and used that model as a starting point for the research. The first study presented a quantitative test of the model. The results showed that the model was useful in understanding the differences in the effectiveness that occurred in this sample of firms, but that the results were somewhat different than the results for a sample of US firms.

The second study selected four firms for more intensive qualitative analysis. This qualitative study generated examples that served to ground the model's concepts in the realities of the Russian context. The case studies showed several examples that fit well with the model and also pointed to several areas where the realities of the Russian context were well outside of the experience base that was used to develop the model. These observations led to a discussion of several key themes that can be interpreted in terms of the model, and have some clear implications for theory development, but may be far more useful to researchers if they are recognized as significant factors in their own right.

The clearest differences between the Russian and US contexts that emerge from the quantitative study are the importance of flexibility traits in Russia. Adaptability proves to be the most important dimension of organizational culture with respect to overall firm performance and profitability. This result is quite believable given Russia's turbulent and unpredictable environment. Since the data for this study were collected prior to the August 1998 financial crisis, it is likely that the need to respond to turbulence is even greater today. In the years since Perestroika and the fall of the Berlin Wall, this level of turbulence has been a constant and is likely to continue for the foreseeable future.

The other flexibility trait, involvement, also appears to be highly important to organizational effectiveness in Russia. Under communism, competition between groups was encouraged, but competition between individuals was discouraged. The result of this tradition is that Russians tend to like working in groups and are good at doing it (Vlachoutsicos, 2000). Russians also place a high value on education and investment in human capability (Holt, Ralston, Terpstra, 1994; Puffer, 1992). Organizations that encourage these traits appear from the results of this study to be more effective.

Other important differences emerge from the case studies. These case studies served two purposes. First, they provided an opportunity to examine four cases in some detail and to analyze examples in terms of the concepts in the model. More importantly, however, the case studies allowed the researchers to focus on aspects of the cultures of these four organizations that were outside of the experience base that was used to generate the original model. These insights can be used to extend and refine the model in a way that aids in future theoretical development and practical application of the model.

The case studies provide good support for the applicability of the model, but also focus our attention on two issues: the Russian concept of time as a resource and the extreme nature of functional sub-cultures. These issues appear critical to an understanding of the relationship between culture and effectiveness in the Russian environment. The examples that are used to illustrate these issues can be interpreted in terms of the model, but they are also important dynamics to understand in their own right. These issues offer several possibilities for future research. First, they suggest rather specific content that can be added to several of the measures in the model and a series of refinements that will be useful for those who want to apply the model in the Russian context. Second, the cases suggest future topics for research. These include topics such as the changes that occur in the social construction of time in the transition process, or the nature of cross-functional integration between production and sales and marketing departments. These findings also imply that generational differences and other demographic features of the Russian workforce may be closely linked to the nature of the functional sub-cultures. Researchers can draw upon the established organizational literature in those areas. This type of work has great relevance in the Russian context.

This paper also contributes to the longstanding debate about the applicability of organizational theories developed in one geographic context to organizations in other parts of the world. This paper provides an interesting point of reference in that debate. On one hand, this study illustrates that a model of organizational culture developed in the USA can be tested in the Russian context and can be useful in predicting differences in effectiveness among a set of foreign firms operating in the Russian context. Thus, the model serves as a useful foundation for understanding differences in effectiveness. On the other hand, many of the specific relationships between culture and effectiveness were somewhat different in the Russian context, suggesting that a literal application of the theory could be misleading.

Interpreting the data from the case studies urged even more caution on a literal application of the model in the Russian context. In the case studies, the general concepts appeared to be quite salient, but the some of the concrete behaviors and the situations that exemplified the concepts were quite different than they would be in the US context. As Denison (1996) noted, the link between concepts and behavior can vary greatly among countries. He cited the example of the meaning attached to individuals wearing surgical masks on the streets of Tokyo and Los Angeles. In Tokyo, wearing a surgical mask is a form of pro-social behavior by those who have a cold and want to make certain that others do not catch it. In L.A., wearing a surgical mask is a means of protecting one's self from the dangers of the natural and social environment. The concepts of collectivism and self-interest are salient in both contexts, and the same behaviors exist in both contexts. But the link between the two is exactly the opposite.

Thus, the further one ventures from the context in which the theory was created, the more exceptions one will find. Nonetheless, a good theory may also be a good foundation from which to identify those exceptions, and those exceptions can make important contributions to further research and theory development. As organizational researchers examine topics in emerging markets, transition economies, and other new contexts, more attention should be devoted to developing robust models and concepts that travel well and are developed with a deep understanding of the flexibility that is required to meaningfully interpret and apply research findings on a global basis.

Thus, this paper makes a contribution to the literature in several important ways. First, this study is unique in its examination of the relationship between organizational culture and effectiveness in Russia and one of very few to examine this topic outside of the USA. As such, it extends this stream of research to a transition economy in an attempt to develop a more robust theory that can be applied across multiple cultures. The identification of the emergent themes of the concept of time as a resource and the nature of functional sub-cultures aids in theory development and the refinement of methods and measures. Second, the emergent themes identified in the case studies suggest several lines of research that may be profitable in the future. These emergent themes can draw upon the existing literature to some extent, but are also likely to benefit from additional research to build theory that is specific to the Russian context. Finally, this study shows how quantitative and qualitative methods can be combined to test and develop theory in a way that shows both the applicability and the limitations of a theory developed in the USA and applied in Russia.

This study is undoubtedly only a first step in developing an understanding of cultural issues for foreign firms operating in Russia. Nonetheless, given the limited amount of research on the topic and the difficulties with conducting research in Russia, this study provides a good starting place and a rich set of new ideas for future research.

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Table 1

Factor Analysis of Organizational Culture Measures

	Factor 1	Factor 2	Factor 3	Factor 4
Involvement				
Empowerment	.206	**.830**	.075	.141
Team Orientation	.009	**.792**	.182	.087
Capability Development	.101	**.749**	.124	.307
Consistency				
Core Values	**.886**	.107	.051	.231
Agreement	**.889**	.263	.182	.094
Coordination & Integration	**.826**	.173	.236	.258
Adaptability				
Organizational Learning	.143	.213	**.801**	.160
Customer Focus	.260	.102	**.828**	.171
Creating Change	.159	.073	**.800**	.357
Mission				
Vision	.222	.329	.162	**.668**
Goals and Objectives	.002	.057	.267	**.841**
Strategic Directions	.001	.290	.140	**.779**
Eigenvalue	5.106	1.793	1.175	1.026
% Variance Explained	42.6	14.9	9.790	8.548
Alpha (for bold items)	.806	.888	.864	.758

Table 2
Culture & Effectiveness Correlations

Russian Data

	Overall Perform	**Market Share**	**Sales Growth**	**Profits**	**Employ Satisfact.**	**Quality**	**Product Develop**
Involvement	**.442******	**.332******	**.384******	**.366******	**.460******	**.424******	**.330******
Team Orientation	.422****	.281****	.347****	.341****	.439****	.413****	.298****
Capability Devop.	.378****	.329****	.334****	.338****	.352****	.339****	.319****
Empowerment	.349****	.254***	.320****	.272****	.410****	.354****	.237***
Consistency	**.306******	**.218******	**.252******	**.275******	**.230******	**.265******	**.116**
Core Values	.299****	.299***	.220***	.253***	.212***	.238***	.110
Agreement	.236***	.169*	.241***	.198**	.158*	.205**	.067
Integration	.288****	.200**	.221***	.290****	.249***	.273****	.133
Adaptability	**.458******	**.296******	**.274******	**.453******	**.331******	**.305******	**.358******
Org.Learning	.439****	.296****	.239****	.393****	.277****	.263****	.328****
Customer Focus	.387****	.160*	.243***	.401****	.291****	.240***	.307****
Creating Change	.349****	.324****	.215***	.362****	.275****	.281****	.281****
Mission	**.202****	**.301******	**.454******	**.260******	**.383******	**.370******	**.269******
Vision	.074	.097	.330****	.127	.183*	.192*	.126
Goals	.190**	.304****	.311****	.194**	.339****	.331****	.233***
Strategy	.257***	.380****	.475****	.335****	.451****	.414****	.326****

**** Δ<.001, *** Δ<.005, **Δ<.01, *Δ<.05

USA Data

	Overall Perform	**Market Share**	**Sales Growth**	**Profits**	**Employ Satisfact.**	**Quality**	**Product Develop**
Involvement	**.554******	**.143**	**.257*****	**.222****	**.734******	**.536******	**.424******
Team Orientation	.503****	.070	.215*	.197*	.655****	.486****	.340****
Capability Devop.	.553****	.267***	.322****	.258***	.700****	.548****	.461****
Empowerment	.500****	.089	.195*	.174*	.705****	.472****	.400****
Consistencey	**.550******	**.189***	**.263*****	**.277******	**.701******	**.578******	**.369******
Core Values	.526****	.216*	.257***	.273****	.690****	.534****	.319****
Agreement	.490****	.206*	.252***	.278****	.583****	.512****	.342****
Integration	.486****	.091	.203*	.202*	.636****	.536****	.399****
Adaptability	**.508******	**.135**	**.257*****	**.164**	**.649******	**.504******	**.454******
Org.Learning	.450****	.038	.200*	.126	.646****	.442****	.340****
Customer Focus	.430****	.142	.191*	.087	.527****	.470****	.354****
Creating Change	.477****	.183*	.292****	.220**	.560****	.439****	.511****
Mission	**.584******	**.262*****	**.377******	**.333******	**.676******	**.509******	**.432******
Vision	.568****	.176*	.337****	.265***	.728****	.558****	.444****
Goals	.502****	.215*	.333****	.352****	.564****	.400****	.328****
Strategy	.572****	.338****	.389****	.323****	.610****	.469****	.439****

**** Δ<.001, *** Δ<.005, **Δ<.01, *Δ<.05

Table 3
Regressions on Effectiveness Variables: Russian Data[1]

Independent Variable	Dependent Variables						
	Gen_Perform	**Market_Share**	**Sales_Growth**	**Profitability**	**Employee_Sat**	**Quality**	**Prod_Devlop**
Involvement	.266***	.202*	.209*	.180*	.332****	.294****	.178*
Consistency	.138	.053	.127	.069	.052	.116	-.062
Adaptability	.297****	.094	.047	.308****	.017	.004	.259***
Mission	.093	.104	.357****	-.011	.219**	.205**	.082
Employee#	.081	.142	.062	.113	.096	.180**	.016
Manufact%	-.030	-.053	-.045	-.111	-.108	-.128	-.016
Years	.083	.120	.012	.068	.048	.000	.072
SIC7A1	-.025	-.103	-.026	-.172*	-.088	-.140	-.027
SIC7A2	.064	.036	.039	-.052	.017	.065	107
SIC7A3	.091	-.058	.006	.002	-.002	.024	-.078
SIC7A4	-.008	-.056	.092	-.011	-.096	.011	-.026
SIC7A5	.083	-.097	.033	-.096	.020	.018	-.009
Co_Canada	.100	-.077	-.049	-.019	.032	.049	.009
Co_Finland	.088	-.118	.092	-.083	.080	-.007	-.012
Co_Germany	.009	-.153	.020	-.093	-.105	-.083	.046
Co_Sweden	.037	.021	-.029	.031	.004	.018	.078
Co_USA	.049	-.133	-.022	-.078	-.004	-.047	-.074
Man_US/R	.062	-.092	.127	.007	.054	.025	.013
F	4.27	2.72	4.08	4.32	4.14	4.10	2.39
Full model R^2	.324	.234	.314	.327	.318	.316	.212
Adjusted R^2	.249	.148	.237	.252	.241	.239	.123
Δ adjusted R^2 [1]	.235	.104	.230	.197	.233	.213	.101
Df	160	160	160	160	160	160	160

**** Δ<.001, *** Δ<.005, **Δ<.01, *Δ<.05;

1. "Δ adjusted R^2" shows the amount of variance due to adding the four organizational culture variables as a set to regressions which had only the control variables (all other independent variables in the table above). Standardized regression coefficients (Betas) are reported above.

Table 4
Regressions on Effectiveness Variables: USA Data[1]

Independent Variable	Dependent Variables						
	Gen_Perform	**Market_Share**	**Sales_Growth**	**Profitability**	**Employee_Sat**	**Quality**	**Prod_Devlop**
Involvement	0,211	-0,175	-0,097	-0,012	0.523****	0,129	0,056
Consistency	0,099	0,069	-0,134	0,205	0,194	0.452**	-0.130
Adaptability	-0,062	-0,133	-0,007	-0.378*	-0.109	-0.022	0,322
Mission	0.376**	0.455**	0.576****	0.473***	0,167	0,037	0,238
F	18.087****	3.133*	5.899****	5.638****	41.438****	16.362****	9.210****
R^2	0,359	0,089	0,156	0,150	0,562	0,338	0,222
Adjusted R^2	0,339	0,061	0,129	0,123	0,549	0,318	0,198
DF	129	129	129	129	129	129	129

**** Δ<.001, *** Δ<.005, **Δ<.01, *Δ<.05

1. Standardized regression coefficients (Betas) are reported above.

Appendix A
Correlations for Russian Data

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. BADAPT																	
2. BCONSIST	.435**																
3. BINVOLVE	.529**	.340**															
4. BMISSION	.455**	.296**	.446**														
5. EMP#9	-.029	.000	-.015	.029													
6. MAN10A	-.122	-.070	-.089	-.056	.072												
7. YEARSR8	.048	.039	.120	.110	.289	.106											
8. SIC7A1	.057	.063	.105	.023	-.035	.019	-.052										
9. SIC7A2	-.076	-.168	-.005	-.013	-.041	.018	-.053	-.100									
10. SIC7A3	.028	.017	-.005	.020	-.047	.042	.130	-.119	-.141								
11. SIC7A4	-.028	-.025	.046	.045	.139	.036	.025	-.119	-.141	-.169*							
12. SIC7A5	-.082	-.007	-.053	-.118	.040	-.072	-.036	-.140	-.073	-.198**	-.198**						
13. COCANADA	.003	-.043	.066	-.066	-.031	-.059	-.109	-.088	.027	.048	-.067	.009					
14. COFINLAN	.043	-.099	.010	.050	.043	.039	-.007	.087	.083	-.020	-.062	-.070	-.138				
15. COGERMAN	-.075	-.046	-.045	.038	.125	-.051	-.009	-.038	-.032	-.042	.078	-.058	-.148*	-.224**			
16. COSWEDEN	.033	.048	-.068	-.008	-.040	-.017	.105	.041	-.054	-.084	-.032	.076	-.101	-.152*	-.164*		
17. COUSA	-.031	.052	-.010	-.074	-.081	.098	-.025	-.039	.013	.030	.030	.092	-.221**	-.335**	-.361**	-.245**	
18 . Man_US/R	-.068	-.121	-.066	-.211**	-.012	-.162*	.066	-.069	-.076	.112	.010	-.097	.034	-.067	.125	.109	-.149

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).