

Organizational Culture and Performance Measures in Greek Telecommunication Industry

Antonios Kargas

Correspondence: Antonios Kargas, National and Kapodistrian University of Athens, Greece. E-mail: kargas.antonis@gmail.com

Received: July 28, 2016

Accepted: August 4, 2016

Online Published: September 26, 2016

doi:10.5539/ibr.v9n10p212

URL: <http://dx.doi.org/10.5539/ibr.v9n10p212>

Abstract

The paper shall examine the relationship between organizational culture and performance measures and the relation of specific cultural types with performance indicators (such as profitability, growth and qualitative factors), in order to support managerial efforts to cultivate an inimitable operational strategy. Based on data from both, fixed and mobile operators in Greece and the use of ANOVA methodology, key findings have been revealed with reference to organizational culture and economic performance. A control-oriented tendency in telecommunication industry has been indicated as a whole, with cultural variations among fixed and mobile operators, along with significantly important differences on performance indicators.

Keywords: organizational culture, OCAI, telecommunication industry, telecommunication business management, indicators' performance management

1. Introduction

During the last thirty years, different events have changed the form of national economies and have created a new global economy, leading to new ages of competitive advantage (Jacome et al., 2002) and revealing the role of organizational culture (Evans et al., 2002). In particular, operational success is currently related with organizational strengths and weaknesses (awareness of own organizational culture), with business environment (competitors' culture) and with market's conditions (national cultural context). As a result, there is a growing interest towards the direction of finding out whether there is a relationship between organizational culture and the effectiveness in organization management. Despite the growing interest for organizational culture, as a means of achieving competitive advantage and superior performance (Evans et al., 2002), there is still confusion about the way it affects telecommunication companies' management.

Since the Second World War, telecommunication companies have evolved into national monopolies in a protected environment in order to respond to the national requirements for telecommunication products and services. Lack of competition, political interventions, bureaucracy and internal orientation influenced most operators' cultures in such a degree that they indicate similarities regardless the country of origin. As a result, telecoms' organizational culture was characterized by hierarchical norms (Blazevic et al., 2003) and top – down hierarchical structures, which both improve performance in stable environments (Lawrence & Lorsch, 1967; Moorman & Miner, 1997). Employees followed bureaucratic procedures, whereas consumers' needs have not always been in the forefront. In addition, operational cost was usually very high and every effort to cut it down met reactions.

The radical developments in legislative, financial and technological level have changed this situation. The telecom market was henceforth characterized by a dynamic and constantly changing environment, which demanded decentralized and flexible decision making structures (Mendelson & Pillai, 1999; MacCormack et al., 2001). Market liberalization and state-owned companies' privatization started in UK during 80's and until 2001 all European Union's members reformed their telecommunication markets, whereas USA was the pioneer in antitrust legislation in 1983. Following that point, market competition grewed up and telecoms started to concentrate on financial and non-financial information (such as culture, market orientation strategies and total quality) in order to gain competitive advantage (Amir & Lev, 1996).

Majumdar (1999) studied the American telecommunication market for a period of sixteen years (1975 – 1990) in order to find out whether the AT&T's separation changed the overall performance and efficiency of the whole telecommunications' sector. He revealed that one of the leading factors for efficiency and performance was

cultural change. The separation produced differentiation in the existed monopolistic culture and this fact had a positive effect in the overall performance of the sector.

Another cultural analysis has been conducted by Claver et al., (2000), who studied the case of Telefonica Group. The firm was a state-owned monopoly until 1998 when the market liberalization was reached. Senior management understood in time that organizational change was needed almost 9 years before market's liberalization. Cultural change aimed on explaining to the employees, how to do things correctly, from the customer's point of view, at the lowest possible cost (Claver et al., 2000). Nowadays, Telefonica Group is one of the leading telecommunication companies worldwide, with more than forty million clients and still maintains its leadership in Spain. A more recent study was conducted by Sivananthiran & Venkata (2004), who studied Sri Lanka Telecom privatized in 1996, but despite structural changes, culture remained unchanged to past legacies of governmental bureaucratic administration. Cultural change's results led to faults' rate decrease from 16% to 4%, whereas employees' involvement has increased as well as their corporate commitment.

Nowadays, organizational culture is recognized as a primary failure factor in cases of off-shore investments (Bjerke, 1999; Gesteland, 2002; Joynt & Warner, 2002; Schneider & Barsoux, 2003). Operating in a globalized and competitive business environment, incorporate cultural complexities. Moreover, according to D' Averi (1994) no firm can maintain a sustainable competitive advantage in an over – competitive industry such as the telecommunication industry. Competitors never stay inactive for long but tend to imitate or adopt new entrepreneurial strategies and technological developments. One of the few unique characteristics that cannot be emulated is culture, according to Onken (1999).

All these explain why companies spend resources in order to develop a desirable organizational culture and why it is essential to investigate organizational culture and its effect on performance indicators aiming to record organizational culture in telecommunication industry in accordance with business environment and entrepreneurial strategies. The rest of the paper shall be organized as follows. In Section 2, the methodology of the research is analyzed, whereas in Section 3 general findings and main results are presented. Finally, the analysis presented and discussed shall be concluded in Section 4.

2. Method

2.1 Cultural and Performance's Data

The **Competing Values Framework** (CFV), created by Quinn & Cameron (1999), has been used in order to collect data via interviews from middle line managers and employees in telecommunication companies. The answers from employees with different demographic and working characteristics grouped according to operators and the stabilized summary of answers were used for the clarification of fixed and mobile telephony's cultural type. The model is built upon two dimensions: a) flexibility versus control and b) external versus internal orientation. Such dimensions are creating four distinct cultural types:

- Clan culture supports an open and friendly place to work where people share a lot of themselves. Group's loyalty and a sense of tradition are strong. There is an emphasis on long term benefits of development and great importance is given to group cohesion. There is a strong concern for people and the organization places a premium on teamwork, participation and consensus.
- Adhocracy culture supports a dynamic, entrepreneurial and creative place to work. Innovation and risk-taking are embraced. A commitment to experimentation and thinking differently is what unifies the organization. Long-term emphasis is placed on growth and acquiring new resources. Success means gaining unique and new products or services.
- Market culture supports a results-driven organization focused on job completion. People are competent and goal orientated. Leaders are demanding, hard-driving and productive. The emphasis is placed on winning conducive to the group's unification. Long-term focus is on competitive action and achievement of measurable goals and targets. Success means market share and penetration.
- Hierarchical culture supports a highly structured and formal place to work. Rules and procedures govern behavior. Leaders strive to be good coordinators and organizers and efficiency-minded. Stability, performance and efficient operations are the long term goals. Success means dependable delivery, smooth scheduling and low cost.

Performance measurement is based on both quantitative (economic – financial indices) and qualitative variables. Despite the importance of performance measurement there is no wide acceptable conceptualization of this issue (Garrigos – Simon et al., 2005) and new concepts are continuously developed (Harris & Mongiello, 2001) in order to meet management's needs to review the performance management systems thereof (Atkinson & Brander

Brown, 2001). The presented analysis attempts to collect key measures, related to financial performance, operational growth and quality factors related with intelligence and market orientation.

Financial performance shall be established by wide accepted indexes (ROI, ROA & ROS), as well as variables revealing telecoms' actual financial condition (profits and revenue per subscriber). Specifically:

1. *Return on investments* stands for average financial profitability,
2. *Return on assets* stand for average economic profitability,
3. *Return on sales* stand for average profitability in sales,
4. *Profits* indicate, in absolute numbers, firms' profitability and
5. *Revenues per subscriber* reveal how demand is affected by firms' pricing policy.

Growth is validated by five distinct variables, related with invested capital, subscribers' number, firm's age and size and investment in infrastructure. All these are revealing a firm's business and technological evolution over time, but moreover reveal the efforts and the invested resources in order to achieve viable growth. Specifically:

6. *Subscribers' growth* reveals whether a firm is gaining market share or not. Since profit and revenues are related with number of subscribers, the variable's growth rate demonstrates an overall firm's tension.
7. *Growth capital turnover* reveals the ratio between the invested capital and the revenues generated by investments. It presents firm's investing efficiency.
8. *Total investment in infrastructure* is a collateral variable. It presents firm's investing policy.
9. *Firm's age* represents firm's life cycle and allows being understandable how many years it has taken to create the operational structures thereof. Moreover, firm's age allows being understandable the legislative framework and market conditions under which it was formed.
10. *Firm's size* is related with employees' number and gives evidence of the staff required in order to achieve its operational structure.

Quality factors reveal how the firm responds to market's changes, how knowledge and intelligence are internally managed and which is the overall orientation. Specifically:

11. *Intelligence about customers* determines how the firm responds to customers' needs. It is a measure about firm's effectiveness to be understandable within market changes related with "demand".
12. *Intelligence about competitors* determines how the firm responds to changes related with competitors and their market strategies. It is a measure about firm's effectiveness to be understandable within market changes related with "supply".
13. *Intelligence dissemination* determines how knowledge is disseminated within the organization.
14. *Responsiveness to intelligence* determines the corporate responsiveness to the collected intelligence and the disseminated knowledge.
15. *Innovativeness* determines the firm's effectiveness in creating opportunities related with new products, new business models or new markets. In a fast changing market, innovativeness can be a key measure in order to gain competitive advantage.
16. *Market orientation* reveals the degree of firm's determination to factors such as customers' satisfaction, openness, results orientation strategy, internal communication and cooperation.

All data were provided to respondents (as comparative scale of Greek telecoms) in order to evaluate through a Likert scale whether they agree or not. Through this procedure it was evaluated whether employees' feeling about their company's performance is accurate or not in comparison with their responds about organizational culture.

2.2 Case Study

The data were collected via interviews from 272 (two hundred seventy-two) middle level managers and employees from six operators in Greece. Table 1 presents the demographic characteristics of the examined sample as well as cultural types which have the highest mean. Employees within fixed telephony market (n=134) tend to have a hierarchical cultural type while employees within mobile market (n=138) are more market-oriented. Males (n=124) and female (n=148) employees tend to different types of dominant cultures, market and hierarchy representatively. Educational background affects developed culture. Employees with economic & management background tend to hierarchical cultures, whereas technical background lead to market-oriented cultural types.

Table 1. Analyzing the Sample

Category	No.	Mean	St. Deviation	Dominant Cultural Type
Total Group	272	30,626	67,710	Hierarchy
Operator				
Fixed	134	33,035	63,333	Hierarchy
Mobile	138	33,319	73,295	Market
Sex				
Male	124	33,858	72,039	Market
Female	148	32,468	69,004	Hierarchy
Educational Background				
Economics	26	30,321	43,842	Hierarchy
Management	78	31,479	84,889	Hierarchy
Technical	56	32,173	70,238	Market
Other	112	34,653	72,021	Market
Length of Employment				
1 - 5 years	192	30,547	72,129	Hierarchy
6 - 10 years	54	32,432	50,360	Market
11 - 15 years	12	37,500	93,225	Market
16 - 20 years	6	28,056	69,330	Market
21 - 25 years	6	31,389	32,352	Hierarchy
26+	2	38,358	31,047	Hierarchy
Job Description				
Economics	20	33,583	38,733	Hierarchy
Strategy Affairs	30	30,389	85,740	Hierarchy
Human Resource Management	8	34,167	50,427	Hierarchy
Corporate Affairs	40	31,750	65,121	Hierarchy
Technical Affairs	74	33,090	80,288	Market
Sales	80	34,313	69,436	Market

Moreover, working experience is another determinant factor. During the first working years, when employees are less-experienced and develop the skills thereof, they tend to search for mentors and they rely on hierarchical relationships developing similar culture. Nonetheless, during the later working years, high experienced and skilled employees become “teachers” and hierarchical culture dominates. During the “ambitious years”, when employees try to be promoted, market-oriented culture is developed as a tendency to compete in. Finally, the job’s nature affects the employees’ preferable cultural type. Technical departments and sale departments tend to develop market oriented cultures, whereas more bureaucratic departments reveal hierarchical tendencies.

3. Results

A statistical analysis is being conducted in order to examine the Greek telecoms’ organizational culture and descriptive statistics was used to reveal the main cultural characteristics. ANOVA technique was used to reveal the relationship between culture and performance, by analyzing the significance of mean differences. In order to check the validity (and reliability) of the questionnaire’s content the Cronbach’s alpha coefficient was used (Gliem & Gliem, 2003). The content reliability check is carried out to ascertain whether or not the questionnaire will succeed in clearly expressing and accurately measuring the variable (or item) wherefor it was constructed. Based on the international literature, whenever a questionnaire is awarded any score higher than 0.7, it is considered reliable (Kurtinaitiene, 2005). In all cases, the results presented in Table 2 exceed this minimum level of reliability.

Table 2. Mean Scores and Reliability Test

Cultural Type (n=272)	Mean	Standard Deviaton	Reliability Coefficients
ClanCulture	19,491	54,235	0,703
Adhocracy Culture	19,449	39,198	0,724
Market Culture	30,434	71,056	0,778
Hierarchy Culture	30,626	67,710	0,701
Mobile Operators			
ClanCulture	18,345	53,617	
Adhocracy Culture	20,048	37,804	
Market Culture	33,318	73,295	
Hierarchy Culture	28,287	69,081	
Fixed Operators			
ClanCulture	20,671	54,153	
Adhocracy Culture	18,557	40,221	
Market Culture	27,462	64,210	
Hierarchy Culture	33,034	63,333	

According to these results, Greek telecommunication industry gives emphasis to control, with the majority of companies having a culture directed towards Market Culture or Hierarchy Culture. These dominant cultural types, Hierarchy Culture (mean equal to 30,626) and Market Culture (mean equal to 30,434) vary significantly from Clan and Adhocracy Culture which have smaller means (mean equal to 19,491 and to 19,449 respectively), but only minor differences exist between cultural types of the same control versus flexibility dimension. Firms are tending between hierarchical structures and market orientation whereas characteristics derived from clan type and adhocracy type cultures are mainly additional to their dominant cultures.

A comparison between fixed and mobile telephony's results indicates an inverse relationship. Both sectors give emphasis in stability and control but mobile operators are primarily market-oriented and secondly hierarchical-oriented, while fixed operators have reverse cultural type. Such inverse relationship, reveals the whole sector's control and stability tendency, but moreover gives a clue about the interaction between fixed and mobile operators through mergers, acquisitions and strategic alliances that took place during the past five years in Greek telecommunication market. These entrepreneurial movements along with competition increased in both markets have developed mixed cultures. Operators cooperate in order to support "3play" packets (fixed telephony, mobile telephony and broadband internet) and this may lead to cultural convergence towards an undefined "path".

In order to investigate the current relationship between organizational culture and performance, the confirmatory factor analysis (CFA technique) was used. Following Bollen (1989), a validity and reliability analysis has been conducted. The number of factors to be extracted, according to eigenvalue criterion, suggests a solution of three factors. This distinction was suggested as soon as the model was constructed and implies the distinction between profitability (items 1 to 5), growth (items 6 to 10) and quality factors (items 11 to 16). In order to achieve a higher rigour, an overall latent performance variable was created using the sum of composite variables for each dimension. It is a widely acceptable method, used to reduce complexity and to facilitate the estimations (Landis et al., 2000).

The observations of all indices corroborate the closeness of our fit (Chi-square=2.180, sig=0.703), by using maximum likelihood factor analysis. All parameters are statistically significant for a level of 95 percent and all factorial weights are greater than 0.4, while Cronbach's alpha provides value greater than 0.7. After model's validation, ANOVA analysis was conducted in order to associate performance with different cultural types. The test shall examine whether the various groups' means are equal representing an examination of differences established among the four cultural types. ANOVA's results are presented in Table 3.

Table 3. ANOVA Results for Cultural Types

		Sum of Squares	df	Mean Square	F	Sig.
Total Profitability	Between Groups	316,073	2	158,036	14,097	0,009
	Within Groups	56,052	269	11,21		
	Total	372,125	271			
Total Growth	Between Groups	84,759	2	42,379	7,255	0,033
	Within Groups	29,206	269	5,841		
	Total	113,965	271			
Total Quality	Between Groups	6,176	2	3,088	1,566	0,296
	Within Groups	9,859	269	1,972		
	Total	16,035	271			
Total Performance	Between Groups	639,758	2	319,879	18,120	0,005
	Within Groups	88,269	269	17,654		
	Total	728,028	271			

A main problem with ANOVA test is that no conclusion could be extracted about which conditions means are different. Researchers have solved this problem by conducting post hoc tests, which are used in case a statistical significance between conditions exists, but no conclusion could be extracted where significant differences exist. Tukey's test was used to locate significant differences and descriptive statistics were obtained. The Tukey's test is based on the studentized range distribution (standardized maximum difference between the means) and its results are presented in Table 4. Tukey's test calculates a new critical value that can be used to evaluate whether differences between any two pairs of means are significant. The critical value is different because it involves the mean difference that has to be exceeded to achieve significance. Therefore, it calculates one critical value and subsequently the difference between all possible pairs of means. Each difference is subsequently compared to the Tukey critical value. In case the difference is greater than the Tukey value, the comparison is significant.

Table 4. Post Hoc Test's Results (Tukey Test)

Dependent Variable	Cultural Type	Mean Differences	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Total Profitability	clan-adhocracy	5,453	2,436	0,174	-1,400	12,307
	clan-market	2,206	1,593	0,590	-2,276	6,688
	clan-hierarchy	-4,159	1,571	0,044	-8,579	0,261
	adhocracy-market	-3,247	2,125	0,507	-9,226	2,731
	adhocracy-hierarchy	-9,612	2,108	0,000	-15,545	-3,679
	market-hierarchy	-6,365	1,024	0,000	-9,248	-3,481
Total Growth	clan-adhocracy	0,744	1,360	0,960	-3,082	4,571
	clan-market	-1,833	0,889	0,039	-0,669	4,335
	clan-hierarchy	2,777	0,877	0,020	-5,245	-0,308
	adhocracy-market	1,088	1,186	0,839	-2,249	4,427
	adhocracy-hierarchy	-3,521	1,177	0,062	-6,834	-0,208
	market-hierarchy	4,610	0,572	0,000	-6,220	-3,000
Total Quality	clan-adhocracy	-2,206	0,533	0,401	-3,706	-0,705
	clan-market	-1,665	0,348	0,160	-2,646	-0,683
	clan-hierarchy	-0,560	0,344	0,449	-1,528	0,406
	adhocracy-market	0,540	0,465	0,717	-0,768	1,850
	adhocracy-hierarchy	1,645	0,461	0,076	0,346	2,944
	adhocracy-hierarchy	-0,540	0,465	0,717	-1,850	0,768
Total Performance	market-hierarchy	1,104	0,224	0,271	0,473	1,735
	clan-adhocracy	3,991	3,318	0,695	-5,343	13,326
	clan-market	-2,375	2,169	0,013	-3,728	8,480
	clan-hierarchy	-7,496	2,140	0,007	-13,517	-1,476
	adhocracy-market	-1,616	2,894	0,038	-9,759	6,527
	adhocracy-hierarchy	-11,488	2,872	0,001	-19,568	-3,407
	market-hierarchy	-9,872	1,395	0,000	-13,799	-5,945

The examination of the relationship between cultural types and total performance revealed significant differences ($F=18.120$ $p=0.005$). The Tukey's test indicated that total performance in hierarchical and market cultures, significantly exceeded ($P<0.05$) the corresponding performance of clan and adhocracy cultures. The total performance of clan and adhocracy cultures did not significantly differ from each other, since there is a strong and statistically significant difference in the total performance, between market and hierarchical culture. The results reveal a situation wherein Greek operators tend to stability oriented cultures (market and hierarchy cultures) in order to achieve operational performance. The results indicate that hierarchical culture is strongly related with total performance in the specific national context. It has large mean differences even within market culture which is the dominant cultural type among telecommunication companies.

As far as profitability concerns, ANOVA test revealed significant differences ($F=14.097$ $p=0.009$) between the various cultural groups. However, Tukey's test indicate that only hierarchy culture's profitability significantly exceeds ($P<0.05$) all other cultural types. Adhocracy and clan cultures do not evaluate highly profitability and are mainly concentrated on viability and innovation representatively, while market culture is mainly goal-oriented and intense competition has reduced firms' profitability. In profitability terms it can be concluded that hierarchical characteristics can lead to increased success possibilities.

The examination of the relationship between organizational culture's types and growth revealed significant differences ($F=7.255$ $p=0.033$). Tukey's test indicated that growth within market and clan cultures significantly exceed the growth patterns of hierarchical culture. "Older" and "larger" operators (which usually are the former state-owned monopolies) tend to have hierarchical cultures in contrast with "newer" and "smaller" operators (which usually are the private and more competitive ones) who tend to develop market-oriented or clan cultures. The results of the present study revealed that "older" and "larger" operators are less oriented to growth patterns in contrast with "newer" and "smaller" operators. Finally, market culture's growth orientation exceeds the growth patterns of clan culture, revealing that market oriented firms evaluate highly operational growth.

ANOVA analysis has not revealed any significant differences in quality factors among the four cultural types ($F=1.566$ $p=0.296$). Neither Tukey's test has indicated significant differences in quality factors between any of the organizational culture's groups. Differences in culture seem to affect performance, profitability and growth, whereas there are no statistical significant differences in quality factors whenever culture differs.

4. Discussion of Findings

The results presented offer a view about the organizational culture in Greek telecommunication market, revealing a control orientation. Both, mobile and fixed operators, tend to develop control oriented cultures

(market and hierarchical cultures respectively). This is not quite surprising given that previous research confirms a positive trend towards market orientation for mobile network operators (Kurtinaitiene, 2005). Moreover, the Tukey's test results indicate the operational sectors wherein each culture holds a competitive advantage.

The results indicate the existence of a positive relationship between performance and control oriented cultural types in Greek telecommunication market. More flexible cultural structures seem to perform in lower level. The results follow Hofstede's (1980) findings about a high degree of "uncertainty avoidance" between Greek employees, which lead to the development of control oriented cultures. The results reveal that managers in the specific national context should establish and manipulate procedures and relationships based on control in order to achieve supreme performance. However, there is a managerial degree of freedom which is related with firm's internal or external orientation (market-oriented or hierarchical-oriented culture, respectively), with the first one exceeding in terms of total performance, but the latter one exceeding in terms of growth. Apart from daily operation, this finding should be taken into account whenever senior management invests time and resources in change programs or in cases whenever mergers and acquisitions occur.

Profitability and growth indicators present significantly important differences according to the cultural type. Hierarchical culture is mainly related with profitability more than any other cultural type. Hierarchical-oriented firms tend to concentrate more in profitability as a mean to ensure viability and operational success. Hierarchical-oriented culture is characterized as profit achieving culture (Quinn and Cameron, 1999) and profit is one of the main goals in a competitive market.

Growth seems to be positively related with market and clan cultures, whereas hierarchical culture follows. The results support the idea that hierarchical cultures are positive related with firm's age and size (Papadimitriou & Kargas, 2012). Growth patterns are more familiar in newly established operators (clan cultures) and externally oriented but controlled operators (market culture). Following the profitability's results, it is clear that market oriented operators can compete to a hierarchically organized incumbent in growth patterns, but profitability is mainly related with well-structured and hierarchical aspects. Despite that, market-oriented culture is preferable under the Greek telecommunication environment from the majority of operators as a result of positive effects on both profitability and growth, while hierarchy culture is only related with profitability.

Finally, there are no statistically significant differences in terms of quality, revealing that all cultural types have their own strengths and weaknesses. Criterion of success, concerning such factor, should be each cultural type's suitability with firm's strategy on quality aspects. This was an expected result. Quinn and Cameron (1999) implied that, in quality terms, there are no "bad" or "good" cultures.

A market-oriented culture may be evolved into a competitive advantage in an over-competing industry, such as telecommunications. Growing competition, reduced market shares and profitability can create a tough business environment. In such an environment market oriented culture may become a non-imitable characteristic (Barney, 1995), capable to ensure corporate viability, since it is directly related with profitability and growth (Slater & Narver, 2000). The emerging findings may provide executives with new market opportunities to be considered during their long-term planning determination. A final interesting result lies on the fact that adhocracy culture is absent throughout our analysis. It plays no significant role to performance's development, since no Greek operator (fixed or mobile) is characterized as adhocracy-oriented. This fact may be related with poor R&D's conduction in Greek national context or with a unique managerial characteristic of telecommunication industry.

Acknowledgments

Authors would like to thank the participants to this survey.

Disclaimer

The information provided and the opinions expressed in this paper shall solely constitute an ongoing research work and the authors' point of view. They neither represent an endorsement nor do they reflect the opinions of the University of Athens or any other fixed or mobile operator in Greece.

References

- Amir, E., & Lev, B. (1996). Value-relevance of nonfinancial information: The wireless communications industry. *Journal of Accounting and Economics*, 22, 3-30. [http://dx.doi.org/10.1016/S0165-4101\(96\)00430-2](http://dx.doi.org/10.1016/S0165-4101(96)00430-2)
- Atkinson, H., & Brander, B. J. (2001). Rethinking performance measures: assessing progress in UK hotels. *International Journal of Contemporary Hospitality Management*, 13(3), 128-135. <http://dx.doi.org/10.1108/09596110110388918>

- Barney, J. (1995). Looking inside for competitive advantage. *Academy of Management Executive*, 9(4), 49-61. <http://dx.doi.org/10.5465/ame.1995.9512032192>
- Bjerke, B. (1999). *Business leadership and culture*. Glos, UK: Edward Elgar. <http://dx.doi.org/10.4337/9781840647600>
- Blazevic, V., Lievens, A., & Klein, E. (2003). Antecedents of project learning and time-to-market during new mobile service development. *International Journal of Service Industry Management*, 14(1), 120-147. <http://dx.doi.org/10.1108/09564230310466010>
- Bollen, K. A. (1989). *Structural equations with Latent Variables*. New York, NY: Wiley. <http://dx.doi.org/10.1002/9781118619179>
- Claver, E., Gasco, J. L., Llopis, J., & Lopez, E. A. (2000). Analysis of a cultural change in a Spanish telecommunications firm. *Business Process Management, Journal*, 6(4). <http://dx.doi.org/10.1108/14637150010345514>
- D'Averi, R. A. (1994). *Hypercompetition: Managing the Dynamics of Strategic Maneuvering*. New York, NY: The Free Press.
- Evans, P., Pucik, V., & Barsourx, J. L. (2002). *The Global Challenge: Frameworks for International Human Resource Management*. Boston, MA: McGraw-Hill Irwin.
- Garrigos-Simon, F. J., Marques, D. P., & Narangajavana, Y. (2005). Competitive strategies and performance in Spanish hospitality firms. *International Journal of Contemporary Hospitality Management*, 17(1), 22-38. <http://dx.doi.org/10.1108/09596110510577653>
- Gesteland, R. R. (2002). *Cross-cultural business behaviour*. (3rd ed.). Copenhagen: Copenhagen Business School Press.
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. Retrieved from: <http://www.alumni-su.org/midwest/midwest%20papers/Gliem%20&%20Gliem-Done.pdf>
- Harris, P. J., & Mongiello, M. (2001). Key performance indicators in European hotel priorities: general managers' choices and company profiles. *International Journal of Contemporary Hospitality Management*, 13(3), 120-127. <http://dx.doi.org/10.1108/09596110110388909>
- Hofstede, G. (1980). *Culture's consequences*. Thousand Oaks, CA, US: Sage Publications.
- Jacome, R., Lisboa, J., & Yasin, M. (2002). Time-based differentiation – an old strategic hat or an effective strategic choice? An empirical investigation”, *European Business Review*, 14(3), 184-193. <http://dx.doi.org/10.1108/09555340210427076>
- Joynt, P., & Warner, M. (Eds.) (2002). *Managing across cultures: Issues and perspectives*. (2nd ed.) London: International Thomson Business Press.
- Kurtinaitiene, J. (2005). Marketing Orientation in the European Union mobile telecommunication market. *Marketing Intelligence & Planning*, 23(1), 104-113. <http://dx.doi.org/10.1108/02634500510577500>
- Landis, R. S., Bela, D. J., & Tesluk, P. E. (2000). A comparison of approaches to composite measures in structural equation modeling. *Organizational Research Methods*, 3(2), 186-207. <http://dx.doi.org/10.1177/109442810032003>
- Lawrence, P., & Lorsch, J. (1967). *Organizations and Environment*. Boston, MA: Harvard University Press.
- MacCormack, A., Verganti, R., & Iansiti, M. (2001). Developing product on 'Internet time': the anatomy of a flexible development process. *Management Science*, 47(1), 133-150. <http://dx.doi.org/10.1287/mnsc.47.1.133.10663>
- Majumdar, S. K. (1999). Sluggish Giants, Sticky Cultures and Dynamic Capability Transformation. *Journal of Business Venturing* 15, 59-78. [http://dx.doi.org/10.1016/S0883-9026\(98\)00010-X](http://dx.doi.org/10.1016/S0883-9026(98)00010-X)
- Mendelson, H., & Pillai, R. R. (1999). Information age organizations, dynamics and performance. *Journal of Economic Behavior and Organization*, 38, 253-281. [http://dx.doi.org/10.1016/S0167-2681\(99\)00010-4](http://dx.doi.org/10.1016/S0167-2681(99)00010-4)
- Moorman, C., & Miner, A. (1997). The impact of organizational memory on new product performance and creativity. *Journal of Marketing Research*, 34, 91-106. <http://dx.doi.org/10.2307/3152067>

- Onken, M. H. (1999). Temporal elements of organizational culture and impact on firm performance. *Journal of Managerial Psychology*, 14(3/4), 231-243. <http://dx.doi.org/10.1108/02683949910263756>
- Papadimitriou, A., & Kargas, A. (2012). The relationship between organizational culture and market orientation in the Greek telecommunication companies. *Netnomics*, 13(1), 1-23. <http://dx.doi.org/10.1007/s11066-012-9066-0>
- Quinn, R. E., & Cameron, S. K. (1999). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. New York, USA: Addison – Wesley.
- Schneider, S. C., & Barsoux, J. L. (2003). *Managing across cultures*. (2nd ed.). Harlow, UK: Pearson Education.
- Sivananthiran, A., & Venkata, C. S. (2004). Changing an Organizational Culture through Social Dialogue: Experience at Sri Lanka Telecom. Retrieved from: <http://www.ilo.org/public/english/region/asro/newdelhi/info/publ-online.htm>
- Slater, S. F., & Narver, J. S. (2000). The positive effect of market orientation on business profitability: A balanced replication. *Journal of Business Research*, 48, 69-73. [http://dx.doi.org/10.1016/S0148-2963\(98\)00077-0](http://dx.doi.org/10.1016/S0148-2963(98)00077-0)

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).