

A longitudinal study of market-oriented subcultures in higher education

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With the withdrawal of state funding for students of business-related topics in 2012, Hungarian business schools have been under increased pressure to become market-oriented, especially as enrolment levels have at times shown a 50% decline in applications for business-related studies. Assuming that subcultures exist in a large complex organisation, our study firstly seeks to identify the subcultures and then, for each subculture, to determine the dominant market orientation. Market orientation in higher education is split into three areas: interfunction orientation (co-operation); student orientation; and competition orientation. The quantitative studies were conducted in 2011 and 2016 in order to compare the period before and after students became fee-paying. Our findings from the 2011 study provided five subcultures, two of them with dominant clan types, two with hierarchy types and one with a dominant market type. It was found that the clan subcultures had a dominant cooperation orientation, market subcultures a dominant competition orientation and hierarchy subcultures a dominant student orientation. Our study from 2016 examined whether subcultures and their orientations remained the same, and if the apparent correlation between dominant subculture type and dominant market orientation still existed. Our findings indicate that, despite some similarities, staff values have changed, and a new subculture type has emerged (i.e. the adhocracy type). Furthermore, the orientations have changed to a greater extent – from a student orientation towards a cooperation orientation for the majority of the subcultures.

Keywords: orientation, market, subculture, higher education.

JEL codes: Z130, M31.

Introduction

The dynamic and evolutionary nature of organisational culture is well-documented as cultures adapt to a combination of internal and external pressures on values and perceptions. This picture becomes even more intricate when we entertain the idea of subcultures existing in large complex organisations: we

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are now faced with a combination of heterogeneous subcultures evolving not only in relation to internal and external pressures, but also in reaction to one another.

Our study seeks to examine the change of subcultures over time through a repeated cross-section study. More specifically, we seek to examine how market orientation has changed in subcultures. The market orientation of higher education institutions (HEIs) is of particular interest as there appear to be simultaneous drives towards market orientation (e.g. in the form of lower government funding and withdrawal of grants for the majority of students) and away from market orientation (e.g. with government exercising greater control over HEIs through the introduction of chancellors).

Market orientation in organisations

Before considering the specific case of higher education in Hungary, the concept of market orientation in higher education should be clarified. Kasper (2005) claimed that there is a link between strategy, organisational culture and the market orientation of the organisation. However, opinions differ when it comes to the values related to a market orientation. Kasper (2005) characterises the market culture type as: dominant attributes as competitiveness and goal achievement; a leadership style emphasising decisiveness and achievement orientation; bonding to the organisation via goal orientation, production and competition; a strategic emphasis on competitive advantage and market superiority. Narver and Slater (1990) see market orientation as an orientation towards the customer, the competitor, and interfunctional coordination. From a higher education standpoint, if the student is taken as the consumer, then student satisfaction becomes the central focus for a market-oriented HEI. Kohli and Jaworski (1990) define the market orientation as intelligence generation, intelligence dissemination and responsiveness. The latter seems somewhat geared towards the context of higher education. Slater (2001) stressed that a market orientation is centred on the needs of the customers and the organisation's aim to satisfy those needs. However, the focus of this study is on the market orientation in organisational culture (i.e. pertaining to staff at all levels) rather than purely from a strategic angle.

Market orientation may vary by degrees between organisations. Kasper (2005, 6) refers to “a scale ranging from being truly market-oriented to not being market-oriented at all”. Hence, the market orientation definition is: “the

degree to which an organisation in all its thinking and acting (internally as well as externally) is guided and committed to the factors determining the market behaviour of the organisation itself and its customers” (Kasper 2005. 6). Although market orientation may not be the only source of competitive advantage, Day (1999) suggested that the following may be considered a means by which new information concerning trends in the market may be accessed: creating a spirit of open-mind inquiry; analysing competitors’ actions; listening to staff on the front lines; seeking out latent needs; active scanning of the periphery of the market and encouraging continuous experimentation.

If we consider market orientation as a particular direction taken by staff, and chosen by management, then we also need to consider how this direction might impact upon staff values and behaviours, i.e. the organisational culture. By using the six dimensions of Hofstede (1991), Kasper (2005) concludes that market cultures will be more pragmatic than normative (the 6th dimension) with customer needs taking priority above procedures and a strong external focus (on competition). Day (1999. 6), Cameron and Quinn (1999) confirm the need for an externally focussed culture as part of a market orientation. Hurley and Hult (1998. 45) found a strong link between market orientation and innovation: “A market- and learning-oriented culture, along with other factors, promotes receptivity to new ideas and innovations as part of the organisation’s culture (innovativeness)”.

Kumar et al. (2011) examined the market orientation and its effects within 261 companies. They found that market orientation has a positive effect on business performance in both the short and the long run, including a lift in sales and profit. More interestingly, this advantage was more sustained for firms that developed a market orientation earlier than others. Kirca et al. (2009) suggest that national culture has a role in the extent of market orientation in organisations. They used Schwartz’s cultural value dimensions to propose that national culture affects the internalization of market-oriented values and norms.

With these issues for market orientation in general, we now turn to the specific context of our study: market orientation in a higher education institution.

Market orientation in higher education

Not all organisations develop a competitive, arguably consumerist approach with detriment to history and traditions (Chandler 2011). According to Meadmore (1998), in Australia certain Higher Education Institutions are using their history

and traditions as a means of achieving a niche, although, of course, this applies much more to the elite universities rather than those lower in the rankings and hierarchy.

Higher education institutions are seeking equilibrium between external demands and the values and needs of the members. Changes in the strategy and structure of universities and colleges are often influenced by various external and internal forces. Merger, as one of the most radical form of institutional reorganisation, is often the response of the institution to such forces (Chafee–Tierney 1988). According to Hemsley-Brown and Oplatka (2010), the marketing of higher education institutions is centred upon relationship marketing. The student may be perceived as the customer and the culture may be considered student-driven. However, when considering market orientation (MO) as a concept, the higher education institution needs to take into account the following dimensions: customer orientation, competitive orientation and interfunctional orientation (Slater–Narver 1994; Oplatka–Hemsley-Brown 2007).

Higher education in Hungary has been experiencing many change drivers, steering many HEIs towards greater market orientation. Day (1999. 9) claimed that the climate of market instability and fierce competition have led to the increased need for a market orientation for all organisations. The change drivers in both public and private organisations are often cited as: globalisation, economic rationalism and information technology (Burke–MacKenzie 2002; Weber–Weber 2001). In Hungarian higher education, Business Faculties or Business Schools of universities and colleges are left with significantly less income from the government and with less student applying for their programmes, which are now almost all tuition fee based. Initially, the enrolment statistics dropped by 50% for applicants to business programmes, but these figures crept back up to those before the change over the following two years.

The School has the advantage of having the reputation of the most practice-oriented business school on the Hungarian market. On a strategic level the practice-orientation of the courses, the further strengthening of corporate collaborations and projects, the fundraising for the formerly non-existent corporate scholarships for students have all been taken on board by the management of the school. But the question, for which this paper also seeks the answer, remains: how much are the subcultures of the Budapest Business School in support of the much-needed market orientation, and to what extent have they changed between 2011 and 2016.

Cultural complexity in higher education

The concept of a homogenous organisational culture is referred to as the unified or 'unitarist' perspective which allows the classification of organisation culture as in the case of Handy (1993) with the four culture types: task, power, people and role-oriented cultures or Hofstede (1980) with an organisation having a role, achievement, power or support culture. However, the larger and more complex an organisation becomes, the less likelihood there is of a monolithic culture with all members of the organisation ascribing to the same values. Kuh and Whitt (1988. 27) highlight this point in the context of higher education: "the 'small homogenous society' analogue... is surely strained when applied to many contemporary institutions of higher education". Moreover, Bowen and Schuster (1986) found that members of different disciplines showed different values, attitudes and personal characteristics.

Bergquist and Pawlak (2008) consider six types of organisational cultures in higher education: collegial, managerial, developmental, advocacy, virtual and tangible. At a first glance, this may appear to be yet another of many typologies of organisational cultures taken from a unitarist perspective, however Bergquist and Pawlack (2008. 7) are quick to point out that "although most colleges and universities...tend to embrace or exemplify one of the six cultures, the other five cultures are always present and interact with the dominant culture". Likewise, Cameron and Quinn (1999) in the development of the Organisational Culture Assessment Instrument (OCAI), based on the Competing Values Framework, maintain the assumption that more than one culture may exist within an organisation at any given time.

Subcultures are more likely to develop in bureaucratic, larger, or more complex organisations since these organisations are more likely to encompass a variety of functions and technologies (Trice-Beyer 1993). With a variety of functions and technologies, professional groups may appear. Bokor (2000) found that subcultures were identified according to technicians (profession culture), customer-oriented parties (market culture), business-oriented parties (return culture) and a subculture of employees referred to as 'small labourers'. Through these typologies it can be seen how the different interactions and values resulted in subculture formation.

Table 1. Subcultures in the development process

	Return Culture	Market Culture	Profession Culture	Small Labourers
<i>Members</i>	Product Managers (Top Managers [to some extent]; potentially: Finance)	Sales (potentially: Customer Care)	Technicians (to some extent: the Lawyer)	Invoicing, MIRA, Lawyer, Customer Care, Finance
<i>Self portrait</i>	The conducting midfielders	The magic forwards delivering goals	Libero, defender serving the others	Secret talents on the bench
<i>Perception of others</i>	Skilful gamblers	Over occupied little star alike	Overloaded geniuses somewhere in the building	Ambitious ballasts
<i>Internal – external focus</i>	Intermediate internal	Strong external (customers)	Intermediate external (suppliers)	Miscellaneous (potentially internal)
<i>Attitude towards risk</i>	Intermediate	Risk taker	Risk avoider	Risk avoider
<i>Time orientation</i>	Intermediate	Shorter	Longer	Intermediate-longer
<i>Professional – task orientation</i>	Task orientation	Task orientation	Professional orientation	Task orientation (some professional)
<i>Professional – business orientation</i>	Business	More business than professional	Professional	Professional

Source: Bokor (2000. 7)

It can be seen from Table 1 that the orientations and attitudes presented vary according to each subculture and, as such, can be seen as either the cause or effect of the subcultures, depending upon the perspective taken of the culture itself: it could be argued that these classifications occur as each person adopts this orientation upon becoming a member of the subculture, in which case it is a process of acculturation, alternatively it could be seen that cultures formed according to staff interacting and finding shared values, orientation, attitudes and so on.

Becher (1987) saw organisational cultures in higher education as a number of subcultures based upon the discipline, with their own boundaries and conflict ensuing through competing interests. Becher (1987) classified the academic cultures into four categories: hard, pure, soft and applied knowledge. A pecking order ensued, based upon these types (with the basis being hard-pure, soft-pure, hard-applied and soft-applied). This complexity signified by the existence of multi-cultural academic institutions is further amplified when Bergquist (1992) claims that the borders between the disciplines and specialisations in HEIs are vehemently upheld to such an extent that in many cases only the administrative staff and librarians are allowed to be interdisciplinary. These borders also create a feeling of ownership concerning symbolic territories (spheres of ownership) and present a significant potential for resistance to change, especially when a proposed change may threaten these perceived territories (Kashner 1990). Thus, it seems that whether a unicultural or multicultural perspective is adopted, the upshot for HEIs is a tendency towards resistance to change.

Tierney (1988) asserts there may be numerous subcultures in a university or college and the basis could be: managerial; discipline-based faculty groups; professional staff; social groups of faculty and students; peer groups (by special interest or physical proximity); and location (offices arranged by discipline).

Schein (1988) entertains the possibility of an organisation's members having a combination of both shared and diverse values through members having both pivotal and peripheral values. Pivotal values are central to an organisation's functioning; members are required to adopt and adhere to the behavioural norms derived from these values and are typically rejected from the organisation if they do not (Chatman 1991; O'Reilly-Chatman 1996). Peripheral values are desirable but are not believed by members to be essential to an organisation's functioning. Members are encouraged to accept peripheral values, but can reject them and still fully function as members, as in higher education faculty members share common pivotal values concerning issues such as learning, but may diverge when concerned with values associated with their respective disciplines. Becher (1987) reinforces this when pointing out that the academic profession has many more similarities than differences and that all faculty members share a common view of the world and scholarship. Kuh and Whitt (1988) indicate that the shared (and strongly held) values of the academic profession are: the main responsibility is to be learned and convey this

learning (through teaching, inquiry and publication); autonomy in the conduct of work; and collegiality (e.g. mutual support).

Martin and Siehl (1983) developed a typology of organisational subcultures as follows: enhancing; orthogonal; and counter cultures. Within the context of Schein's (1988) pivotal and peripheral values, this typology clarifies how subcultures can co-exist in an organisation without detracting from the strength of the overall culture. This first type is called Enhancing subcultures. In this case, members adhere to dominant organisational culture values enthusiastically. They agree with and care about both pivotal and peripheral values, consistent with the larger organisation's core values, resulting in intense commitment to particular peripheral values that are consistent with those of the overarching culture. The second type is Orthogonal subcultures. Members embrace the dominant cultures' values, but also hold their own set of distinct, but not conflicting, values. This does not mean that orthogonal subcultures should be classed as countercultures, as members embrace the pivotal organisational values but, simultaneously, hold values that are peripheral to those of the overarching culture. The third type is Counter cultures. Members disagree with the core values of the dominant culture and hold values that directly conflict with those core values.

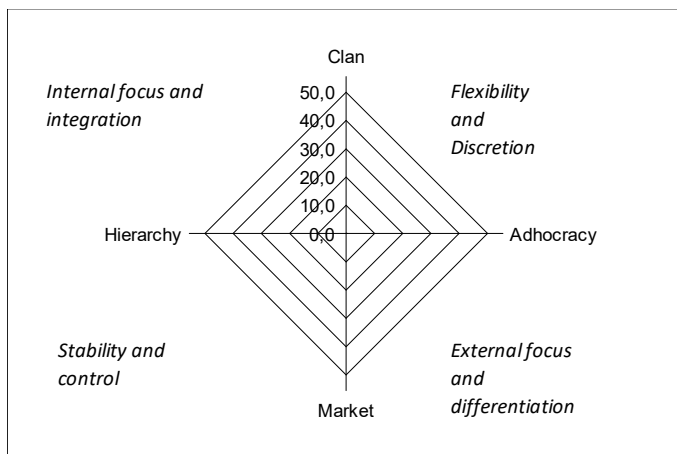
These typologies have been found to exist in higher education. Martin and Siehl (1983. 53) discovered an orthogonal subculture in faculty as they "simultaneously accept the core values of the (institution) and a separate, non-conflicting set of values particular to themselves". Whilst countercultures may be a rarity in higher education, that does not mean there is no opposition to the dominant culture: according to Kuh and Whitt (1988. 50), "conforming or orthogonal enclaves, such as the faculty senate, may challenge aspects of the dominant culture". According to Boisnier and Chatman (2003. 92), the "members' degree of conformity to peripheral norms can vary considerably". Thus, it seems that subcultures may vary in the extent to which they are related to the dominant organisational culture. The following section considers the cultural aspect of mergers with reference to higher education.

Method

Our explorative study's research questions tackle two aspects, with the latter building upon the findings of the former: what subcultures can be identified in the organisation and then, for each subculture, what is the dominant market orientation.

After considering the available tools, the organisational culture was measured by using the Organisational Culture Assessment Instrument (OCAI), which is based on the Competing Values Framework (CVF). This Framework was chosen for a number of reasons. Firstly, its original design and implementation by Cameron and Quinn (1999) was in an educational context and it has since been used to analyse the organisational cultures in many HEIs around the world (e.g. Kleijnen et al. 2009; Ferreira–Hill 2008). Secondly, the model allows for a number of different cultural types to exist simultaneously within one organisation, which seems more suited to the fragmentary nature of HEIs. Thirdly, this framework has already been used in Hungary although not for a higher education institution (Gaál et al. 2010) and finally, the instrument is intended to show current perceptions in comparison with preferences in the organisation giving an additional dimension of not only values but perceptions of the organisation as well.

The CVF was developed by Quinn and Rohrbaugh (1983) as a means of describing the effectiveness of organisations along dimensions with two bipolar axes, one indicating the range from control to flexibility and the other with a focus on the range from external to internal. Based upon this framework, the OCAI was developed with four quadrants indicating four cultural orientations. With this model, it is not the question of whether the culture can only be one of the four, but rather a question of which orientation is more dominant (Figure 1).



Source: Cameron–Quinn (1999)

Figure 1. The four culture orientations and dimensions of the OCAI

The clan culture is characterised by internal cohesiveness with shared values, participation and collectivism. It focuses on internal problems and concerns of individuals and perpetual employment with an informal approach to work characterised by flexibility and discretion. The adhocracy culture uses ad hoc approaches to solve problems incurred from the surrounding environment with flexibility and discretion. This combined with the external focus and differentiation indicates a willingness to take risks, creativity and innovation. Independence and freedom are highly respected. The market culture has a distinctly external focus with an orientation to the market and maintaining or expanding current market share. Competition is emphasised but within the boundaries of stability and control as with the setting of ambitious, quantifiable goals. The hierarchy culture has an internal focus with centralized decision-making and attention to stability and control through formalized structures and rigidity with policies, instructions and procedures. In this type of culture, conformity is encouraged.

The OCAI results in a culture profile which may be used to illustrate the following: the dominant culture; the strength of the dominant culture (the amount of points given); discrepancy between present and preferred culture; the congruency of the six features (dominant characteristics, organizational leadership, management of employees, organization glue, strategic emphases, criteria of success); Evaluation of the culture profile with the average for the sector and a comparison with average tendencies.

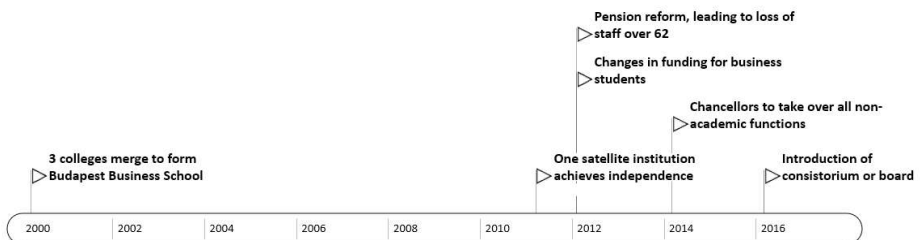
By using the Organisational Culture Assessment Instrument (OCAI) and the scores given by participants in relation to the preferred values within the organisation, a hierarchical cluster analysis was undertaken by using Ward's (1963) method as a means of attempting to identify potential subcultures according to common values and perceptions of the organisation. This method has been used previously as a means of identifying subcultures (Hofstede 1998; Jermier et al. 1991). This way, each participant is grouped into clusters based on the similarity of each score, and by using the SPSS software, this results in a dendrogram (tree diagram). As referred to by Hofstede (1998), the method for deciding which part of the dendrogram to select as an indication of groupings in the organisation i.e. the optimal number of splits, is similar to that of a scree analysis used in factor analysis, in that large jumps detected in the dendrogram from one cluster to another are the limiting factor after which groupings are not considered. If no jumps were found, then homogeneity could be considered prevalent in the

organisation. However, numerous small clusters with a significant number of outliers creating their own clusters would indicate a high level of fragmentation within the organisational culture. Hofstede (1998) assumed that these clusters were subcultures in the organisation and, assuming that interaction has taken place between respondents within this case study of a matrix organisation – albeit to varying extents –, these value groupings can also be considered subcultures.

To assess the market orientation in this case study, the Market Orientation Inventory (Hemsley–Brown–Oplatka 2010) was used. This questionnaire has been developed for a higher education setting and considers three dimensions which together form the market orientation in a higher education institution: customer orientation, competitor orientation and interfunctional orientation. This instrument has been tested in a number of countries and has reliability with Cronbach’s scores of more than 0.8 (Hemsley–Brown–Oplatka 2010. 211).

Data

Our research focuses upon an institution that has already undergone some changes, with a merger in 2000 (see Figure 2). The HEI initially consisted of three separate colleges. The three colleges have remained in their locations after the merger, although the structure was changed from a hierarchical to a matrix one as a means of encouraging greater cooperation and contact across the three colleges. As shown in Figure 2, there have been a range of external and internal changes – the majority of which have occurred after our study in 2011.



Source: author’s own design

Figure 2. Key changes for the Budapest Business School

A significant internal change occurred in 2013 at the BBS when a large number of employees had to retire due to changes in the way pensions were handled. At some faculties (colleges) of the BBS the rate of retirement of lecturers

over age 60 was as high as 30% of the total teaching staff. In the face of these changes uncertainty has grown higher than ever before.

Our initial study in 2011 took place before all these changes and we seek to discover how subcultures and their market orientations have evolved in the face of these external and internal developments through comparison with our second study in 2016.

For the 2011 study, from a total possible sample of 959 employees from all levels of the organisation, 369 completed questionnaires were received (38.5%), from which 3.5% were either incomplete or invalid due to miscalculations in the OCAI, giving a final sample of 35% (334 employees). Our study in 2016 resulted in a final sample of 348 employees from a total of 898 employees in the organisation.

Findings

Due to the size and complexity of the dendrogram, it has been omitted from this paper. It was clear from the dendrogram that significant jumps occurred from the point beyond which five clusters were found and these can be considered subcultures. Two respondents were outliers which resulted in two clusters with only one respondent in each. These were extracted from the study as this did not display a significant level of fragmentation on an individual basis with only two cases and, as subcultures may be defined as requiring interaction between members, subcultures containing one individual could not exist. The summary of the key characteristics of subcultures for 2011 and 2016 can be seen in Table 2 and Table 3.

Table 2. Summary of subcultures found in 2011

Dominant characteristic	Subculture				
	1	2	3	4	5
Size (number of persons)	140	84	34	30	44
Dominant culture type	Market	Clan	Hierarchy	Strong Hierarchy	Strong Clan
Perceived organisational dominant culture type	Hierarchy	Hierarchy	Hierarchy	Hierarchy	Clan
Position	Lecturer	Lecturer	Office staff	Office staff	Lecturer
Function (teaching/admin/unskilled/management)	Teaching	Teaching	Admin	Admin	Admin
Age (years)	50-62	50-62	50-62	50-62	50-62
Tenure (years)	< 5, and 10-20	10-20	10-20	Less than 5	5-10

Source: author's own design

Table 3. Summary of subcultures found in 2016

Dominant characteristic	Subculture					
	1	2	3	4	5	6
Size (number of persons)	142	62	61	24	36	21
Dominant culture type	Clan	Clan	Hierarchy	Strong Clan	Adhocracy	Hierarchy
Perceived organisational dominant culture type	Hierarchy	Hierarchy	Hierarchy	Clan	Hierarchy	Hierarchy
Function (teaching/ admin/ unskilled/ management)	Teaching, admin, management	Teaching, management	Admin	Admin	Teaching	Admin
Gender	Male		Female			
Tenure	3+	<1, 10+	<1		1-5, 10+	<5

Source: author's own design

Upon finding the subcultural types, the market orientations were assessed for each subculture, as well as for the organisation as a whole. By using the Market Orientation Inventory (MOI) questionnaire for higher education institutions (Hemsley–Brown–Oplatka 2010), the findings can be found in Table 4 and Table 5.

Table 4. Market orientation of the five subcultures in 2011

	Market		Clan		Hierarchy		Strong hierarchy		Strong clan		BGE	
	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x
Student orientation	0.71	1.21	0.53	1.35	0.92	1.29	0.74	1.26	0.85	1.08	0.71	1.24
Competition orientation*	0.61	1.05	0.34	1.21	0.56	1.13	0.47	1.09	0.49	1.10	0.51	1.11
Co-operative orientation	0.64	1.03	0.55	1.14	0.79	1.00	0.56	0.94	0.86	0.94	0.65	1.04

*Note: although none of the subcultures have a dominant competition orientation, the market subculture has the highest figure for this orientation

Source: author's own design

Table 5. Market orientation of the six subcultures in 2016

	Hierarchy		Strong Clan		Market		Clan		Market-hierarchy		Adhocracy		BGE	
	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x	\bar{x}	s_x
Student orientation	0.60	1.35	1.19	1.16	0.55	1.31	0.31	1.38	1.18	1.04	0.62	1.40	0.60	1.31
Competition orientation	0.54	1.38	0.75	1.33	0.38	1.32	0.34	1.21	0.75	1.14	0.46	1.16	0.46	1.28
Co-operative orientation	1.00	1.02	1.28	1.23	0.61	1.09	0.68	1.10	0.98	0.92	0.71	1.15	0.77	1.09

Source: author's own design

Discussion

In our two snapshots of the organisation, we can see noticeable changes in the organisation. Bearing in mind our findings in the literature, there seems to be more divergences in some areas, such as the emergence of a new adhocracy subculture, which is especially significant as this type did not exist in our earlier study. Furthermore, although there doesn't seem to be any convergence, there are some subcultures that appear to be a repetition of the status quo, with the same types reoccurring. However, due to significant changes in the staffing over the period of the study, we cannot say that the same members of subcultures in 2011 'dug their heels in' and stuck to the same values and beliefs over a 5-year period, despite internal and external drives to change.

The variance figures have been included to give extra depth to our findings. However, there is a caveat within any culture study: it is conceivable that any 'outlier' with strong values above the rest, is actually the role-model or informal leader of the subculture and ignoring any figures in relation to a role-model or leader would also skew the results. It seems counterintuitive, but the outliers and variances may not be a distortion from the norm, but the norms and values that members are aiming for. To examine the variance further, we conducted box plots for each item in the instrument and found that in all cases, the high variance was not due to a majority of members differing from one another, but rather that in each case, there were two or three outliers. Furthermore, the outliers were not 'repeat offenders' as it seems that, in each subculture, there were only occasional divergences from the group, for the members.

In the 2011 study, the clan subcultures both had a co-operation student orientation, which is in line with the characteristics deigned to be associated with

this culture type (Cameron–Quinn 1999). Likewise, the market-oriented culture has the highest competitive orientation of all five subcultures in 2011 as it should have both an external focus and a tendency towards stability and control. This is also the case for the hierarchy culture which has to solve students' problems and administration on a daily basis, and has a correspondingly dominant student orientation. Despite these findings, the link between culture type and market orientation was not found to be statistically significant.

Our findings for the 2016 study destroy any preconceptions of links between a specific organisational subculture and a specific orientation. If we compare tables 4 and 5 overall, three out of five subcultures had a student orientation and two a cooperation orientation. There has been a noticeable shift as four out of six subcultures now have a cooperation orientation and two have a student orientation. This shift from a student orientation to a cooperation orientation could result from the impact of a range of internal and external changes increasing the need for working together. This finding indicates that the core belief of the majority of subcultures has shifted from an emphasis on collecting and processing information related to customer preferences, to a belief in creating superior value for target customers through the integration and coordination of the HEI's resources. This shift is also related to activities of the top management as, due to the changes mentioned earlier in this paper, there is a greater stress on the importance of attracting student-customers and sustaining recruitment not only falling under the responsibility of faculty management, but rather under the responsibility of everyone in the university community.

Conclusions

The findings of this case study have raised a number of questions which may require further research. They also highlighted some of the key issues to be taken into consideration in further research regarding cultures in higher education institutions.

The case study underscores a key issue in organisational development of aligning organisational subcultures in large organisations as indicated by Hopkins et al. (2005). Following management activities, there has been a clear shift of market orientation and the increased interfunctional orientation could arguably show greater convergence of subcultures in the future. Further research is planned with another step of the repeated cross-section study in 2021, to further examine this aspect.

Furthermore, the fact that the merger has not resulted in a single common culture after more than 10 years seems to point to a certain inevitability of subcultures continuing to survive in higher education institutions despite transformation efforts. Regarding acculturation in merged organisations (Heidrich–Chandler 2011), it seems that it may have taken place across physical boundaries with subcultures forming across all locations for both studies in 2011 and 2016 and this may be the result of the matrix structure and stress by top management on collaboration and cooperation across faculties.

Both internally (clan, hierarchy) and externally focussed (market, adhocracy) subcultures have orientations towards student and co-operation. This calls into question, firstly, whether the student is perceived as an internal or external element of the organisation. Secondly, it indicates that externally-focussed subcultures may also be oriented towards co-operation to a greater extent than other aspects associated with an external focus, such as competition. Further research would be needed to confirm this to be the case generally and if this finding is also applicable beyond a higher education setting.

Finally, this study builds upon the hierarchical cluster analysis used to identify subcultures and presents a methodology for making a direct comparison between the organisation and subcultures as a means of discovering and contrasting their adherence to the organisation values and perceptions over time.

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