Development of Business Schools into Performance-Driven International Institutions – an Empirical Survey in Germany

Sabine KNOTHE¹, Maik LACHMANN²

Abstract: Increasing worldwide competition in the higher education market has led to new public management approaches at higher education institutions. A critical success factor in this context is the international profile of the more performance-driven institution. This paper provides a snapshot of the state of international activities at German universities based on an empirical survey of 61 business schools and analyzes the findings. Target setting and respective performance and implementation measures for internationalization strategies are discussed.

The results provide a catalog of elements of the internationalization process that can be adapted to the performance improvement needs of specific institutions in the European higher education market. Key elements are a strategic anchoring of internationalization processes and a professionalization and centralization of international affairs with regular evaluations and reports to the leadership. Further implementation measures for a successful internationalization process prove to be the active recruitment of international experienced faculty members, the advancement of faculty mobility, the acquisition of third-party funds and scholarships as well as active memberships in recognized international networks. The results of the survey can be extended to other higher education institutions throughout the world with the vision to compete more efficiently and effectively in the global market for higher education.

Keywords: New public management, higher education, Germany, internationalization, student mobility, performance measurement.

JEL: I21; I23; I25.

Introduction

In light of economic and social developments and government policy changes over the last decades, successfully competing in the European higher education market requires an understanding of new public management processes at higher education institutions, or HEIs (de Boer et al., 2007; Toma 2012). With new governance structures, the Bologna process, and the liberalization of the higher education market, HEIs have gained more autonomy and become market

---

¹ PhD Westfälische Wilhelms-Universität Münster, International Relations, Germany
² Professor PhD, Technische Universität Dortmund, Assistant Professor of Management Accounting, Germany
actors that compete with other institutions within their countries for students, third-party funding, and public monies (Washington and Ventresca, 2004; Pfeiffer et al., 2006). Much of the decision-making authority has transferred from the government to HEIs (Alexander, 2000; Witte, 2006; Beerkens and van der Wende, 2007; Lange, 2008). To be more efficient, self-sufficient, accountable, and professionalize HEIs have started to use performance indicators and targets (Lin and Lee, 2011; Marginson, 2006; Meloa et al., 2010). Whereas some HEIs devote more energy to local or national activities, others pursue international activities more earnestly.

An international orientation can be a differentiating feature, especially for business schools (Küpper, 2007; Li and Bray, 2007; Verbik and Lasanowski, 2007), and international student mobility has been employed as an indicator of an HEI’s degree of internationalization (Kehm, 2005). Like the issues of attracting the best talent, wealth creation, and brain drain, student mobility has become an issue of economic and academic competitiveness and is expected to grow considerably during the coming years (Li and Bray, 2007). Incorporating a semester or year abroad into curricular goals not only factors into the decisions of excellent students seeking an appropriate HEI, but also represents an important experience for their personal as well as professional development (Frank et al., 2010; González et al., 2011). Basically, study abroad programs offer four types of enriching experiences from the students’ viewpoints: immersion in a foreign culture, exposure to alternate world views, opportunities for linguistic development, and, if applicable, the acquisition of new knowledge (Teichler, 2007). Students should thereby be better prepared for the globalized workplace. In 2009, 26% of students in German HEIs integrated a study abroad within their studies. The Federal Ministry of Education and Research and the German Academic Exchange Service have asked for a significant increase in student mobility. This target is aligned with the appeal to HEIs to establish adequate structures and implement efficient action parameters into their inner organization (German Academic Exchange Service 2010).

Increasing decentralization at the HEI level is leading to an improved autonomy of schools and departments in strategy implementation (Clark, 2000).

The primary objective of this study is to empirically examine the performance of internationalization at business schools in Germany, that are mostly public institutions. The research question is which internationalization parameters are significantly and positively associated with institutional performance, proxied by student mobility as one of the many performance indicators (PI) in the area of internationalization. The rationale for selecting student mobility as the PI is that many HEIs consider the number of internationally mobile students they attract to be an indicator of the attractiveness and reputation of their educational provisions (Kehm, 2007). Additionally, we derive implementation measures to improve the internationalization for HEIs that wish to devote more energy to international activities.
We proceed as follows. First, Section I reviews the relevant literature and builds a theoretical framework of internationalization processes. Next, Section II presents the research design and provides empirical results. Section III elaborates upon the implications for HEIs in the European higher education market. The final section concludes our study with an outlook for future studies.

1. Literature review and theoretical framework

An increasing number of scholars underline the necessity of organizational change and new public management in higher education due to changing environmental conditions and the newest policy developments in the public sector (Guthrie and Neumann, 2007; Ferlie et al., 2008; Witte et al., 2008). Interest in measuring the performance of HEIs has increased as institutions become increasingly market driven. For instance, Tropp (2002) develops a performance measurement system for managing teaching and research in German HEIs. Guthrie and Neumann (2007) analyze economic and non-financial performance indicators in universities in the areas of financial viability, teaching and learning, and research.

However, internationalization processes in higher education are understudied (Marginson and Rhoades, 2002). Thus, the literature review does not reflect the importance of the internationalization of higher education that is attributed to the subject in political discussions worldwide (Teichler, 2007). Hahn summarizes previous research results related to the internationalization of HEIs (Hahn, 2004) and distinguishes between two types of publications. First, the conceptual literature analyzes the concepts, models, and frameworks of internationalization at HEIs (Clark, 1983; Knight, 1994; Davies, 1995; van Dijk and Meijers, 1997; van der Wende, 1999; Karathanos and Karathanos, 2005): These concepts and models confirm the need to define internationalization as a strategic process with an integrated performance measurement system. Second, contributions to practice discuss the implementation measures of international activities. Although these studies consider similar internationalization dimensions, they rate the importance of internationalization dimensions differently: Audas (1990) conducted one of the earliest scientific studies related to the implementation of internationalization processes at HEIs and compared the internationalization strategies of 25 US HEIs. Further studies have been conducted by Francis (1993), Green (2005) and Androniceanu (2008). Hahn (2005), one of the first German scholars within the field of higher education, conducted an empirical study concerning the internationalization of HEIs in Germany and, based on five case studies, she derives success factors that accelerate the internationalization process. Two years later Brandenburg and Federkeil (2007) developed a tool set to reveal the performance of HEIs within a coherent system of key internationalization parameters.
Based on a meta-analysis of prior research, we identify eight institutional dimensions with parameters in the area of internationalization: leadership, human resources, financial resources, international networks, service and support, marketing, cooperation, and study degrees. These dimensions are not to be displayed by one manifest indicator that can be easily identified in an empirical survey; instead, they represent a batch of individual parameters that has been examined for a fully comprehensive view and quantification of its dimensions (Kromrey, 2009). Table 1 identifies the importance of the eight dimensions according to 13 scholars, and thus supports our rationale for selecting them.

Table 1. Identified relevance of internationalization dimensions

<table>
<thead>
<tr>
<th>Source</th>
<th>Country</th>
<th>Dimensions of internationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conceptual literature</strong></td>
<td></td>
<td>Leadership</td>
</tr>
<tr>
<td>Knight (1994)</td>
<td>Canada</td>
<td>x</td>
</tr>
<tr>
<td>Davies (1995)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td>Van Dijk and Meijers (1995)</td>
<td>Netherlands</td>
<td>x</td>
</tr>
<tr>
<td>Van der Wende (1999)</td>
<td>Netherlands</td>
<td>x</td>
</tr>
<tr>
<td>Karathanos and Karathanos (2005)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td><strong>Contributions to practice</strong></td>
<td></td>
<td>Leadership</td>
</tr>
<tr>
<td>Harari (1989)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td>Audas (1990)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td>Scott (1992)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td>Francis (1993)</td>
<td>CAN</td>
<td>x</td>
</tr>
<tr>
<td>Knight (1999)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td>Hahn (2005)</td>
<td>Germany</td>
<td>x</td>
</tr>
<tr>
<td>Green (2005)</td>
<td>USA</td>
<td>x</td>
</tr>
<tr>
<td>Brandenburg and Federkeil (2007)</td>
<td>Germany</td>
<td>x</td>
</tr>
</tbody>
</table>

Given the above studies and since no theoretical framework depicts internationalization processes, we develop one for the purpose of this study (Figure 1). Our main argument is that the proper usage of internationalization dimensions is related to the institution’s performance, proxied by student mobility, given changes in environmental conditions.
The framework with the corresponding eight dimensions of internationalization is a key feature for the quantitative and qualitative analysis of this study and guarantees the comparability of results. Participating schools are analyzed according to the framework and the usage intensity of individual parameters compared and discussed to close the existing research gap.

2. Empirical results

2.1 Research methodology

Since this research area is underdeveloped, we first conduct a quantitative survey. The present state of the internationalization in Germany is subject of a nation-wide survey of business schools. This methodology provides insights into empirical reality and discovers factors that positively influence internationalization of higher education. We sent a fully standardized questionnaire to all the business schools in Germany (N=180, n=61; see Appendix A). The questionnaire is divided into three sections. The first section deals with general information on the participating business school. The items in the second section relate to student mobility as our performance indicator. The third section asks the participants to evaluate and rate the usage intensity of the individual internationalization indicators of the eight dimensions (three or five scale).
2.2 Sample characteristics

From the population of 180 business schools, we were able to retrieve 61 analyzable questionnaires (for a response rate of 33.89%). Nearly all German business schools are institutionally located within host universities largely funded through public sector. This means that the ultimate goal of most business schools is not to make profit but to advance knowledge. Knowledge is mostly seen as a public good and not as a product in the marketplace (Ferlie et al., 2010). A valid return rate of 48% from universities was considerably higher than that from universities of applied science, or UASs, with 25%. Thus, universities are more strongly represented in this survey, reflecting actual proportions. Figure 3 shows the structural characteristics of the participating sample.

![Figure 2. Structural characteristics of the participating sample](image)

Institutional performance in the area of internationalization is measured in this study by international student mobility. We focus on mobility as a limited period of study abroad (typically between six and 12 months), and not on mobility for the purpose of studying a whole degree program abroad. The average student

---

3 Of the 180 business schools in Germany that offer undergraduate and/or graduate courses, 155 are public sector (60 universities and 95 universities of applied science, or UASs) and 25 private sector (6 universities and 19 UASs) (Centre for Higher Education, 2008).

---

58 ADMINISTRAȚIE ȘI MANAGEMENT PUBLIC ș 18/2012
Development of Business Schools into Performance-Driven International Institutions – an Empirical Survey in Germany

mobility at business schools in an academic year is 5.36% for outbound students (median 4%, with a standard deviation of 5.01 percentage points) and 4.11% for inbound students (median 3%, with a standard deviation of 4.93 percentage points).\(^4\) There is a significant correlation between the number of inbound and outbound students (Spearman correlation coefficient = 0.545, \(p<0.001\)).\(^5\) On average, 1,618 students study at participating business schools (median= 1,475, with a standard deviation of 1,092). The majority of the participating institutions are publicly funded (90.16%) and universities (52.46%). Private institutions have a higher student mobility than public institutions (Mann–Whitney U-test, \(p<0.01\)).\(^6\) There are no significant differences in student mobility between universities and UASs (Mann–Whitney U-test, \(p=0.554\)).

2.3 Internationalization parameters

This section studies the internationalization parameters in the eight dimensions at the participating business schools.

Leadership

Most business schools questioned do not implement strategic measures or objectives in their internationalization efforts and did not undergo an administrative reorganization of employee structure. As shown in Table 2, 33% of business schools feel it necessary to employ additional administrative staff for international relations.

Table 2. Employee structure in international relations

<table>
<thead>
<tr>
<th>Number of employees (n=60)</th>
<th>0%</th>
<th>41.7%</th>
<th>25.0%</th>
<th>21.7%</th>
<th>11.7%</th>
</tr>
</thead>
</table>

Internationalization strategies are not widely used in business schools: 23% of the business schools have a written document outlining strategic objectives with strategic measures, 65% of business schools have not specified a strategy, and 12% are planning to develop one. There is no correlation between the type of HEIs and the existence of a strategy (Mann–Whitney U-test, \(p=0.317\)). Target agreements between the state, the university, and faculty seem to be a frequently used tool, with 87% of business schools incorporating strategic internationalization into their target agreements (Table 9).

Most business schools recognize the importance of internationalization, as shown in Table 3. In 75% of business schools, internationality is a topic in

\(^4\) For this paper, student mobility is defined as the fraction of internationally mobile students to the total number of students.

\(^5\) Kolmogorov–Smirnov tests show significant variance from normality, so that here and in the following, Spearman correlation coefficients are used.

\(^6\) Nonparametric methods are used if usage conditions are not completely fulfilled.
management meetings at least twice a year, with deans/vice deans regularly attending international representational events. A total of 20% of business schools report at least quarterly to the management of the institution. Reports to the management of the school regularly take place. This supports the trend noted toward a decentralized control of internationalization at the school level.

Table 3. Significance of internationalization (n=59)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Yearly</th>
<th>Biannually</th>
<th>Quarterly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic in management</td>
<td>8.5%</td>
<td>16.9%</td>
<td>23.7%</td>
<td>22.0%</td>
<td>28.8%</td>
</tr>
<tr>
<td>meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Representational</td>
<td>10.2%</td>
<td>15.3%</td>
<td>8.5%</td>
<td>30.5%</td>
<td>35.6%</td>
</tr>
<tr>
<td>events with the dean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report to school</td>
<td>10.2%</td>
<td>22.0%</td>
<td>15.3%</td>
<td>20.3%</td>
<td>32.2%</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report to the institution’s</td>
<td>28.8%</td>
<td>33.9%</td>
<td>18.6%</td>
<td>8.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Human resources**

Besides leadership structures, we examine the internationality of faculty members. Table 4 proves that most business schools questioned do not employ internationally experienced faculty. Most business schools have not yet recruited faculty members with an international study degree, a semester stay abroad, or international professional experience. Yet, professors at business schools usually conduct international research and present papers at international conferences.

Table 4. Internationality of faculty members (n=57)

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>1-24%</th>
<th>25–49%</th>
<th>50–75%</th>
<th>&gt;75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>International conference</td>
<td>0.0%</td>
<td>36.8%</td>
<td>14.0%</td>
<td>15.8%</td>
<td>33.3%</td>
</tr>
<tr>
<td>contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester abroad (in last five</td>
<td>3.5%</td>
<td>63.2%</td>
<td>17.5%</td>
<td>10.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study degree abroad</td>
<td>17.5%</td>
<td>78.9%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>International professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>experience</td>
<td>21.1%</td>
<td>50.9%</td>
<td>19.3%</td>
<td>5.3%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

**Financial resources**

Business schools view the allocation of financial resources as necessary: 47% of schools have a budget for international relations, while 85% provide a travel allowance to faculty members for international research, 57% of schools provide an allowance to administrators, and 30% of schools offer scholarships for inbound and outbound students (Table 9, p.14).
International networks

Memberships in international networks and associations are more common than membership in and accreditation by one of the three international accreditation agencies: Association to Advance Collegiate Schools of Business, European Foundation for Management Development, and Association of MBAs. Whereas more than 60% of schools questioned actively engage in international networks, only 3% of business schools in Germany have earned international accreditation (Table 9, p.14). For the majority of business schools, active participation in networks is more attractive or the preliminary stage of the intended accreditation.7

A total of 39% of business schools do not actively engage in international alumni work, while 10% of business schools register more than 40% of their international students in their alumni network (Table 5).

Table 5. Number of students in international alumni networks

<table>
<thead>
<tr>
<th>Number of international students in alumni network (n=61)</th>
<th>0%</th>
<th>1–20%</th>
<th>21–30%</th>
<th>31–40%</th>
<th>&gt;40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.3%</td>
<td>39.3%</td>
<td>6.6%</td>
<td>4.9%</td>
<td>9.8%</td>
<td></td>
</tr>
</tbody>
</table>

Service and support

A total of 49% of business schools have built their own international office at the school level, and 13% have also built an internationally oriented career center. The usage of a mentoring program is common at 67% of business schools to support the service for international exchange students. It seems that these business schools put a high emphasis on service and support structures, which can be seen in the fact that the majority of schools that have not yet built a service structure are planning to do so (Table 9).

Marketing activities

Besides a well-established communication policy for the target group of scholars that aims to improve the school’s international reputation through research projects and highly ranked journal articles, a promotional communication policy for the target group of potential students is becoming increasingly important. A total of 74% (18%) of business schools offer a bilingual (multilingual) website (Table 6). Additionally, 90% of the business schools print information materials, brochures, and flyers in English.

7 A total of 8% of the participating business schools are planning to obtain international accreditation.
The frequency of attendance to higher education fairs abroad provides another picture: 32% of business schools attend several higher education fairs per year, 37% one fair, and 32% do not attend any fairs (Table 7).

### Table 7. Attendance at higher education fairs abroad

<table>
<thead>
<tr>
<th>Attendance at higher education fairs (n=60)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3–4</th>
<th>&gt;4</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.7%</td>
<td>36.7%</td>
<td>13.3%</td>
<td>11.7%</td>
<td>6.7%</td>
<td></td>
</tr>
</tbody>
</table>

**International partnerships**

While analyzing partnership agreements, it becomes evident that Erasmus cooperation is most popular among business schools. Business schools have, on average, 24 Erasmus agreements (median 20, with a standard deviation of 16.64) and 13 bilateral agreements (median 8, with a standard deviation of 15.56). This can be explained by the fact that all Erasmus cooperations are easy to implement and financially attractive. Business schools with a high number of students have a better-differentiated offering of international partnerships than smaller business schools (Spearman correlation coefficient 0.555, p < 0.001).

**International content in teaching**

Most participating business schools do not see offering international content in teaching as a priority. The non-existence of programs for “internationalization at home” becomes evident from the low number of business courses taught in a foreign language, as shown in Table 8. More than 70% of schools offer less than a quarter of their courses in a different language, while 6% of business schools teach more than half of their courses in English and 3.3% of business schools teach solely in English.

### Table 8. Percentage of courses taught in a foreign language

<table>
<thead>
<tr>
<th>Courses in a foreign language (n=61)</th>
<th>0</th>
<th>1–24%</th>
<th>25–49%</th>
<th>50–99%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3%</td>
<td>68.9%</td>
<td>21.3%</td>
<td>3.3%</td>
<td>3.3%</td>
<td></td>
</tr>
</tbody>
</table>

Table 9 indicates that 31% of business schools offer a summer school for domestic as well as international students; 10% of the schools are planning to establish one, since this can lead to a significant increase in their reputation abroad; and 57% of schools offer lectures on intercultural learning. While many schools offer an international module with an integrated study abroad stay, the majority do
Development of Business Schools into Performance-Driven International Institutions – an Empirical Survey in Germany

Table 9. Usage of internationalization parameters (n=61)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>In planning</th>
<th>p (U-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy</td>
<td>23%</td>
<td>65%</td>
<td>12%</td>
<td>0.004</td>
</tr>
<tr>
<td>Target agreements</td>
<td>87%</td>
<td>10%</td>
<td>3%</td>
<td>0.151</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel allowance for administrators</td>
<td>60%</td>
<td>35%</td>
<td>5%</td>
<td>0.483</td>
</tr>
<tr>
<td>Travel allowance for faculty scholarships</td>
<td>85%</td>
<td>12%</td>
<td>3%</td>
<td>0.780</td>
</tr>
<tr>
<td>Budget for international relations</td>
<td>47%</td>
<td>49%</td>
<td>4%</td>
<td>0.013</td>
</tr>
<tr>
<td>Networks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International networks</td>
<td>60%</td>
<td>37%</td>
<td>3%</td>
<td>0.003</td>
</tr>
<tr>
<td>International accreditation</td>
<td>2%</td>
<td>90%</td>
<td>8%</td>
<td>0.342</td>
</tr>
<tr>
<td>Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International office</td>
<td>44%</td>
<td>40%</td>
<td>16%</td>
<td>0.006</td>
</tr>
<tr>
<td>International career center</td>
<td>13%</td>
<td>79%</td>
<td>8%</td>
<td>0.107</td>
</tr>
<tr>
<td>Mentoring program</td>
<td>68%</td>
<td>29%</td>
<td>3%</td>
<td>0.001</td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Website in a foreign language</td>
<td>74%</td>
<td>18%</td>
<td>8%</td>
<td>0.178</td>
</tr>
<tr>
<td>Information brochures in a foreign language</td>
<td>90%</td>
<td>6%</td>
<td>4%</td>
<td>0.192</td>
</tr>
<tr>
<td>International content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer school</td>
<td>31%</td>
<td>60%</td>
<td>9%</td>
<td>0.108</td>
</tr>
<tr>
<td>Lecture on intercultural learning</td>
<td>57%</td>
<td>41%</td>
<td>2%</td>
<td>0.002</td>
</tr>
<tr>
<td>Import of study degrees</td>
<td>11%</td>
<td>80%</td>
<td>9%</td>
<td>0.946</td>
</tr>
<tr>
<td>Export of study degrees</td>
<td>23%</td>
<td>62%</td>
<td>15%</td>
<td>0.972</td>
</tr>
</tbody>
</table>

2.4 Comprehensive view

Business schools place a high emphasis on internationalization dimensions in the areas of leadership, networks, service, and marketing. Less frequently, schools recruit international faculty members or offer international content in teaching. Overall, it can be stated that the usage of internationalization parameters

---

8 In 1994, higher education was included in the World Trade Organization’s General Agreement on Trade in Services (Hahn 2005).
varies greatly. Table 9 summarizes the coded parameters (yes/no/in planning) according to their existence. Additionally, the Mann–Whitney U-test examines statistically significant differences between student mobility and parameter usage.\(^9\)

Business schools with a written internationalization strategy, the transparent allocation of money with their own internationalization budget, active membership in international networks, and usage of mentor programs have, on average, significantly higher student mobility. This finding can be interpreted as evidence that there is a positive correlation between the tested parameters and student mobility. Additionally, we calculate Kendall correlation coefficients for indicators measured by means of ordinal scales. Table 10 proves that most parameters in the areas of leadership, human resources, and partnerships show significant positive correlations with student mobility. Apparently, the personal structure has a positive impact on student mobility: Indicators that measure the number of administrative staff or faculty with international study degrees have the highest coefficients (0.436 and, respectively, 0.425). Thus, schools with high student mobility have a higher level of professionalization and better strategic direction of international relations than others. A further interpretation of the results follows in the next section.

Table 10. Nonparametric correlations with student mobility

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Number of administrative staff in international relations</th>
<th>Kendall’s tau ((\text{p-value}))</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Topic in management meetings</td>
<td>0.295 (0.003 59)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Representational events with the dean</td>
<td>0.315 (0.001 59)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Report to school’s management</td>
<td>0.119 (0.225 59)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Report to institution’s management</td>
<td>0.195 (0.047 59)</td>
<td></td>
</tr>
<tr>
<td>Human resources</td>
<td>International conference contributions</td>
<td>0.154 (0.130 57)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semester abroad</td>
<td>0.344 (0.001 57)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International study degree</td>
<td>0.425 (0.000 57)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International professional experience</td>
<td>0.297 (0.004 57)</td>
<td></td>
</tr>
<tr>
<td>Networks</td>
<td>International alumni work</td>
<td>0.287 (0.005 60)</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>Website in a foreign language</td>
<td>0.053 (0.614 60)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attendance of higher education fairs</td>
<td>0.255 (0.010 59)</td>
<td></td>
</tr>
<tr>
<td>Partnerships</td>
<td>Erasmus partnerships</td>
<td>0.321 (0.001 58)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bilateral partnerships</td>
<td>0.376 (0.000 58)</td>
<td></td>
</tr>
<tr>
<td>Int. content</td>
<td>Courses taught in a foreign language</td>
<td>0.205 (0.048 60)</td>
<td></td>
</tr>
</tbody>
</table>

9 The response categories “in planning” and “no” have been grouped together for the implementation of the Mann-Whitney U-tests.
3. Implications for business schools

While many business schools have not recognized the potential competitive advantage of strategic internationalization, the correlation analysis shows positive examples. We derive the following recommendations for business schools in the European higher education market to increase the level of internationality, as proxied by student mobility. Transferability and concrete implementation must be decided on an individual basis in light of the heterogeneous playing field (Berthold, 2011).

- The dimension of leadership aligned with respective service structures is one of the essential factors to increase the level of internationality. Frequent rotation of the dean’s position complicates long-term strategic planning. Thus, business schools should implement applicable parameters to integrate internationalization into the school’s culture, long-term strategic plan, and vision. The majority of participating schools have neither developed an internationalization strategy nor established service structure at the school level for strategic and operative internationalization planning. Therefore, action is required for business schools to implement a consistent internationalization strategy with target setting and activity measurement. A service structure at the school level emphasizes the centralization of strategic and operative internationalization activities.

- A result-oriented, forward-looking governance system of the internationalization process and its activities, with priority setting and regular evaluations and reports to the management board, can present an essential factor in the school’s internationalization. These evaluations and documentations for target achievements should not be regarded as control instruments, but should instead serve as legitimization of international activities.

- Sufficient financial resources are a necessary condition to increase the level of internationality. However, less than half of business schools have their own budget for international activities. In addition, schools do not assign their own scholarships for students. Thus, action is required for third-party funding for international projects.

- Active membership in international networks is essential for increased internationality. A condition for the effectiveness of international networks is the equal reputation of network members, as well as their high motivation to actively attend network meetings. International networks allow for benchmarking initiatives, create information efficiency through improved access to resources and member know-how, and facilitate the establishment of potentially new cooperative relations within the network. Already 60% of participating business schools are actively involved in international networks.

- International faculty members are important in increasing the level of internationality. The majority of faculty members at participating business schools,

---

10 It is to be noted that schools focusing on the regional market or other priorities should also discuss internationalization strategies.
Development of Business Schools into Performance-Driven International Institutions – an Empirical Survey in Germany

...have no international experience. Through the promotion of staff mobility and the development of international scholar programs, schools can improve the internationality of faculty members for the short term and, in so doing, gain international know-how.

**Conclusions**

Based on a sample of 61 business schools, this paper investigates the internationalization processes of HEIs and outlines key issues for the establishment of a performance-driven, international institution in the European higher education market. The findings from our study confirm that most business schools in Germany do not have a structured internationalization process. Most participating business schools have only a low usage of internationalization parameters, and correspondingly low student mobility numbers. They implement international activities intuitively and spontaneously rather than systematically and methodologically supporting them. Internationalization processes have a high potential for optimization. In essence, we find evidence that some internationalization parameters have a positive impact on institutional internationalization performance and can thus serve as catalysts in internationalization processes.

The findings from this study should be seen as preliminary rather than definitive. We are cautious in generalizing our results due to the heterogeneous playing field of HEIs and the limitations that arise in empirical studies. First, the study only covers data from a cross-sectional design. It is not possible to consider time delay effects through single-time observations if student mobility increases only subsequently due to changing internationalization parameters, context factors, and externalities. There are inadequacies that can only be eliminated through detailed empirical studies with longitudinal research designs over a couple of years.

Second, this study uses student mobility to measure performance in internationalization. Other measures of performance (e.g., in international research publications or international student load as a percentage of the institution’s load) can also be considered. A third limitation of the study relates to the fact that the research area is still underdeveloped, and thus no theoretical model exists that describes the internationalization dimensions to be considered. We select dimensions and respective parameters based on our interpretation of the prior literature. Others may interpret the existing literature differently than we do, and we therefore argue for using different dimensions for the survey (Gordon et al., 2009).

Given the rising significance of internationality in the higher education sector and its high expectations, higher education research faces a comprehensive research agenda and has been asked to increase the level of knowledge of successful management practices at HEIs in the context of globalization and new public management. Since the research area is underdeveloped, this study focuses on the development and validation of internationalization dimensions and parameters, the status quo of international activities, as well as first correlations...
between parameters and student mobility. In-depth analyses of individual dimensions through success factor research can deepen the first set of empirical results. Regarding content, a follow-up study could closely examine further aspects of internationalization, such as the accreditation processes and international networks. In sum, it can be assumed that research on internationalization in higher education will significantly increase in the future.

**Bibliography**

5. BERTHOLD, CHRISTIAN (2011) Als ob es einen Sinn machen würde... Strategisches Management an Hochschulen, Gütersloh.


Development of Business Schools into Performance-Driven International Institutions – an Empirical Survey in Germany


### APPENDIX A: RELEVANT QUESTIONS OF SURVEY

#### A. General questions
1. Name of institution:
2. Name of school:
3. State:
4. Legal form:
5. Number of students (Business as first study degree):

#### B. Student Mobility
6. Number of incoming students:
7. Number of outgoing students:

#### C. Leadership
8. Number of administrative staff in international relations:

   |   |   |   |   |   |
---|---|---|---|---|---|
0 | 1 | 2 | 3-4 | >4 |

9. Report institution’s management:
   - Never
   - Once/yr
   - Twice/yr
   - Quarterly
   - Monthly

10. Report school’s management:
   - Never
   - Once/yr
   - Twice/yr
   - Quarterly
   - Monthly

11. Representational events dean:
   - Never
   - Once/yr
   - Twice/yr
   - Quarterly
   - Monthly

12. Internationality as a topic in management meetings:
   - Never
   - Once/yr
   - Twice/yr
   - Quarterly
   - Monthly

13. Existence of internationalization strategy:
   - Yes
   - No
   - In planning

14. Is internationality integrated in target agreements?
   - Yes
   - No
   - In planning

#### D. Human resources
15. Percentage of professors with semester abroad in last five years (in %)

   |   |   |   |   |   |
---|---|---|---|---|---|
0% | 1-24% | 25-49% | 50-75% | >75% |

16. Percentage of professors with international study degree (in %)

   |   |   |   |   |   |
---|---|---|---|---|---|
0% | 1-24% | 25-49% | 50-75% | >75% |

17. Percentage of professors with international professional experience in last five years (in %)

   |   |   |   |   |   |
---|---|---|---|---|---|
0% | 1-24% | 25-49% | 50-75% | >75% |

18. Percentage of professors with international conference contributions in last five years (in %)

   |   |   |   |   |   |
---|---|---|---|---|---|
0% | 1-24% | 25-49% | 50-75% | >75% |
E. **Financial resources**
19. Budget for international relations?
   - Yes
   - No
   - In planning

20. Scholarships from incomings/outgoings on school’s level
   - Yes
   - No
   - In planning

21. Travel allowance for faculty?
   - Yes
   - No
   - In planning

22. Travel allowance for administrators?
   - Yes
   - No
   - In planning

F. **International networks**
23. Active involvement in networks/associations/benchmarking initiatives?
   - Yes
   - No
   - In planning

24. International accreditation?
   - Yes
   - No
   - In planning

25. % of international graduates integrated in alumni work?
   - 0%
   - 1-20%
   - 21-30%
   - 31-40%
   - > 40%

G. **Service and support**
26. International office (school’s level)?
   - Yes
   - No
   - In planning

27. International-oriented Career Center (school’s level)?
   - Yes
   - No
   - In planning

28. mentoring program for international students?
   - Yes
   - No
   - In planning

H. **Marketing**
29. language of website of school?
   - German
   - bilingual
   - multilingual

30. Information brochures in English?
   - Yes
   - No
   - In planning

31. Number of attended higher education fairs abroad?
   - 0
   - 1
   - 2
   - 3 bis 4
   - > 4

I. **Cooperations**
32. Number of active ERASMUS exchange programs:
33. Number of active bilateral exchange programs:
### J. International content in teaching

34. Courses in foreign language?
- [ ] 0%
- [ ] 1-24%
- [ ] 25-49%
- [ ] 50-99%
- [ ] 100%

35. Number of international programs/modules?
- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3
- [ ] > 3

36. Lectures on intercultural learning?
- [ ] Yes
- [ ] No
- [ ] In planning

37. Summer School?
- [ ] Yes
- [ ] No
- [ ] In planning

38. Export of study degrees?
- [ ] Yes
- [ ] No
- [ ] In planning

39. Import of study degrees?
- [ ] Yes
- [ ] No
- [ ] In planning

### K. Personal questions

Gender
- [ ] female
- [ ] male

Age:

Position in school:

Name:

Email:

Phone: