

Measuring Performance in Finnish Universities: Struggling with Institutional Complexity*

Tomi J. Kallio	Kirsi-Mari Kallio	Giuseppe Grossi	Janne Engblom
Adjunct Professor, PhD	Adjunct Professor, PhD	Professor, PhD	Lecturer, PhD
University of Turku	University of Turku	University of Kristianstad	University of Turku
Finland	Finland	Sweden	Finland

Abstract

Over the last thirty years, institutional and socio-economic development and globalization have played a crucial role in the changes seen in the higher education sector. These changes have impacted aspects such as governance, organization, financing, management systems, and the academic and social legitimacy of universities (Burke & Associates, 2005).

Previous studies have focused on changes in performance management (PM) and the management of universities, for example, in the implementation of PM (Deem, 1998; Shun et al., 2006; Broadbent, 2007), the assessment of academic performance (Kanji et al., 2010), the use of key performance indicators (Ball & Halwachi, 1987; Lewis et al., 2000; Guthrie & Newman, 2007), and the measurement of institutional and individual performance (Modell, 2003, 2005, 2006; Taylor, 2001; Kallio & Kallio, 2014; Ter Bogt & Scapens, 2012). The common factor in these studies seems to be a transition in institutional logics from academic logics to business logics (see Pettersen, 2015).

In line with this recent development, the competition between universities in Nordic countries for students, researchers, and resources has been on the rise; these universities are now being managed using different PM tools (see Vakkuri & Meklin, 2003; Kallio et al., forthcoming). Universities are complex and heterogeneous organizations characterized by the multiplicity of “institutional logics,” which can compete, shift, and interact (Friedland & Alford, 1991; Thornton & Ocasio, 2008).

The present study uses institutional logics to analyze how the renewal of the PM system in Finnish universities has led to a change in the operating logics of university employees. The study is based on a results of a survey conducted in 2015, which included 672 respondents from three universities in Finland. The preliminary analysis revealed that despite the way in which university employees’ perceive the PM system in use, this system has initiated a change in the institutional logics of individual researchers and lecturers.

Keywords: Institutional logics; Performance management; Universities; Academic profession; Knowledge work; Hybridity

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1. Introduction

Over the last thirty years, institutional and socio-economic development and globalization have played a crucial role in the changes seen in the higher education sector. These changes have impacted aspects such as governance, organization, financing, management systems, and the academic and social legitimacy of universities (Burke & Associates, 2005). Previous studies have focused on the changes taking place in the performance management (PM) of universities; for example, in the implementation of PM, the assessment of academic performance (Lewis, 2014), the use of key performance indicators (Guthrie & Neuman, 2007), and the measurement of institutional and individual performance (Modell, 2006; Kallio & Kallio, 2014; Ter Bogt & Scapens, 2012). A common factor in these studies seems to be the transition in institutional logics from academic to business logics (Pettersen, 2015).

In line with this recent development, universities in Nordic countries have faced increased competition for students, researchers, and resources, and they are now managed via different PM tools (Vakkuri & Meklin, 2003; Kallio et al., 2015). Universities are complex and heterogeneous organizations characterized by the multiplicity of 'institutional logics' that compete, shift, and interact (Thornton & Ocasio, 2008).

In more general terms, during the last years there has been considerable interest in linking micro-level and macro-level perspectives in the institutional logics context. However, as noted by McPherson and Sauder (2013, p. 166), thus far "much more attention has been given to how institutional forces dictate individual behavior than to how micro-level activities affect the nature of these forces," and, therefore, "More work is needed to unpack how local actors mediate institutional demands and the requirements of day-to-day organizational activity." The present study endeavors to provide an answer to this need as it adopts the institutional logics perspective in analyzing how the adoption and application of the PM system in Finnish universities has led to a change in the operating logics of university employees. The research questions can be presented as follows:

- i) Do the individual scholars perceive an increase in work efficiency in their universities due to the introduction of PM, and thus do they themselves experience a steering effect by the PM system?
- ii) How do PM-related processes at the local actor level in academia interact with the changing institutional logics of the university sector?

The study is based on a longitudinal approach, which has been suggested to be particularly useful for research dealing with institutional logics (Townley, 1997). A survey was conducted in 2010 and 2015 among 12 departments of three universities operating in Finland. The survey, which contained both quantitative and qualitative elements, was sent to all the university employees in the chosen departments involved in teaching and research-oriented tasks. A cluster analysis indicates three major clusters of respondents and a statistically significant change in the relative weight of these clusters from the year 2010 to the year 2015. The migration of scholars between the clusters is perceived as an indication of changing micro-level operating logics in academia. This change is

further perceived as a manifestation of the way in which the local actor-level in academia interacts with the institutional logics of the field.

The article proceeds as follows. After the introduction, we provide a synopsis of the studies dealing with the changing institutional logics in academia and introduce the Finnish PM system for our further analysis. In the methods section, we describe the research data and the logic of our empirical analysis. Next, we introduce the four clusters of respondents and, based on the cluster analysis, we explore the changes of the relative size of the clusters from the years 2010 to 2015. Evidencing statistically significant changes in the way that scholars report the effects of PM on academic work, we attempt to answer the first research question. We further illustrate the clusters using extracts from an open-ended question of the survey. In the following sections, we explore the second research question as we try to theoretically understand what the changes in the clusters indicate from the perspective of the changing institutional logics in academia. We end the paper with our conclusions and suggestions for further research.

2. Background: The competing institutional logics in academia

Several recent studies dealing with scholarly work in academia have indicated significant changes in the way that the performance of individual researchers and teachers are evaluated (Ter Bogt & Scapens, 2012; Kallio & Kallio, 2014). This line of research is in the intersection of two wider academic discourses, one dealing with new public management and PM (see e.g. Hood, 1995; Pollitt 2013), and the other studying changes in higher education organizations and the academic profession (see e.g. Clark, 1983; Rhoades, 1998). Over the last few decades, numerous studies, mostly originating from the latter discourse, have identified fundamental changes in academia. These changes are typically reported to be caused by the factors studied in the former discourse. These changes are typically connected to the underlying assumptions concerning the nature of academia in general, and the way that university organizations are managed in particular. Based on the extant literature, Table 1 presents some examples of the findings of this type of research.

Table 1. Examples of research findings describing the ‘old’ and ‘new’ logics in academia

Author(s)	Finding(s)
Gumport (2000)	“[T]he dominant legitimating idea of public higher education has changed from higher education as a social institution to higher education as an industry.” p. 68
Ter Bogt & Scapens (2012)	While the traditional, developmental PM in academia was used for helping individuals to improve their future performance, the new judgmental PM focuses on quantitatively measuring their past outputs.
Ylijoki & Ursin (2013)	“[A]cademic identities have become increasingly diversified and polarized due to the managerial and structural changes in higher education.” p. 1135
Kallio et al. (2016)	Due to PM, the competitive ethos of the “new” academia is challenging and replacing the collegial ethos of the “old” academia. The changing ethos “cuts to the originality, autonomy and freedom at the heart of academic work.” p. 702

Even if the actual concept of institutional logics is mentioned in only a few of the studies presented in Table 1, the common denominator for this line of research, in general, seems to be that there is an ongoing transition from traditional academic institutional logics to business logics (Pettersen, 2015). The tendency to perceive academia as a battlefield of schemes pulling actors in opposite directions is in line with the literature of institutional logics where such competing logics have been reported in numerous professional fields, ranging from higher education and the publishing industry (Thornton & Ocasio, 1999) to healthcare (Reay & Hinings, 2005), and even to Nouvelle cuisine in French gastronomy (Rao et al. 2003). Within these studies, scholars have typically recognized and theoretically elaborated upon two or more competing logics. The first of these logics typically represents traditional professional logic, while the second is a type of new business or market-oriented logic.

Competing logics have received considerable scholarly interest of late, and institutional complexity is generally considered to be a theoretically puzzling topic of research (see e.g. Reay & Hinings, 2009; Besharov & Smith, 2014). According to Thornton and Ocasio (2008), even if presenting competing logics in scholarly analyses often means simplifying and exacerbating certain characteristics of the logics, constructing such ideal types and ideal type pairs is useful for the theoretical understanding of the logics. Thus, based on the extant literature of the field, Table 2 summarizes some essential attributes of competing institutional logics in academia, especially from the perspective of this study, namely, PM in academia.

Table 2. Some essential attributes of professional and business logics in academia

	Professional logic in academia	Business logic in academia
<i>Academic identity and ethos</i>	Homogenous; collegial	Heterogeneous; competitive
<i>Basic conception of scholarly work</i>	Intrinsic motivation; vocation; Unlike any other job	Extrinsic motivation; A job among others
<i>Mode of behavior</i>	Valuing free science; Academic freedom; Loyalty to academic discipline	Producing value for money; Utilitarian survival; Loyalty to employer
<i>Source of legitimacy</i>	Internal legitimacy; Accountability for scientific community and professional associations	External legitimacy; Accountability for the government and other external financing bodies
<i>Evaluation of the quality of outputs</i>	Quality determined by academic community	Quality determined by working life, society, financiers and legislation; Quantification of quality
<i>Nature of PM</i>	Developmental; qualitative; future-oriented	Judgmental; quantitative; focus on past outputs

As illustrated in Table 2, professional logics perceives the traditional academic identity as homogeneous and constructed on collegial identity, while the business logics see the academic identities as less homogenous and based on a competitive ethos (Ylijoki & Ursin, 2013; Kallio et al., 2016). The traditional conception of academic work has underlined intrinsic motivation and vocation, while scholarly work in academia has been generally understood as something special. On the other hand, the challenging business logics also recognizes extrinsic factors as legitimate sources motivation and, rather than exceptional, it sees scholarly work as a job among others. (Kallio & Kallio, 2014; McInnis 2010.) The mode of behavior under professional logic is expected to be deeply value-laden. While the scholar's behavior in relation the surrounding society is expected to be independent, impartial and neutral, there is a deeply value-laden stand on advancing free science. This traditional mode of behavior that underlines academic freedom has been challenged by business logic, which trusts utilitarian survival, and scholars are expected to do what they are paid for. Consequently, while professional logics sees loyalty towards one's own discipline as at least, if not more, important than belonging into one organization, business logics underlines the latter (Townley, 1997; Gumpert, 2000).

The source of legitimacy of scholarly work has been traditionally traced to one's scientific community and professional associations. The traditional type of legitimacy can thus be considered as internal legitimacy in the sense that the legitimacy derives from the academic profession's own principles, where scholars are accountable for their own community and associations. On the other hand, the business logic, with its managerial orientation, considers the government's and other external financiers' policies to be crucial for legitimacy. This type of legitimacy is mostly determined outside the academic profession and is thus external. The universities' strategies and performance

indicators are, therefore, mostly designed for external accountability (Townley, 1997; Gumpert, 2000; Kristiansen et al., 2011; Välimaa, 2012). In a similar vein, whereas professional logic leans on the academic community when determining the quality of the essential outputs of universities, such as teaching and research, business logic relies on the quality assurance determined outside of academia, including from sponsors and the business life. Moreover, business logic has a tendency to approach quality in measurable terms and thus quantify quality (Lomas & Ursin 2009; Kallio, Kallio & Grossi 2016). Consequently, PM in business logic is judgmental, mostly quantitative, and focuses on past outputs in comparison to PM in traditional academic logics, which is developmental and future-oriented (Ter Bogt & Scapens, 2012; Townley, 1997).

While the professional and business logics discussed above are naturally ideal types, and the actual manifestations of competing institutional logics in academia naturally vary in different countries, the general trend throughout the Western world seems to be that PM practices in academia are increasingly copied from the business world, and performance measurements are constantly being developed into a more detailed form. Business logic-oriented measurements typically aim to quantify scholarly outputs, especially in research activities; moreover, in some countries and universities, the outputs related to teaching are also measured (Kallio, Kallio & Grossi, 2016). This general development reflects the instrumental perspective of PM.

Institutional logics have been found to be particularly useful in explaining institutional change and the way in which macro-level institutions affect organizational level strategies and practices (see e.g. Thornton & Ocasio, 1999; Thornton, Jones & Kury, 2005). However, Thornton, Ocasio and Lounsbury (2012) have stated that the extant research dealing with institutional logics do not adequately explore how different logics are used “on the ground.” In a similar vein, McPherson and Saunderson (2013, p. 166) have stated that the extant literature “lacks a clear, empirically based understanding of how social actors translate logics into action as they engage in everyday organizational activities, or how these micro-level activities help reproduce or transform organizational structures.”

This general lack of micro-level activities within institutional logics research is also present in studies conducted in the field of higher education. Accordingly, while the consequences of changes in the field and the organizational levels from the viewpoint of university personnel have been reported (Kallio & Kallio, 2014; Ylijoki & Ursin 2013; Kallio, Kallio, Tienari & Hyvönen, 2016), the extant literature typically reflects macro-level phenomena, such as the effects that field-level changes have on higher education organizations as a whole (see e.g. Bastedo, 2009; Gumpert, 2000; Townley, 1997). The perspective of the extant studies are thus mostly from macro and/or meso to micro, and the studies typically report how university personnel experience and react to changes in their management systems and practices, organizations, and the operational environment in general. The research conducted in the opposite perspective, i.e., how micro-level activities affect meso and macro levels, is much more sporadic. There is thus much less knowledge available on how university personnel, through their own actions and behavior, affect changes in their organizations and, moreover, initiate field-level changes.

3. Data analysis, research data, and methods

The study is based on a longitudinal analysis of a large survey conducted in 2010 and 2015 on university employees in 12 faculties and three universities in Finland. In 2010, there were 966 respondents, and in 2015 there were 672. The analysis took part in two waves: first, in the form of a cluster analysis, and then completed with a qualitative analysis of the open questions of the survey.

The data contained variables describing attitudes against certain aspects of university performance-based management. Likert scale of “Strongly disagree”, “Disagree”, “Neither agree nor disagree”, “Agree” and “Strongly agree” was used in measurement.

On the basis of the first research question, we chose two Likert scale statements that we used as variables to build our cluster analysis. Clusters were formed based on 5 x 5 cross-tabulation of statements “Performance management increases work efficiency in universities,” which is used as a variable to indicate whether the respondent perceives that performance management in universities has the effect that the Ministry of Education and the individual universities and faculties pursue through PM: increased work efficiency, and the statement, “Performance management steers my work,” is used as a variable to indicate whether the respondent also experiences the steering effect of PM in his/her own work. Four clusters were obtained by combining categories “Strongly agree/disagree” with “Agree/disagree”. Neutral answers (“Neither agree nor disagree”) were left out of the classification. This resulted to 2 x 2 cross-tabulation.

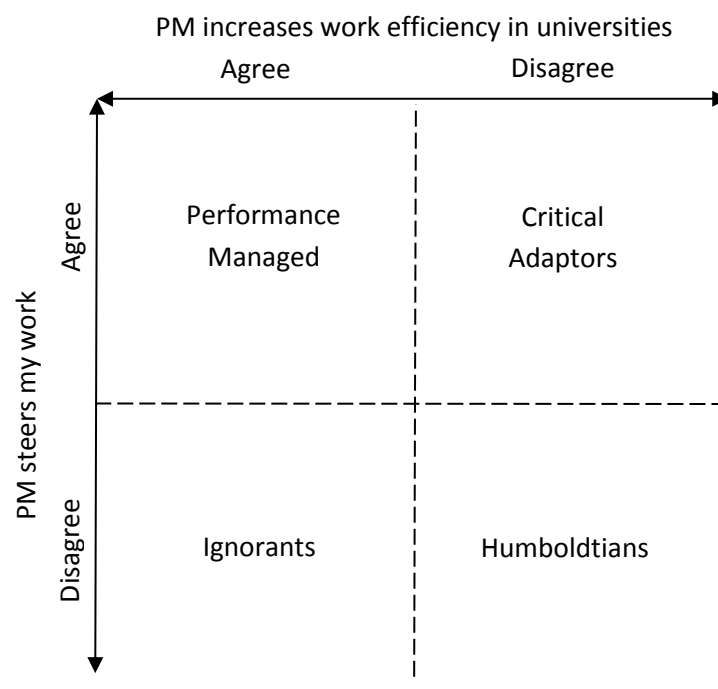


Figure 1. The four respondent clusters

Besides the two axis that make the fourfold table in Figure 1, we have labeled the four individual clusters as “Performance managed,” “Critical adaptors,” “Ignorants,” and “Humboldtians.” The

labels of the clusters were iteratively developed during the data analysis. The purpose of the labels is not to reflect any kind of superiority or priority between the clusters but rather to concisely articulate the essential attributes of each cluster.

Using four possible values (“completely agree,” “mostly agree,” “mostly disagree,” and “completely disagree”) for both indicators results in a cluster analysis containing four individual cells in each cluster; thus, a cluster matrix of 16 cells was formed. As can be seen from the cross tabulations presented in Appendix 1 (see Tables A1 and A2), in 2010, 61.73 percent, and in 2015, the equivalent of 70.06 percent of the respondents fell into the 16 cells of the four clusters (emphasized by the gray shading in the Appendix 1). This means that the number of respondents who “do not agree nor disagree” has clearly decreased, thus indicating that the respondents increasingly developed their opinions on PM during the five-year period.¹ The same applies to the relative number of missing values decreased from 2010 to 2015. However, given that the response rate was lower in 2015, the number of respondents (n) positioned in the clusters is nevertheless smaller in the 2015 data.

Tables 3a and 3b about here

Next, we shall take a closer look at the four clusters and their changes from 2010 to 2015. Besides the quantitative data used to illustrate the weights—i.e. the relative number of respondents who belong to each cluster—we will also use extracts from an open question in the survey (“How does performance management affect your motivation to work?”) to illustrate the typical perceptions of the individual respondents in each of the four clusters. We begin by conducting a deeper analysis of the largest cluster.

The Humboldtians

The Humboldtians form the largest cluster of respondents in the datasets of both 2010 and 2015. The respondents in this cluster disagree with both the variables; in other words, they neither believe that PM would increase work efficiency in universities nor do they feel that PM would have a steering effect on their own work. Accordingly, despite the fact that their universities and faculties increasingly apply PM means and tools to direct their work, they believe that, in practice, these means do not increase general work efficiency in universities. Moreover, they believe that something other than PM steers their own work. The following extracts illustrate the typical answers of the respondents of this cluster to the open question, “How does performance management affect your work motivation?”

Tables 4a and 4b about here

* Work-in-progress. Please do not reference or site without consulting the authors.

As is clear from the extracts presented in Tables 4a and 4b, within the cluster of the Humboldtians, there are generally two types of scholars. On the one hand, there are those who state that PM does not affect their own personal motivation even if the effects of PM on scholarly work in academia in general are negative. In a sense, they continue their work regardless of PM and its negative effects. On the other hand, there are those who, due to PM, also report a decrease in individual work motivation. Both types can be understood as responses from representatives of the traditional academic profession, who typically feel that intrinsic motivation rather than extrinsic motivation should steer scholarly work; they perceive that PM tools fail to have a real effect on work efficiency in universities. In this sense, the label Humboldtians, which refers to an idealistic scholarly ethos, describes these respondents rather well. To underline their ethos, numerous respondents explicitly mentioned their intrinsic motivation towards academic work.

Importantly, in both 2010 and 2015, the largest individual number of respondents of all the four clusters are positioned in the extremist cell of the Humboldtian cluster (see Tables 3 and 4), indicating a strict disagreement (“completely disagree”) to both statements. However, the relative percentage of this individual cell dropped from 27.78 in 2010 to 18.06 in 2015, meaning a total decrease of almost 10 percentage points. A decrease has also observed in the other three, somewhat less extreme, cells of the cluster.

The performance managed

Theoretically, an opposite cluster to the Humboldtian cluster can be labeled as the Performance Managed. The respondents in this cluster agree with both statements: they believe that PM increases work efficiency in universities and also feel that it has a steering effect on their own work. However, compared to the respondents of the Humboldtian cluster, most of the respondents in the Performance Managed cluster were less extreme in their opinions.

Accordingly, while as many as 19.70 percent of the respondents in 2010 and 22.46 percent in 2015 belonged to this cluster, only a handful of respondents (1.79 percent in 2010 and 2.64 percent in 2015) belonged to the extremist cell where respondents completely agreed with both statements. As a matter of fact, both in 2010 (14.87 percent of the total respondents) and 2015 (15.64 percent of the total respondents), the largest individual cell by far in this cluster was the most moderate one, where the respondents somewhat agreed with both statements. This means that in this particular cluster, in 2010, as many as 75.48 percent, and in 2015, still as many as 69.63 percent of the respondents in the cluster chose the most moderate alternative. It can be thus concluded that the respondents of the Performance Managed cluster are typically less extreme in their opinions compared to the Humboldtians. This fact can also be detected from the typical responses from the Performance Managed cluster to the question, “How does performance management affect your work motivation?” This can be seen in the following extracts from the interviews.

Tables 5a and 5b about here

While their responses to open questions tend to be less fervent than those given by the Humboldtians, the respondents of the Performance Managed cluster nevertheless differ from the representatives of the traditional academic profession (the Humboldtians) as they believe that PM can be used to increase work efficiency in universities; further, they recognize the steering effect of PM in their own work. In comparison with the Humboldtians, they thus represent a new type of academics who recognize the role of extrinsic motivation in scholarly work. While this change is presently rather small, the relative weight of the Performance Managed cluster has grown by 2.76 percentage points from 2010 to 2015.

Respondents of the Performance Managed cluster mentioned salary in their answers more often than the Humboldtians. Unlike respondents in the Humboldtian cluster who, if they even mentioned salary, typically stated that PM causes no real chance of a wage increase, the respondents in the Performance Managed cluster were a bit more positive on the matter. However, as can be seen from the above extracts, many respondents of the Performance Managed cluster had hesitations about appropriateness of the PM indicators in use. Accordingly, several respondents brought up certain dangers and negative effects related to PM, such as bureaucracy, loss of time due to additional reporting, and the possibility of stress caused by target setting and monitoring.

The critical adaptors

While the Humboldtian cluster decreased by 11.54 percentage points and the Performance Managed cluster grew by 2.76 percentage points between 2010 and 2015, it was the Critical Adaptors cluster that gained the most relative weight. While it was only the third-largest cluster in 2010 with a 17.02 percent share, in 2015, the cluster clearly surpassed the Performance Managed cluster and became the second largest cluster with a 27.09 percent share. This means that the Critical Adaptors cluster gained as much as 10.07 percentage points in five years.

One could say that the cluster itself is an odd mix of the perceptions of the Humboldtian and Performance Managed respondents. Accordingly, the respondents in this cluster express that they disagreed with the statement that PM would, in fact, increase work efficiency in universities; however, they agreed with the statement that PM has a steering effect on their own work. While this might seem somewhat contradictory, we will explain in the following section how this type of logic can nevertheless be considered rational. The typical responses to the open questions in the Critical Adaptors cluster are illustrated by the following extracts.

Tables 6a and 6b about here

While numerous respondents in all four clusters stated that pressures and work-related stress increase due to PM, in the Critical Adaptors cluster, this was particularly evident in the 2015 data. The experiences of pressure and work-related stress are understandable since situations where

highly educated and intelligent individuals adapt to something that they consider to be secondary, or even detrimental, as many respondent explicitly expressed, can cause cognitive dissonance. Consequently, the basic assumptions towards one's profession and work only change slowly. While many respondents in the Critical Adaptors cluster have most likely migrated from the Humboldtian cluster, they probably still experience internal conflict.

The Ignorants

The fourth and clearly the smallest cluster, both in 2010 (5.03 percent) and 2015 (3.74 percent), is the Ignorants. The perceptions of these respondents can be described as somewhat contradictory. On the one hand, they express that they believe PM increases work efficiency in universities; nevertheless, they report that PM has no steering effect on their own work. While some respondents explicitly stated that PM is not, in their opinion, working as it should, the qualitative analysis suggested no notable systematic logic of argumentation behind the open-ended answers in this cluster. In that sense, there is no "typical" open-ended answer for this cluster excluding, perhaps, the fact that the answers in this cluster tended to be somewhat shorter than those provided by respondents in the other clusters.

Table 7 about here

The decrease in the size of the Ignorants cluster from 2010 to 2015 could indicate that as the faculties developed their respective PM systems during the five-year period, some of the previous respondents in this cluster migrated to other clusters. Since this cluster is significantly smaller than the other three, it receives less attention in the following analysis. Consequently, in the next section, we shall adopt a more theoretical perspective on the empirical data as we discuss the kind of institutional logics exhibited by the three significant clusters (the Humboldtians, the Performance Managed, and the Critical Adaptors), and what the changes in their relative weights between 2010 and 2015 potentially indicate in more general terms.

4. Discussion

According to Townley (1997, p. 263) institutional logics "offers a number of generalized rules which dictate the degree of appropriateness of specific practices in particular circumstances; it forms the basis of individual and organizational identities, interests and actions; it generates that which is valued; and it provides individuals with vocabularies of motives." From the data of this study, it is possible to identify three types of institutional logics.

Professional logic leans on the traditional conception of academic work and being a scholar. This logic is mostly exemplified by the respondents of the Humboldtian cluster, while several Critical Adaptors and even a few Performance Managed respondents apply its essential attributes in their responses. In their answers, respondents who follow professional logic typically refer especially to

themes related to academic freedom, intrinsic motivation, high quality of research and teaching, and the scientific community.

While indications of the tendency to follow the **efficiency logic** can be found in only a few responses, some of its themes are frequently mentioned. In particular, numerous respondents in all the three major categories displayed an understanding of the crucial importance of publishing, especially in highly graded journals.

Hybrid logic, the third logic present in the data, cannot be understood merely as the synthesis of professional logic and efficiency logic. In fact, hybrid logic is not a “product” of the classic thesis, antithesis and synthesis type of thinking often connected to the Hegelian approach. This is due to the fact that many of the central attributes of professional and efficiency logics simply cannot be synthesized, as there is no practical way to build synthesis, for instance, between collegial ethos and competitive ethos. Instead, in hybrid logic, some of the essential attributes of both professional and efficiency logics are present at the same time. This naturally creates internal tensions if one is to follow the hybrid logic in his or her work. Hybrid logic is thus an interesting combination of themes adopted from both professional and efficiency logics.

Those respondents who exemplified hybrid logic in their responses typically underlined their conviction of intrinsic motivation and academic freedom, while also touching upon the importance of publishing, especially in highly graded journals. While hybrid logic was most prevalent in respondents in the Critical Adaptors cluster, numerous scholars from both the Humboldtian cluster and the Performance Managed cluster also indicated hybrid logic in their responses.

While McPherson and Saunderson (2013) analyzed how institutional logics affect day-to-day micro-level organizational activities, they found that the expert workers in a drug court that they studied creatively used available logics as if they were tools. These expert workers used different logics in order to reach a consensus, manage institutional complexity, and to get the work of the court done. Unlike in the ethnographic study of McPherson and Saunderson (2013), due to the nature of the data of this study, it is not possible to build higher-order theoretical categories based on the empirically observed actions of individual respondents. However, based on the open-ended responses of the members of the different clusters, together with the extant research, it is possible to draw a picture of the two competing institutional logics and their hybrid as the third major logic.

Please note that the data analysis is still ongoing and the results are thus tentative.

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APPENDIX 1

Table A1 Cross tabulations 2010 (frequencies and percentage)

PM increases work efficiency in universities						
PM steers my work	Completely Agree	Mostly agree	Do not agree nor disagree	Mostly disagree	Completely Disagree	Total
Completely Agree	10 1.11%	10 1.11%	7 0.77%	8 0.88%	12 1.33%	47 5.20%
Mostly agree	7 0.77%	83 9.18%	46 5.09%	51 5.64%	24 2.65%	211 23.34%
Do not agree nor disagree	2 0.22%	40 4.42%	84 9.29%	69 7.63%	48 5.31%	243 26.88%
Mostly disagree	1 0.11%	19 2.10%	25 2.77%	77 8.52%	58 6.42%	180 19.91%
Completely Disagree	3 0.33%	5 0.55%	25 2.77%	35 3.87%	155 17.15%	223 24.67%
Total	23 2.54%	157 17.37%	187 20.69%	240 26.55%	297 32.85%	904 100%
Frequency Missing = 78						

Table A2 Cross tabulations 2015 (frequencies and percentage)

PM increases work efficiency in universities						
PM steers my work	Completely Agree	Mostly agree	Do not agree nor disagree	Mostly disagree	Completely Disagree	Total
Completely Agree	12 1.85%	13 2.01%	6 0.93%	14 2.16%	6 0.93%	51 7.87%
Mostly agree	6 0.93%	71 10.96%	45 6.94%	74 11.42%	29 4.48%	225 34.72%
Do not agree nor disagree	1 0.15%	17 2.62%	36 5.56%	34 5.25%	18 2.78%	106 16.36%
Mostly disagree	0 0.00%	13 2.01%	27 4.17%	58 8.95%	45 6.94%	143 22.07%
Completely Disagree	0 0.00%	4 0.62%	10 1.54%	27 4.17%	82 12.65%	123 18.98%
Total	19 2.93%	118 18.21%	124 19.14%	207 31.94%	180 27.78%	648 100%
Frequency Missing = 24						

Table 3a: Cluster breakdowns in 2010

PM increases work efficiency in universities					
PM steers my work	Completely Agree	Mostly agree	Mostly disagree	Completely Disagree	Total
Completely agree	10 1.79%	10 1.79%	8 1.43%	12 2.15%	40 7.17%
Mostly agree	7 1.25%	83 14.87%	51 9.14%	24 4.30%	165 29.57%
Mostly disagree	1 0.18%	19 3.41%	77 13.80%	58 10.39%	155 27.78%
Completely disagree	3 0.54%	5 0.90%	35 6.27%	155 27.78%	198 35.48%
Total	21 3.76%	117 20.97%	171 30.65%	249 44.62%	558 100.0%

Table 3b: Cluster breakdowns in 2015

PM increases work efficiency in universities					
PM steers my work	Completely Agree	Mostly agree	Mostly disagree	Completely Disagree	Total
Completely agree	12 2.64%	13 2.86%	14 3.08%	6 1.32%	45 9.91%
Mostly agree	6 1.32%	71 15.64%	74 16.30%	29 6.39%	180 39.65%
Mostly disagree	0 0.00%	13 2.86%	58 12.78%	45 9.91%	116 25.55%
Completely disagree	0 0.00%	4 0.88%	27 5.95%	82 18.06%	113 24.89%
Total	18 3.96%	101 22.25%	173 38.11%	162 35.68%	454 100.0%

Table 4a Exemplary quotes from the Humboldtians, year 2010

<i>The effect is negative. It feels like performance management causes lots of extra work so that there's less time to do the real productive work (teaching and research). Moreover, the performance indicators measure wrong things, so in the long run they will deteriorate the scientific quality of universities.</i>
<i>The effect is absolutely negative; in the long run the effects of this plutocratic rule will be devastating both for individuals and society.</i>
<i>Performance management doesn't have significant role for my work motivation. The performance appraisals continue to follow the tradition pattern and their effects to the nature of the work as well as the salary have been spurious. However, performance management increases the amount of work and occasionally it affects to the entire work community and atmosphere so that haste becomes tangible.</i>
<i>The effect positions somewhere on the scale 'depressing – infuriating'. My motivation is gone – I will retire as soon as I can. Thus far I was satisfied as I thought that I was doing important work for science, no matter the salary.</i>
<i>Performance management degrades work motivation because previously one toiled for research and students, not for the big brother that surveils and punishes.</i>
<i>The motivation to conduct high quality research and give high quality teaching isn't increasing as the results are measured solely in the form of quantities of publications and master's degrees.</i>
<i>My work motivation has been degrading and while I used to do lots of work during the weekends and evenings, now I only do what is absolutely necessary. As I see it, the politicians have, encouraged by the business world, raped the universities and it feels like living in an occupied territory. I feel that the government is the greatest enemy of free science.</i>
<i>Performance management has increased the amount of unnecessary work that takes time from the actual productive work. I expect that performance management will degrade the quality of [master's and doctor's] degrees and teaching as the indicators are set to measure the number of degrees and credits.</i>
<i>It lowers it. It feels like that there's not enough trust – just constant 'surveillance'.</i>
<i>[The effect is] Somewhat negative. It [PM] doesn't affect negatively to the quality of teaching but it does affect negatively to the mental and general well-being at the work.</i>

Table 4b Exemplary quotes from the Humboldtians, year 2015

<i>It stresses me. I'm a person of high internal motivation and I always do my best especially in teaching. However, the constant surveillance, monitoring and counting of credits is really demotivating and unpleasant.</i>
<i>It lowers it considerably. Performance management is ridiculous and unfair, and a scholar trained to think critically cannot swallow it. It doesn't suit academia at all. In science the motivation originates from somewhere completely else than from the infantile practices of business world.</i>
<i>At least not positively. It stresses me to even think about the performance appraisal ahead, even though based on the numbers there's nothing to be afraid of – I produce publications and contribute in supervising [master's] degrees. The quality of the work has plummet, but then again nobody cares about that.</i>
<i>It either has no effect all, because I don't care about it, or then the effect is solely negative as this "performance management" is not interested in the content and quality of research but just easily measurable things meaning, in practice, the number of publications.</i>
<i>It has no actual effect. The work motivation comes elsewhere. Besides everybody knows that regardless of what you do the universities cannot afford to reward it financially.</i>
<i>It affects negatively. I don't understand how the administration could know what is relevant research. Performance management is integrally related to a short-sited economic improvement so it mostly have negative effects on everything in the academia.</i>
<i>Well not in any way – own intrinsic motivation is always more important and sustainable source of motivation than external sanction and monitoring.</i>
<i>It doesn't improve work motivation that everything is being monitored. The academic freedom that once felt compelling and has been the privilege of the field has vanished almost entirely.</i>
<i>Extremely negatively. Everybody knows that the "performance management" is idiotic. It makes angry to do unnecessary work [due to PM]. [PM] Leads to the situation where opportunistic people advance in their careers and those who are gifted and take their work seriously will suffer.</i>
<i>Well it haven't increased my work motivation that's for sure. All performance measurement activities take time from real work and I would like to spend my time doing something meaningful. There's no doubt that I will meet my result targets but it has nothing to do with the incentives. In my nature I'm a civil servant and I do my things always as well as possible regardless of any incentives or requirements.</i>
<i>It is harsh and humiliating, it increases rudeness and competition in the academia.</i>
<i>There's quite little effect. Developing one's work in both teaching and research is striven by an intrinsic motivation as well as a will to develop and advance one's own field.</i>

Table 5a Exemplary quotes from the Performance managed, year 2010

<i>As such performance management motivates, but if it is taken into too extreme it starts to stress.</i>
<i>On the one hand motivation increases because one's accomplishments have significance for salary, but on the other hand constant monitoring and performance anxiety exhausts.</i>
<i>In my case performance management affects positively to work motivation: if I work more and better, I will get more salary and thus acknowledgment for the work done.</i>
<i>Mostly positively (e.g. the research credit system). Reaching own goals and performing well compared other colleagues / the general level motivates quite nicely.</i>
<i>In principle positively, although sometimes it's difficult to reject some societal tasks that are not in line with the objectives of performance management, even if they would be important otherwise, e.g. for my field of research. It [PM] also somewhat directs to do some things "moderately" in order to reach the targets (which I consider to be quantitatively oriented). So there's a slight risk for behavior that isn't actually positive for new ideas. It [PM] also motivates to apply funding for those topics that are currently favorable in terms of the possibility to get funding. The reason behind this [applying funding for favorable topics] is both to get the very funding as well as the fact you get measured for getting external funding.</i>
<i>If the indicators are reasonable, the effect is positive. It helps to recognize one's work and its consequences. Currently some of the indicators are reasonable and some are not. It [PM] has brought harsh and robust system of measurement into the academia and with it the culture of quantitative measurement in particular. It leads to responsibilities to report and monitor which consumes lots of time, and aren't very motivating.</i>
<i>Actually it [PM] has increased [work motivation] but sometimes the management have been using it in wrong way; to build pressure.</i>
<i>Positively, even though the effect isn't that big. However, for instance the active registration of research publications may speedup dissemination of research findings.</i>
<i>No problems. Performance management is here to stay and it just has to be accepted. Of course, for many an extreme competition may destroy work motivation, but in the world of finite resources the performance management is in principle just.</i>
<i>I see it [PM] as part of the job description: those who fund the operations want to see that the money is well spent.</i>
<i>Positively, in principle. In practice, as there's no money to allocate, the benefits [performance remuneration] for the unit might not materialize even if the work is done well.</i>

Table 5b Exemplary quotes from the Performance managed, year 2015

<i>Throughout my career I have always evaluated my achievements and made plans for the coming years. Performance management mostly creates institutional practices and bureaucracy along this process. In that sense it means only extra work, but then again it's nice to get feedback from your achievements. In my work performance management reminds me not to waste good manuscripts to those forums that doesn't produce research credits. [---]</i>
<i>Increases work motivation. It's good that active and productive people get rewarded.</i>
<i>I don't think that we actually have performance management and the lack of it affects very negatively to my work motivation. Research outcomes and teaching feedback are monitored for sure, but I have never faced a situation where they would have actually let into consequences. The tasks and the salary remain the same [---] just as it has been thus far. So in that sense I think that performance management is just a joke. Personally I long for performance management that would have a real effect on individual position and salary. As long as the salary is mostly determined by formal qualifications you cannot really talk about performance management.</i>
<i>It affects my work motivation in a positive way, but only because in my work unit, it has been well explained why and how good research and teaching results help our unit as a whole. The importance of each employee's work has been emphasized many times in our unit. This is not necessarily true of all work units, however.</i>
<i>In principle it [PM] inspires one to try to publish in increasingly reputable journals.</i>
<i>Positively. I like it that active publishing and teaching contributes [performance remuneration] directly to my own unit.</i>
<i>In principle performance management affects positively to work motivation and I think it's good that productivity is being monitored. It's another matter how and for what this information is being utilized for.</i>
<i>On the one hand it [PM] helps to make it clear how the work contribution should directed. On the other hand it creates pressure and stress.</i>
<i>On the one hand I think it's good that contributions get monitored and that there cannot be free-riders among us; to certain extent competition improves e.g. the quality of research and teaching. Emphasizing result responsibilities also produce constant pressure and sense of insufficiency – nothing ever seems to be enough.</i>
<i>I have tried to prioritize research and publishing and weed out the rest (e.g. teaching hours and planning).</i>

Table 6a Exemplary quotes from the Critical adopters, year 2010

<i>When result = amount, the effect to work motivation is lowering. Often it frustrates and changing job often comes to mind.</i>
<i>I cannot say yet. Perhaps it already motivates to write more as I have committed certain amount of journal articles in my work plan.</i>
<i>Depending on superior sometimes positively sometimes negatively. Mostly negatively.</i>
<i>Sometimes it frustrates. Everybody would like to do as high quality research as possible. Well, it's not possible as only quantity rules. It seems that the coping mechanism for many is just to focus on their own business. Cynicism has clearly increased.</i>
<i>Feedback mechanisms are usually good, necessary and useful. It is a good servant, but a bad master. [---]</i>
<i>It is a contradictory matter. Performance management has brought certain assertiveness which I think is positive [---]. On the other hand it easily goes a bit too and it turns into slave drive. The best results in universities comes when there's certain flexibility and fun in the making. I must admit that in my own case this has been lost occasionally.</i>
<i>Both positively and negative. The overall effect?</i>
<i>It distorts the situation: it looks as if it would increase motivation, but in fact it increases stress.</i>
<i>First it [the effect] was positive. I thought that due to own activeness it would have been possible to influence for instance to my salary. However, regardless of everything (e.g. finishing my doctoral thesis) the salary is not rising but the requirements does. Currently my work motivation is really low. I feel mostly betrayed!</i>
<i>On the one hand it depresses, on the other it encourages to strive.</i>
<i>Varying; sometimes it motivates, sometimes it discourages. Mostly it creates pressures.</i>

Table 6b Exemplary quotes from the Critical adopters, year 2015

<i>I get increasingly stressed year after year.</i>
<i>It makes motivating increasingly difficult as it seems that the science itself doesn't matter; only thing that matters is to publish as much as possible, as fast as possible and in as good journals as possible. [---]</i>
<i>Not that much; at least I try not to let it affect.</i>
<i>Negatively in that sense that the quantity/quality of [journal] articles produced in different fields of science are not mutually comparable. A scholar want's to do as good research as possible both for the personal interest and for the career. However, simple numeric indicators seldom work in the competition between different fields of science. [---]</i>
<i>It stresses.</i>
<i>Doesn't affect to work motivation, although it complicates work for certain aspects. There's no clear instructions for performance management. [PM] Causes stress, nausea and competition among employees.</i>
<i>Motivation focuses now on different things – and not necessarily to "better" things. Getting funding and publishing seem to be all that matters. It's really stupid! There's lots of important work that gets neglected because it isn't "appreciated" and [there's] rush since there's just not enough time to do everything right. A lousy trend.</i>
<i>Performance management causes stress and pressures and distorts competition and neglects accomplishments. I'm a highly competitive person, so if even I'm critical about this excessive competition, then it really must be hard!</i>
<i>Negatively. Unnecessary stress accumulates on everybody due to the need to collect credits and publish as much as possible so that the wheels would keep turning. And the quality should still not get neglected. [---]</i>
<i>Mostly negatively; it feels more like pressuring that supportive.</i>
<i>Usually negatively. Narrow indicators direct work to peculiar tracks which have very little to do with any reason. Research, in particular, is based to passion and these arrangements [PM] doesn't really support it.</i>
<i>It kicks in the ass. There's no alternative; you just have to be productive. So in certain sense it motivates while the counter side is that there's not really time to pay attention to the quality of your research; it's essential to look good on paper.</i>

Table 7 Exemplary quotes from the Ignorants, years 2010 and 2015

<i>No effect. (2010)</i>
<i>Arouses controversies. Make's every now and then to question your own motivations, which are connected to more holistic effects than those measured by the performance indicators. (2010)</i>
<i>Very little. (2010)</i>
<i>[PM] Lowered [work motivation] because performance management isn't working in a supporting way as it should. (2010)</i>
<i>[PM] Stresses and makes you think that the university's management and the ministry disregard scholar's ability to discernment and gumption. Many of us do follow our vocation and spend lot of our own free time to do this work. (2015)</i>
<i>No major effect, although causes some extra work. (2015)</i>
<i>Merely positively. (2015)</i>