

## Resource orchestration and the higher education programme director

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### **Abstract**

*With approximately half a million students, universities of applied sciences are the largest providers of highly educated professionals in the Netherlands. The programmes offered by these universities have a certain degree of policy freedom when it comes to connection and knowledge exchange with professional practice. Programme directors (PDs) are responsible for the organization and development of the education programmes. In this role, they have, within the institutional framework of the university, powers in the areas of personnel, finance, quality assurance and planning. They have become the central pivot in the organization of these programmes, and they are responsible for optimizing the work processes and guaranteeing the quality of the graduates. In this study, we interviewed 25 PDs how they use their resources for innovation within their managerial frameworks in educational organizations. This research shows that innovation requires room for experimentation.*

**Keywords:** *University of applied sciences, resource orchestration, agency, knowledge exchange, professional field, programme director.*

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## **1. Introduction**

Universities are the driving force behind innovation and knowledge development in today's Western European societies. However, academics need an incentive to actively realize knowledge sharing (Sormani & Rossano-Rivero, 2023). Stimulating innovation and knowledge exchange are strongly influenced by the opportunities offered by the educational institution (Cabrera & Cabrera, 2005). Programme directors (PDs) within a university are responsible for the organization and development of the educational programmes. They have become the central pivot in this, and they are responsible for optimizing the work processes and guaranteeing the quality of the graduates (Westerheijden, 2022). In this study, we look at how PDs use their resources for innovation within their managerial frameworks in educational organizations.

## **2. Theory**

Twenty-five directors were interviewed, spread over eleven educational institutions and seven educational sectors. Nine women and sixteen men, all with more than five years of experience in the management of a higher education institution, These PDs were interviewed with open-ended questions about their experiences as managers, their successes, and their failures over the past 4 to 5 years. In these interviews, attention was paid to topics such as innovation in education, the relationship with the professional field, and the possibilities and limitations that the university gave them as PDs. All higher educational sectors were represented, with the exception of the art education sector.

We looked at awareness of institutionalized habits and routines (Emirbayer & Mische, 1998), ability to identify problems in current institutional arrangements (Battilana et al., 2009) and the ability to conceptualize alternative outcomes (Emirbayer & Mische, 1998). Central were the institutional aspects of formal authority, including the actor's right to make decisions (Hardy & Phillips, 1998) and access to the financial costs of change (Greenwood et al., 2002). We addressed resource orchestration by linking value creation in dynamic environmental contexts to management resources (Sirmon et al., 2011). The components of the resource management model included structuring the resource portfolio, bundling resources to build capabilities, and leveraging capabilities to provide value. This document could be used as a template for formatting the papers. All texts, figures and tables must be included within the document margins.

### **2.1. Resource orchestration**

A review of the literature showed that most papers that measured resource orchestration were limited to commercial entrepreneurship and shed little light on the dynamics of commercial enterprises (Ghalwash & Ismail, 2022). Resource orchestration processes that explain how

opportunities are created, operationalized and legitimated in the institutional environment of universities have received less attention (Owusu & Janssen, 2013). The goal of this study was to explore these concepts to show how in higher education, middle managers in an institutional environment overcome resource constraints and achieve value through innovative resource orchestration (Ireland et al., 2003; Sirmon et al., 2011).

## ***2.2. Institutional entrepreneurship***

Institutional entrepreneurship theory highlights how actors with sufficient resources see opportunities to realize interests that they value highly” (DiMaggio, 1988, p. 14). Institutional theory is characterized by adherence to a given way of acting – of doing things. This is streamlined within predetermined frameworks. When actors want to act in a change-oriented way, they will act outside these bandwidths. Thus, a contradiction arises. The question here is how, within the usual course of action, change-oriented action takes place or, even better, is conceived of at all? We used this change-oriented attitude to subdivide the ways in which PDs use their powers and capabilities to act innovatively or to adopt a more administrative attitude.

## **3. Method**

The 25 interviews, each at least an hour, were transcribed verbatim, stripped of social talk, anonymized and then coded based on Sirmon et al. (2011). ATLAS.ti was used for the coding (Figure 1). Where the quotes are from an interview, reference is made to a letter and a number. The letter stands for an education sector: E for education / teacher training, H for health care, A for agriculture, M for management, S for social sciences and T for technology / IT. The numbering is consecutive.

The following concepts were coded: structuring, bundling or leveraging available resources, looking for new opportunities and combining them with development opportunities, and integrating identified resources to increase effectiveness or efficiency. In addition, search terms such as profession, professional field, knowledge exchange, company, contacts, knowledge, knowledge innovation, and relationship were used. This coding was arranged in paragraphs to give an initial picture of the possibilities that PDs saw for maintaining and renewing their study programmes.

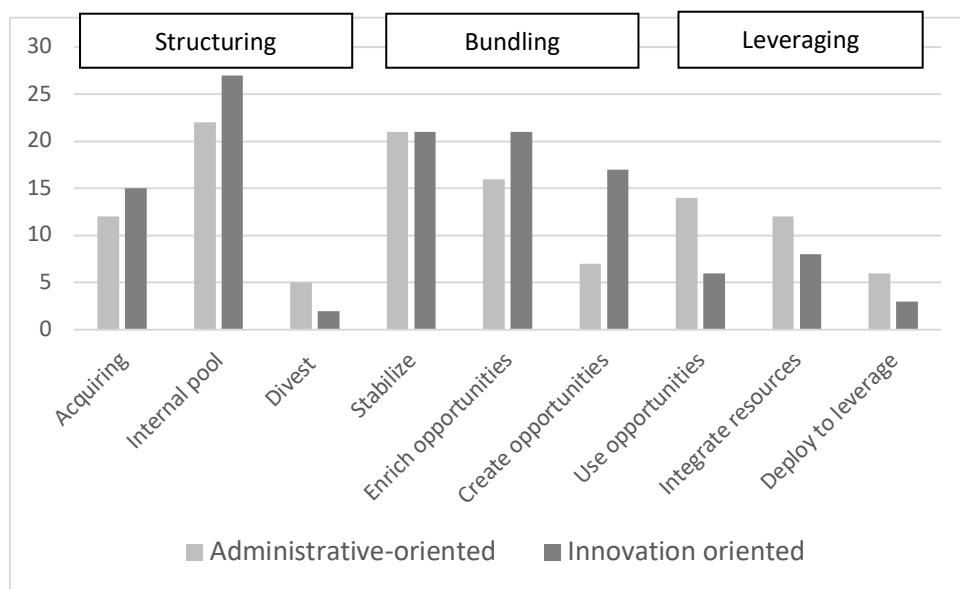


Figure 1. Resource orchestration categories based on Sirmon et al. (2011).

#### 4. Results

These results provide a picture of how PDs used their duties and powers. The numbers on the y-axis are percentages of the total number of statements made by the PDs, ranked according to the reasoning of Sirmon et al. (2011).

The left (blue) columns reflect the answers of the PDs whom we recognized as administrative-oriented, in accordance with DiMaggio (1988). The right (green) columns reflect the statements of PDs recognized as aiming for innovation. This distinction was the result of the first coding in which the following question was distilled from the interviews: How do the relevant PDs view the possibilities and limitations that were given by their educational institute? (Tiberius et al., 2020).

All PDs indicated that innovation or modernization in relation to the professional field was of great importance to them (H6: “I am manager of Education & Innovation, and that word says it all – to really look from that point of view. What is needed? What is that dot on that horizon?” S3: “We are doing several innovations – curriculum revisions anyway – making crossovers in the context of interprofessional learning and working.” T6: “And whatever we started doing, that was also quite innovative – was a kind of open maker space type of thing”).

Differences became visible in the extent to which directors saw opportunities to actually get started. The connection with the professional field was often guiding them (S3: “We have

done all kinds of sessions with the professional field: What do you think it should go to? So, we had a professional field committee there, which was closely involved there, but we also had professional field sessions around it to reach a wider group.”) or at least stimulating them (H4: “And on a professional level, we went together very well.”). A limited number of directors related innovation and development to putting the standing organization in order. In one case, a director who showed their year plan received feedback, but where was the innovation? (M3: “And I remember very well that I once gave a faculty-wide presentation in which I thought I was giving a reassuring message to everyone. And at that presentation, there was a lecturer who was like, OK, now this is the message, and where is the innovation?”)

A second notable feature was that directors received little support from the institutional organization for their development and renewal activities, although there was sufficient expertise available (S2: “The institutional environment, the policy documents that were available were of a high level. But then policy was not binding or directive. And do you just have almost a complete mandate to relate to it according to your own insights?”). It was noted that the slowness and lack of clarity of institutional decision-making unnecessarily limited the success of the innovation (E3: “Well, and then the way in which leadership is given. Just to name a few things, I have a new study programme, actually a merger of three study programmes, which is still very small, but then it will be half a year before a decision is made about it.”).

It was striking that a similar approach, but without external support sources, was described as very successful in one case (H1: “I noticed the new concept was really successful. That meant that we really had a very high student satisfaction during the first 2 years. And also, that employee satisfaction was very high, and absenteeism decreased.”) but as failed in another case (T1: “At a certain point, the resistance is no longer manageable, and at that moment, you also see that the gentlemen’s agreement between the university of applied sciences and the business community no longer works.”), although the ambition was supported at the highest institutional level. In terms of the latter, the lead time, due to a change of personnel at the higher decision-making levels, clearly played a role.

Truly innovative and more or less disruptive innovation occurred in one case where, based on the research input of a researcher, the educational vision was prescribed and adopted for the entire university of applied sciences over time (E1: “Our educational concept is being introduced in phases. I’ve been to expert meetings, and it’s much more a matter of time. If you look at what most of the discussions are about, what does it mean for our education?”).

Another distinction that became visible was the focus on innovation. In a number of situations, the innovation turned out to be aimed at the content of the curriculum, especially updating the curriculum. In four cases, the update aimed at combining existing programmes

into a few strongly up-to-date programmes, as the connection with the professional field required this. In this relatively limited research, it turned out that two very special educational innovations were involved. At one educational institution, care training was combined with social training, which together organized a new form of practical experience by advising their starting students during openly accessible consultation hours (H2: “HU Healthy & Well Centre, that is in the district. People have the opportunity for an interprofessional introduction, and then we will see what is relevant and what we can offer you. So now it’s in and out with eye measurements or skin consultation or whatever. We want to look much more holistically at the people who come in.”). Another institution was able to combine the innovation demands of a number of large companies by having final-year students from different study programmes and universities of applied sciences work in teams on the research questions (T4: “Are they going to experiment with the companies? They have development and innovation questions, and we connect students to them: a mini hub with students who spend half a year doing a research assignment or completing a graduation assignment.”).

In this study, we looked at how PDs used their resources for innovation within their frameworks as higher education programme managers. The results showed that structuring and bundling were used for innovation regardless of the administrative or innovative orientation of the PDs. The PDs first looked at the internal resources and then stabilized and enriched these resources. Another remarkable result was the leveraging of resources. The administrative-oriented PDs were active in just this area, looking for opportunities, integrating resources and deploying them where possible. By contrast, innovation-oriented PDs looked for success by structuring and bundling resources. In general, we can conclude that these middle managers in higher education looked for resources they could handle and used these whenever possible.

## **5. Discussion**

Much is fixed in higher education, which has a high rule density. Almost everything – price, place, naming, content, etc. – is meticulously monitored and controlled. This is particularly the case at universities of applied sciences because of the attitudes of most lecturers and the intertwining of management and education. So how do we bring about innovation? This is clearly very difficult within the existing environment. Even small incremental innovations quickly run into rules (“it can’t be done,” “it’s not allowed,” “it costs too much,” and “what are you going to do now?”). In practice, it appears that to realize innovation, it is best to set up a new project (e.g. a new course). Old, long-serving teachers and young flamboyant teachers come to life when they are allowed to come up with something new. Content is then enthusiastically created out of the box, contradictions are easily bridged, and cooperation flourishes. It is not surprising that the successful PDs almost all first tried to create their own

space in which they wanted innovation to take place. They then asked for a mandate / freedom from their superiors. Only then did they get to work. They still have to fight back against superstars, but at least the atmosphere is set. There are many examples of new study programmes created in this way, such as the privatization of original tracks/specializations, separate innovation projects, and private–public partnerships, which are carried out either by the university of applied sciences itself or in cooperation with a number of fellow universities of applied sciences.

## References

- Battilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *The Academy of Management Annals*, 3(1), 65–107; <http://doi.org/10.1080/19416520903053598>.
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. *Institutional patterns and organizations*, 3-21.
- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The international Journal of Human Resource Management*, 16(5), 720–735; <https://doi.org/10.1080/09585190500083020>
- Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology*, 103(4), 962–1023; <https://doi.org/101086/231294>
- Ghalwash, S., & Ismail, A. (2022). Resource orchestration process in the limited-resource environment: The social bricolage perspective. *Journal of Social Entrepreneurship*, 1-28; <http://doi.org/10.1080/19420676.2021.2020152>
- Greenwood, C. R., Horton, B. T., & Utley, C. A. (2002). Academic engagement: Current perspectives on research and practice. *School Psychology Review*, 31(3), 328–349; <https://doi.org/10.1080/02796015.2002.12086159>.
- Hardy, C., & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. *Organization Science*, 9(2), 217–230; <https://doi.org/10.1287/orsc.9.2.217>.
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963–989; [https://doi.org/10.1016/S0149-2063\(03\)00086-2](https://doi.org/10.1016/S0149-2063(03)00086-2).
- Owusu, W. A., & Janssen, F. (2013). Social entrepreneurship: Effectuation and bricolage approaches to venture establishment in West Africa. 4th EMES International Research Conference on Social Enterprise.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management*, 37(5), 1390–1412; <https://doi.org/10.1177/0149206310385695>
- Sormani, E., & Rossano-Rivero, S. (2023). Facilitating academic engagement with society: A bonding social capital approach to self-determination. *Triple Helix*, 1, 1–29; <https://doi.org.vu-nl.idm.oclc.org/10.1163/21971927-bja10036>.

- Tiberius, V., Rietz, M., & Bouncken, R. B. (2020). Performance analysis and science mapping of institutional entrepreneurship research. *Administrative Sciences*, 10(3), 69; <https://doi.org/10.3390/admsci10030069>.
- Westerheijden, D. F. (2022). Gatekeepers on Campus: Peer Review in Quality Assurance of Higher Education Institutions. *Peer review in an Era of Evaluation: Understanding the Practice of Gatekeeping in Academia*, 79-106; Palgrave Macmillan Cham; <https://doi.org/10.1007/978-3-030-75263-7>.