

MASTER THESIS
PERSONALITY PROFILE, COMPETENCIES
AND MOTIVATIONAL FACTORS OF
TECHNOLOGY-ORIENTED
PURCHASING PROFESSIONALS

Author: **Nina Moix Fernández**

Student registration number: **1532060**

Supervisor: **Volker Koch**

Summons: **June 2016**

ACKNOWLEDGMENTS

I would like these lines to express my utmost gratitude and sincere appreciation to those whose help has somehow collaborated in the implementation of the present work.

Especially to Volker Koch, supervisor of this particular master thesis and author of the main study in which the following lines are based. His kindness when accepting me as a collaborator in his PhD is unparalleled to the support, motivation and knowledge he has provided me during the execution of my work.

A particular gratitude deserves the understanding, the patience and the encouragement received from family and friends.

To all of them, thank you.

Content

1. Introduction	5
1.1. Project topic	5
1.2. Objective	5
1.3. Limitations	5
2. Research on Purchaser Professionals' competencies	6
3. ISPIM Conference and WASET Conference	7
3.1. ISPIM Conference Paper	7
3.2. WASET Conference Paper	16
3. Conclusion	20
4. References	21

1. Introduction

1.1. Project topic

Regarding nowadays economical difficulties, companies try to adjust budgets. This aspect particularly concerns purchasing professionals. In addition to cost reductions, purchasers pursue many other objectives and cannot be seen just as the "traditional" buyers. Increasing liquidity, increasing competitiveness, necessary product quality, reducing risk, innovation and other potentials can be carried out by the purchase departments. Therefore, purchasers do not solely stick to buying processes. Today, value manager is the concept in more detail and includes more than just the purchasing activities.

In order to meet all these requirements, certain competencies are essential. In this study, competencies are charged for technology-oriented purchases from the literature and through qualitative interviews and furthermore will be empirically tested. A personality analysis to personality traits and motivation factors for technology-oriented buyers will be collected and will be predictive for modes of action of incentives in purchasing.

The final objective of the PhD research is to help companies to identify which skills of technology-oriented purchaser are beneficial and how working conditions can be designed in an efficient way for purchasing people.

1.2. Objective

The objective of this Master Thesis was to participate in the development of Volker Koch's PhD, focused on personal competencies and motivational factors of purchasing professionals in technology-oriented businesses.

After a first introduction to the topic, my role was to support the on-going research while participating in different activities with various responsibilities.

1.3. Limitations

Significant constraints limit this submission. On one hand, not being able to express all the research hours really diminishes the undertaken work, missing to reflect a broad part of my activity.

On the other hand, this academic work shows only two official papers due to confidentiality agreements. In this sense, also a lot of gathered information is disregarded.

All in all, the documents appearing in the following lines are only the very final result of a combination of diverse activities.

2. Research on Purchaser Professionals' competencies

Research into different topics guided my occupancy during the past months.

By way of introduction, a first research was done on the field of purchaser professionals' competencies. After being provided a wide amount of literature about the subject, my objective was to analyse the matching aptitudes shown in the articles. The aim of this research was trying to put together the required purchasing professionals' competencies according to the different authors' criteria. Interesting to note is that all the considered information was written before the financial crisis' economical issues. By this is meant that the skills shown could be understood as the "classical" or "traditional" competencies a purchaser professional is thought to have.

Moreover, an exploration of similar papers in the Spanish literature was also conducted. In this case, our plan was trying to understand if different countries required similar competencies in order to perform a final comparison. However, the result of this experiment was not as successful as the previous milestone

In order to complete the aforesaid doings, I learned to deal with different databases such as *Google Scholar*, *Scopus* or *Web of Science*.

3. ISPIM Conference and WASET Conference

Once I got familiarized with the topic, my duties directed at writing papers for two different European conferences Volker was attending to. Hold by an international scientific society of distinguished scholars engaged in scientific, engineering and technological research, I helped Volker preparing his candidacy under the titles: “Rewarding of Purchasing Professionals in Austrian technology companies” and “Education of Purchasing Professionals in Austria”.

My commitment regarding those conferences was not limited to the writing of the papers. Another of my duties were preparing presentations, maintaining a dynamic contact with the organisation or writing feedback comments to other papers, for which multidisciplinary competencies and abilities were needed.

As revealed in the papers shown hereafter, these procedures required a formal record, both in the form and content.

3.1. ISPIM Conference Paper

The first topic, “Rewarding of Purchasing Professionals in Austrian technology companies”, was presented at the XXVII ISPIM Innovation Conference – Blending Tomorrow’s Innovation Vintage, in Porto, Portugal, in June 2016. ISPIM stands for International Society for Professional Innovation Management.

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow's Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

Rewarding of purchasing professionals in Austrian technology companies

Volker Koch* and Nina Moix

Graz University of Technology, Institute of Business Economics and Industrial Sociology, Kopernikusgasse 24/II, 8010 Graz, Austria.
E-mail: volker.koch@tugraz.at;

* Corresponding author

Abstract: Reward systems are a tried and trusted tool in propelling the motivation by incentive of employees – especially in finance, accounting and sales. Reward systems could support trigger changes and growth through innovation, however rewarding for purchasing departments is rarely witnessed. This paper aims to identify the field of practice of rewarding systems in seven Austrian technology companies and evaluate the use of rewarding systems as it is to current understanding unclear why industry implementation has been limited. The paper further aims to point out how to fulfil rewarding systems in purchasing departments and to what gains.

Keywords: Purchasing professionals; motivation; rewards; technology companies.

1 Introduction

The great impact purchasing processes have on companies and how it could be heighten in technology companies are the leaders of this research. Purchasing departments have a high potential to generate profit for technology companies and thus to pursue important business objectives (EBig et al., 2013). Therefore, forming sustainable buyer-supplier relationships is essential for a prosperous existence of companies (Cousins, 2002) leading to a successful performance of purchasers, which is, in a sense, directly related to motivation.

Innovative reward systems could support trigger changes and growth through innovation (Stoppel, 2012). However rewarding systems for purchasing departments are treated in a neglected way, regarding both literature (Hofmann, 2012) and practice when it comes to rewarding since, according to Pagell, M. et al. (1996), the performance of purchasing professionals has a difficult measuring.

For deeper comprehension of the motivation of purchasing professionals, the authors took a closer look at how purchasing departments of Austrian technology companies investigate the corporate practice regarding incentives and variable pay to motivate their employees. Aiming to identify the field of practice of these companies' rewarding systems and evaluating why reward systems, though as proven driver, are absent in purchasing departments for better knowledge of why purchasing departments has the payment structure as it does and what outcomes can be determined through change.

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow’s Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

Finance and sales, traditionally use payment models while their counterparty would be purchasing department, should have full compatibility for implementation of rewarding payment systems (Gupta and Shaw, 2014). Innovative rewarding systems for purchasing professionals could prove to be useful for any purchasing department looking to further stimulate and drive employees, possibly sharpen their current criteria of purchase and effort put to the task leading to more competitive purchasing and cost effectiveness (Roylance, 2006). This performance is also directly related to the motivation of employees, which helps companies’ prosperity (Frey and Jegen, 2001).

Particularly in purchasing, however, it is often that companies relinquish on variable compensation. Lack of measurability of success is often the reason for this. (Wolff, 2011) In order to overcome this problem, authors believe specific objectives should be agreed and understandable and measurable key performance indicators should be chosen in order to clearly communicate them to purchasing employees.

The purpose of such a compensation system is none other than to motivate employees to perform work beyond the limits of the contract. So employees should have the opportunity to increase the salary through individual or group performance. Companies expect employees’ motivation to increase significantly.

Based on the above, the main research question of this working paper is:

What is the impact of rewards on purchasing professionals in technology companies?

Aiming to address the research, an overview of the literature in the area of compensation and innovative reward systems, self-determination theory and motivation is given. A qualitative methodology is used to interview seven purchasing professionals.

2 Literature review

Motivation

Motives are the reason why a person or generally an individual puts certain behaviour on the day. They are derived according to the desire of people who will meet their own needs. Motives are responsible that people who have different needs work target oriented (Sprengrer, 2014). On one side there are intrinsic motives. They are primary concern that the human needs are satisfied by the activity carried itself. On the other side, there are extrinsic motives that are created by external incentives such as money (Rheinberg, 2008). Most of the reward systems and incentives refer to extrinsic motives.

Motivation even now arises when the own motives meet with triggers or incentives. However, literatures say that it is always depending on the person and situation, whether or not if motivation occurs. (Rheinberg, 2008)

Compensation systems

The real purpose of compensation systems is to motivate employees to work on more as contractually agreed. Furthermore the behaviour of the employees should be strengthened to reach specified company objectives. (Becker, 1995) However, Sprengrer (2014) says that performance-based compensation systems are instruments which act on the human motivation because of the variable portion of the salary.

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow's Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

Lindert (2001) defined the most important target of reward system. First, reward systems should control the behaviour of the employees in a company that the behaviour is oriented at the organizational goals. Second, reward systems should bring qualified employees into the company and ensure they are interconnected with the company.

Self-determination theory

The self-determination theory of motivation (SDT) sees itself as cross-cultural, organismic-dialectical macro theory of motivation. It engages the contact surface between intrinsic and extrinsic motivation and differentiated further here. (Ryan, 2012)

SDT provides a framework in which six partial theories are embedded: Cognitive Evaluation Theory, Organismic Integration Theory, Causality Orientations Theory, Basic Psychological Needs Theory, Goal Contents Theory and Relationships Motivation Theory. (Karabenick and Urdan, 2010). The first three are innate psychological basic needs for motivation.

Viewed from the perspective of self-determination theory, the long-term objectives and overarching motives take a significant role in life.

3 Research model

The theoretical framework was provided by the self-determination theory and the literature review was done on purchasing topics and goals, rewards, compensation systems and motivation. A literature map of the major topics was created in order to structure the literature. A qualitative research design was selected to obtain more information about the meanings of situations, events and actions in the specific context that we investigated and about unexpected influences.

Out of this research, semi-structured interviews with experts were created, i.e. seven purchasing managers of Austrian technology companies, which were conducted and analyzed by applying the content analysis proposed by Mayring (2010).

The research was firstly focused on the preparation of the interview guide. The thematic structure followed in harmony with the results from the literature review and for quantitative studies on to the available basic psychological needs theory. Next, a selection of purchasing professionals (PP) was carried out based on an operative work of the purchasers' criterion and buyers were contacted by the activation of personal networks. Primary, buyers were informed by phone just above the content of the interview as well as dates were agreed. The interview itself was locally in each operation of purchaser performed and recorded by dictation of the mobile phone. A total of seven purchasers were interviewed. In Table 1 the categorization of interviewees and in Table 2 and Table 3 the companies' information is shown. The data was gathered out of the interviews.

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow’s
Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM
members at www.ispim.org.

Table 1 Categorization of interviewees

	<i>Procurement</i>	<i>Management</i>
Mechanical engineering	PP 1, PP 5, PP 6, PP 7	PP 2, PP 3
Mechanical sports industry	PP 4	

PP... Purchasing professionals

Table 2 Information of companies

<i>Purchasing Professional</i>	<i>Turnover</i>	<i>Employee</i>	<i>Employees in purchasing department</i>	<i>Purchasing volume</i>
PP 1, PP 2	470.000.000	2.500	24	192.000.000
PP 3	400.000.000	1.400	14	225.000.000
PP 4	210.000.000	800	6	No information
PP 5	40.000.000	100	4	No information
PP 6	55.000.000	450	4	No information
PP 7	1.300.000.000	100.000	60	300.000.000

PP... Purchasing professionals

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow’s Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

Table 3 Information of companies

<i>Purchasing Professional</i>	<i>Clear separation strategic / operational</i>	<i>Purchasing targets</i>	<i>Variable payment</i>	<i>Motivation factor</i>
PP 1, PP 2	Yes	Budget fulfilment Cost saving	Annual bonus	Challenges
PP 3	Yes	Cost reduction targets Inventory range Quality indicators	30% variable	Fun at work Challenges Home office
PP 4	Yes	Budget fulfilment Reduce number of suppliers	Annual bonus	Esteem
PP 5	No	Lower inventory Reach best possible prices Performance ratio Negotiate bonus agreements	Annual bonus	Good corporate climate Flexibility
PP 6	Yes	Reach best possible price Performance ratio Reduce number of suppliers	Annual bonus	Challenges
PP 7	No	Delivery cost reduction Budget fulfilment Delivery time compliance	Project bonus	Challenges

PP... Purchasing professionals

The transcription system was created before the transcription of the interviews could begin to ensure it would focus on self-determination theory and rewards on purchasing professionals. A simple transcription system based on Kuckartz (2014) was designed.

4 Results

Innovative rewarding theoretically supports the majority of the findings. Edward E. Lawler III (2000) strongly argues that strategic success rests on how well the firm's reward structures support the firm's strategic intent. Therefore, an innovative reward system would lead to an innovation in the company. Edward E. Lawler III's (2000) thesis is that, with few exceptions, firms desiring to develop and innovate in core competencies from which sustainable competitive advantages emerge must focus on attracting, developing, motivating, and retaining what he calls "excellent" employees, where excellence is defined in terms of performance in the pursuit of the firm's strategic objectives.

Out of the research it can be stated compensation systems are only found occasionally in purchasing departments. When implemented, the rewards are often based on a blend of

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow's Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

group and individual targets. Only two companies do not shy away from adapting the reward system by cross-checking the departments' goals.

Reward systems are only found in four of seven purchasing departments. The rest, which do not use reward systems in purchasing, point to difficulty in measuring purchasing goals or even show a complete rejection to use incentives and performance based-pay as part of their corporate culture. Especially small and medium-sized businesses are deeply concerned about the detrimental effects of incentives on perceived distributive justice, employer-employee relationship and the negative effects of rivalry on employee performance.

Cost savings are frequent leading goals for purchasing professionals. In this regard, the results of our study show that an integration of the purchasing professionals in an early stage of the product development process is very motivating. All of the purchasing professionals get not enough praise but that doesn't demotivate them. Moreover, four out of the seven purchasing professionals are in favour of a variable pay system linked to the achieved cost savings.

Incentive systems

Apart from the incentive system underlying performance measurement, in general the opinion of the topic of incentive systems is rather negative. Two of the purchasers believe incentive systems lead to a competition within the department. Three purchasers fear that incentive system harms the quality of goods purchased. One last purchaser sees no point in an incentive system.

One purchaser was in its position a group leader as he introduced a key performance model and thus a performance measurement for the department as a whole. Through the transparency of the performance, characterized by not creating a connection to financial incentives, the competitive thinking was sparked and the motivation increased without gaining competitive at the same time. This makes sense even from the perspective of basic psychological needs: A performance measurement functions as feedback system and thus feeds success directly to the competency-perception. The autonomy-sense and the need for social relatedness are not adversely affected because of the lack of competition.

Regarding salaries, four purchasers show satisfaction and three purchasers claim they would not be more motivated if they would get more money. Only one purchaser would be motivated by more salary while four purchasers indicate some other motivation factors such as exciting projects, flexible working hours and an improvement of workflows.

5 Limitations

A limitation is given because of the country specific focus of technology companies in Austria. Hence a comparison across countries could give a broader view on the topic of reward systems in purchasing departments. A detailed view on rewards of purchasing professionals and also their motivation could be gained through quantitative interviews where more purchasing professionals take part.

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow’s Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

6 Conclusion

There seems to be little empirical attention for compensation and reward systems for purchasing professionals in literature. Despite illustrating a wide range of compensation systems and also some for purchasing professionals, most of the latter miss appropriate measurable objectives. With this paper, a real world perspective on the ‘how-to’ of compensation systems in purchasing departments is provided. Moreover, considerations and arguments are offered as indications whether and how a reward system in purchasing departments could be used and structured. Innovative reward systems for purchasing professionals should not only focus on “cost savings” but also help purchasing professionals become a value manager supported by a reward system.

First, and based on the study’s results, purchasing managers can set very specific incentives for the purchasing professionals, which assumedly lead to better results benefiting both workers and companies. Second, on a long-term basis, purchasing professionals will also benefit from an effective use of compensation systems, as these improve their working conditions.

Based on the study’s outcome, it is believed that a following quantitative research with purchasing professionals could show the impact of reward systems on purchasing professionals more in detail.

References

- Becker, F. "Anreizsysteme als Führungsinstrument" 1995, 2nd ed.
- Gupta, N., and Shaw, J. D. "Employee compensation: The neglected area of HRM research" 2014, *Human Resource Management Review* 24 (1), pp. 1–4. DOI: 10.1016/j.hrmr.2013.08.007.
- Cousins, P. D. "A conceptual model for managing long-term inter-organisational Relationships" 2002, *European Journal of Purchasing & Supply Management* (8), 71–82.
- Frey, B. S., and Jegen, R. "Motivation Crowding Theory" 2001, *J Economic Surveys* 15 (5), 589–611.
- Hofmann, E. "Erfolgsmessung und Anreizsysteme im Einkauf: Den Mehrwert der Beschaffung professionell erheben, bewerten und darstellen" 2012, With assistance of Maucher D., Krienbring O.
- Karabenick, S.A., and Urdan, T.C. "The decade ahead: Theoretical perspectives on motivation and achievement" 2010, *Advances in motivation and achievement*, v. 16A. Emerald, Bingley, UK.
- Kuckartz, U. "Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung" 2014, 2. Aufl. ed. Juventa Paperback. Beltz Juventa, Weinheim, Bergstr.
- Lawler III, E. E. "Rewarding Excellence" 2000, San Francisco: Jossey-Bass.
- Lindert, K. "Anreizsysteme und Unternehmenssteuerung: Eine kritische Reflexion zur Funktion" 2001, *Wirksamkeit und Effizienz von Anreizsystemen*. Hampp, München [u.a.].

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow's Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

- Mayring, P. "Qualitative Inhaltsanalyse" 2010, In Günter Mey, Katja Mruck (Eds.): Handbuch Qualitative Forschung in der Psychologie. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 601–613.
- Pagell, M. et al. "Motivating the Purchasing Professional" 1996, pp. 27–34.
- Rheinberg, F. "Motivation" 2008, 7., aktualisierte Aufl. ed. Kohlhammer-Urban-Taschenbücher, Bd. 555. Kohlhammer, Stuttgart.
- Roylance, D. "Purchasing performance. Measuring, marketing, and selling the purchasing function" 2006, Aldershot, Hants, England: Gower.
- Ryan, R. M. "The Oxford Handbook of Human Motivation" 2012, Oxford University Press.
- Sprenger, G. "Leistungsorientierte Vergütungssysteme – Leitungsmotivation, Arbeitszufriedenheit und Unternehmenserfolg aus Sicht der Motivationstheorie" 2014
- Stoppel, M. "Anreizsysteme im Einkauf: Mit den richtigen Mitarbeiterzielen zum Erfolg" 2012, With assistance of Gaulty, C.
- Wolff, S. "Leistungsorientierte Vergütung im produzierenden Mittelstand" 2011

3.2. WASET Conference Paper

The second topic, “Education of Purchasing Professionals in Austria – Competence Based View”, was presented at the XVIII WASET International Conference on Business and Psychological Sciences, in Amsterdam, The Netherlands, in August 2016. WASET stands for World Academy of Science, Engineering and Technology).

Education of Purchasing Professionals in Austria – Competence Based View

Volker Koch and Nina Moix

Abstract— This paper deals with the education of purchasing professionals in Austria. In this education, equivalent and measurable criteria are collected in order to create a comparison. The comparison shows the problem. To make the aforementioned comparison possible, methodologies such as KODE-Competence Atlas or presentations in a matrix form are used. The result shows the content taught and whether there are any similarities or interesting differences in the current Austrian purchasers’ formations. Purchasing professionals learning competencies are also illustrated in the study result.

Keywords— Competencies, Education, Purchasing Professional, Technological-oriented.

I. INTRODUCTION

INFORMATION regarding individual education is obtained from each of the examined web presences. Especially due to Austria’s geographical limitations and content limitations on purchasing professionals’ education, only a very specific sector is covered.

Interesting is when the question about the “perfect” purchaser education arises. What should be taught to form a purchasing professional? Here some issues: Successfully finding the right criteria for a comparison as well as measurable education subjects is only possible after careful consideration. The limitations should perfectly clarify the scope of the assessment in order not to distort the test results. To present a compact and meaningful result, similarities have to be found. This paper describes the research guiding questions (i) How does the education scenery for purchasing professionals look like in Austria? and (ii) What skills are taught in purchasing professionals’ education programs?

The key concept of this issue are competences. By introducing this term, one can easily grasp an idea of what is being taught. This paper is intended to illustrate a glimpse of the first studies on the topic.

II. THEORIE

There seems to be little empirical attention in the literature regarding the existing purchasers’ education in Austria.

The literature used for the present study is related to the competencies subject. To enhance professionals’ abilities, some knowledge needs to be acquired. With this knowledge,

V. Koch is with the Graz University of Technology, at the Institute of Business Economics and Industrial Sociology, Kopernikusgasse 24/II, 8010 Graz, Austria (e-mail: volker.koch@tugraz.at).

actions can be better implemented. Moreover, this knowledge is reused in relations that are relevant for decisions [1]. According to Hurrelmann, competent people (i) accept responsibility for themselves and others, (ii) have a good control consciousness and (iii) can achieve an intention or a goal [3]. Knowledge provided in education will be later in their professional lives needed to self-organize and solve certain situations.

In order to enable the transfer from the conveyed knowledge to the resulting competence, the KODE-Competence Atlas is used [4]. "KODE is the abbreviation of Competence Diagnostics and Development. It is a process system with various development and competency determination tools" [1]. This transition from the education to the competences, which takes the knowledge acquirement for granted, enables a comparison between educations by comparing the skills taught. The KODE-Competence Atlas is shown in Figure 1. It consists of a 64-part matrix. The first division shows the four basic skills, which are: Personal Competence, Activity and Action Competence, Socio-communicative Competence and Methods and Professional Competence.

P Personal Competence				A Activity and Action Competence			
Loyalty	Normative-ethical Focus	Devotedness	Self-management	Capacity to make decisions	Creative Will	Energy/Drive	Mobility
Credibility	Self-Responsible	Creative Talent	Openness toward Change	Innovation Propensity	Ability to Handle Stress	Disposed to Performance	Proactive
Humor	Cooperativeness	Willingness to Learn	Holistic Thinking	Optimistic	Social Action/Engage ment	Result-orientated action-taking	Goal-orientated Management
Employee/Staff Promotion	Delegate	Discipline	Reliability	To give impulses	Quick-wittedness	Persistence	Consequence
S Socio-communicative Competence				M Methods and Professional Competence			
Ability to Resolve Conflicts	Integration Capacity	Canvassing Ability	Ability to Solve Problems	Knowledge-oriented	Analytical Talent/Ability	Konzeptions-stärke	Organisations-fähigkeit
Ability to be on a team	Dialog Ability Customer-oriented	Fondness of Empowering	Capacity to Advise	Objectivity	Assessment Ability	Diligence	Proceed in a systematic-methodic manner
Ability to Communicate	Capacity to Cooperate	Language Proficiency	Willingness to Understand	Project Management	Consequence Awareness	Specialized Knowledge	Knowledge of the Market
Relation Management	Ability to Conform	Sense of Duty	Asiduousness, Conscientiousness	Ability to Teach	Professional Recognition	Talent for Planning/Scheduling	Multidisciplinary

Fig. 1 KODE-Competence Atlas [2]

These are common terms in practice. Only seldom primarily skills are mentioned in education, therefore an allocation of so-called mixed competences must also be possible. With help of empirical studies, the authors of the KODE-Competence Atlas have been able to logically assign these mixing skills. All 64 competences are defined with synonyms, explanations, and competence hyperboles. The classification using the Competence Atlas means that the focus is on this specific competence [5].

III. METHODOLOGY

A specific target group of this work is not defined. However, the findings could be used for potential research of a better design of purchasers' education. Likewise, this work could serve as an internal discussion incentive for those responsible for the individual Austrian education institutes for purchasers.

To obtain information about the different educations, their websites were analysed. A personal contact with the different education institutions is omitted due to large distances. On this account, the gathering of online proved to be most effective.

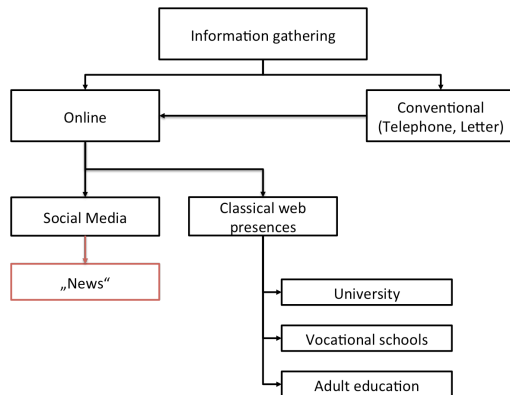


Fig. 2 Scope of research

Bringing different educations face to face was defined as the objective of this paper. Therefore, what is to be compared must be clarified. This first subdivision has emerged in basic education and advanced education. A comparison of studies with a multi-day negotiation seminar is not the target here.

Subsequently, the definition of education criteria takes place. These are divided into two groups. Quantitative criteria are measurable and comparable, such as the duration of education. The other group is known as qualitative criteria [6]. The key to evaluating qualitative criteria is to consistently work up the problem of different names and synonyms for one same feature and apply a unitary term for all comparable alternatives. So, same content may be now taught in courses under different names.

This is accomplished by using the KODE-Competence Atlas, which was explained in the second section of this paper, the theory part. In Fig. 3, the transfer is clearly recognizable. The education professional (1) is associated with a concept of the synonym Atlas (2). This synonym is associated with one of

the 64 skills by the KODE-Competence Atlas (3). From this skill, the basic competence (4) is finally determined.

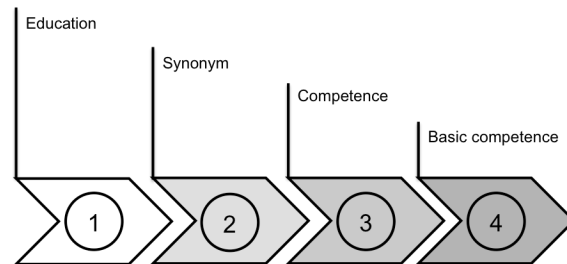


Fig. 3 Conversion procedure from education professionals to basic competences using the Competence Atlas

An example of this process is the education in the field of marketing. In the Competence Atlas, marketing knowledge is found as a synonymous. This analogue is entered in the lower right quadrant of the Atlas. Therefore, marketing falls under the basic competence "Methods and Professional Competence". The competence designation can also be read as "Knowledge of the Market" [7].

Since the procedure from step (2) on runs always the same, after several hundred education subjects were studied this step has been automated. Excel by Microsoft is used for the spreadsheet program. Due to the fact that only synonyms defined in the KODE-Competence Atlas are accepted, the data validation function of the program is guaranteed. Once a synonym is registered, the look-up and reference functions are called and both competences and basic competences are automatically completed. This procedure also takes place in a stored table where all matching synonyms are recorded according to KODE-Competence Atlas competence terms. In order to permit an international exchange of information of competencies' evaluation, synonyms, skills and basic skills are stored in English in the lookup function and the reference function.

Another benefit of using Microsoft Excel is the easiness to detect both criteria and different educations in a tabular form. This matrix classification criteria, which shows different educations in one same row, helps a quick finding and comparison. In addition, there is a control button that permits displaying or hiding specific educations. This feature allows direct comparison between interesting educations.

In the educations' matrix, the following criteria have been selected:

- Education institution
- Academic title
- Competencies
- Goals
- Target group
- Requirements
- Course particularities
- Content
- Holding
- Duration

- Hours
- Examination and graduation
- Contribution / Costs
- Education location
- Federal state
- Contact / Email Address

The great amount of examined education subjects warrant the results of the study. About 220 subjects in the basic education and 500 subjects in further educations have been covered and assigned according to the KODE principle of competence.

IV. RESULTS

As a result of this work, numerous bar charts are created to represent the most important skills for purchasing professionals in accordance with Austrian educations.

Fig. 4 shows the evaluated competencies' organized by the competence groups from the basic educations. As mentioned in section III, about 220 competencies are assigned. The analysis reveals that most of the educations' content is intended to boost Methods and Professional expertise. Mentioned as another important basic skill, Socio-communicative competence is enhanced. Particularly team skills and communication and language skills should be increased. Also worth mentioning is the need to target and focus on results, which is attributed to the Activity and Action competence. Personal skills are apparently rarely promoted in basic educations.

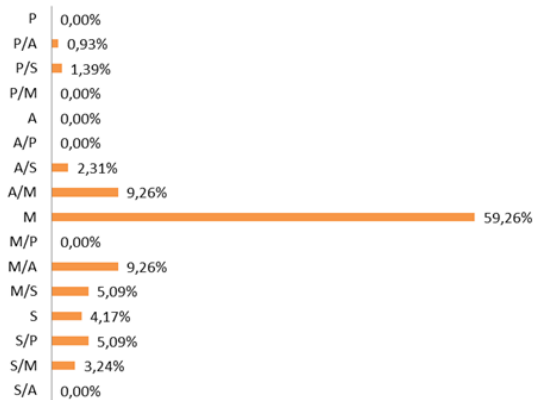


Fig. 4 Skills assessment in basic education

The evaluation of further courses provides much of the same result. However, one must specially be wary of: a course for better negotiating on the phone, improving communication abilities and enhancing fluency. On the whole however, all courses outweigh the basic professional skills.

The high professional percentage is due to the fact that different skills such as legal aspects about professional curiosity or SAP expertise (ERP software) are classified as technological skills. These two competences are associated

with the Methods and Professional Competence.

Another significant outcome of the study is the bar graph in which all 64 skills are individually listed indicating the respective quantity. The bars of the expert group Methods and Professional Competence are presented, being the "M" group the greatest.

V. SUMMARY

The values obtained from this study can be broadly judged as not unexpected. Most of the skills can be classified as part of the Methods and Professional Competence. Since a purchasing professional requires a mix of commercial and technical knowledge, technical bases must be provided.

A positive element here is that it has been possible by using the KODE-Competence Atlas to compare different education subjects together. Due to the high number of investigated educations and thus associated skills, the results may well be considered as informed and meaningful.

As a negative aspect of using the KODE-Competence Atlas to analyse the landscape of Austrian purchasers' education, the excessive focus on Methods and Professional Competence could be mentioned. Since this involves a great amount of different fields of knowledge and it is strongly represented in the evaluation that no exact statement could be made on how these skills should be taught. This could be provided as a subsequent study matter. Was that to be the case, the division of the basic "M" competence into further skills would be a possible approach.

In addition, a study of the purchasing professionals' educations in Germany would be interesting. Specially regarding that, when online searching, many hits in the literature come up from Germany. Through this study, the Austrian results could be better weighted or perhaps questioned.

REFERENCES

- [1] V. Heyse, *Grundstrukturen menschlicher Kompetenzen. Praxiserprobte Konzepte und Instrumente*. Münster, Waxmann (Kompetenzmanagement in der Praxis, 5), 2010.
- [2] V. Heyse and J. Erpenbeck, *Kompetenzmanagement. Methoden, Vorgehen KODE und KODEX im Praxistest*. Münster, Waxmann, 2007.
- [3] K. Hurrelmann, *Einführung in die Sozialisationstheorie*. 9., unveränd. Aufl. Weinheim [u.a.]: Beltz (Beltz-Studium), 2006.
- [4] V. Heyse, J. Erpenbeck, *Kompetenzmanagement. Methoden, Vorgehen, KODE® und KODE®X im Praxistest. Strategien - Kompetenzanforderungen - Potenzialanalysen*. Münster: Waxmann, 2007.
- [5] J. Erpenbeck, W. Sauter, *Kompetenzentwicklung im Netz. New Blended Learning mit Web 2.0*. Köln: Luchterhand (Personalwirtschaft Buch), 2007.
- [6] J. Bortz, N. Döring, *Forschungsmethoden und Evaluation für Human- und Sozialwissenschaftler*. Limitierte Sonderausgabe. 4., Aufl. 2006. Kartierte Sonderausgabe 2015. Berlin: Springer Berlin (Springer-Lehrbuch), 2015.
- [7] J. Erpenbeck, L. von Rosenstiel, Einführung. In: J. Erpenbeck (Hg.): *Handbuch Kompetenzmessung. Erkennen, Verstehen und Bewerten von Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis*. 2., überarb. und erw. Aufl. Stuttgart: Schäffer-Poeschel, S. XVII-XLVI, 2007a.

3. Conclusion

At this point, I would like to draw some conclusions on a personal level.

Despite having an engineering and technological background, I warmly appreciate the opportunity given by my supervisor, Volker Koch -also an engineer- of taking part in a work that defers from my field of study but focuses on a more social aspect.

In just 5 months and almost without realizing it, I've acquired a wide amount of knowledge in a particular study area. Both the content and the form of the official procedures I dealt with were new to me. It was not easy at first, and I must admit I sometimes felt lost. However, with guidance and support from my tutor, I have been able to face and solve different drawbacks. Moreover, Volker has provided me the required skills to analyse formal papers and look for information in literature. In order to accomplish the aforementioned doings, I worked with different databases –like *Google Scholar*, *Scopus* or *Web of Science*- which were unfamiliar to me until the moment.

I have also strengthened decision-making skills, which appear to be quite necessary when working on projects. Facing formal procedures has made me been aware of the structure and redaction of conference papers, as well as empowering the learning of new vocabulary. In addition, I have had the opportunity to dynamically maintain contact with the organisation of different European conferences, thus developing communication and organizational skills.

All in all I feel highly satisfied with my work. I believe I have fulfilled the expectations, both Volker's and mine. My gratification is also remarkable regarding I firmly believe I will take profit from what I have learned when facing the labour market.

So, I must conclude by saying I felt very comfortable working on the combination of aspects included in this work. And last but not least, I believe to have achieved my very first goal when travelling to Austria: learning about new topics, coping with a different working atmosphere and get enriched by a new culture.

4. References

Having consulted countless sources, (physical, online and human ones), some of the most relevant ones for the development of this project are quoted below.

Literature:

Becker, F. "Anreizsysteme als Führungsinstrument" 1995, 2nd ed.

Bortz J. and Döring N. "Forschungsmethoden und Evaluation für Human- und Sozialwissenschaftler. Limitierte Sonderausgabe" 2015, 4., Aufl. 2006. Kartonierte Sonderausgabe 2015. Berlin: Springer Berlin (Springer-Lehrbuch).

Gupta, N., and Shaw, J. D. "Employee compensation: The neglected area of HRM research" 2014, Human Resource Management Review 24 (1), pp. 1–4. DOI: 10.1016/j.hrmr.2013.08.007.

Cousins, P. D. "A conceptual model for managing long-term inter-organisational Relationships" 2002, European Journal of Purchasing & Supply Management (8), 71–82.

Erpenbeck J. and Sauter W. "Kompetenzentwicklung im Netz. New Blended Learning mit Web 2.0. Köln: Luchterhand", 2007, (Personalwirtschaft Buch).

Erpenbeck J. and von Rosenstiel L. "Einführung. In: J. Erpenbeck (Hg.): Handbuch Kompetenzmessung. Erkennen, Verstehen und Bewerten von Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis" 2007a, 2., überarb. und erw. Aufl. Stuttgart: Schäffer-Poeschel, S. XVII–XLVI.

Frey, B. S., and Jegen, R. "Motivation Crowding Theory" 2001, J Economic Surveys 15 (5), 589–611.

Heyse, V. "Grundstrukturen menschlicher Kompetenzen. Praxiserprobte Konzepte und Instrumente" 2010, Münster, Waxmann (Kompetenzmanagement in der Praxis, 5).

Heyse V. and Erpenbeck J., "Kompetenzmanagement. Methoden, Vorgehen KODE und KODEX im Praxistest" 2007, Münster, Waxmann.

Heyse V. and Erpenbeck J., "Kompetenzmanagement. Methoden, Vorgehen, KODE® und KODE®X im Praxistest. Strategien - Kompetenzanforderungen – Potenzialanalysen" 2007, Münster, Waxmann.

- Hofmann, E. "Erfolgsmessung und Anreizsysteme im Einkauf: Den Mehrwert der Beschaffung professionell erheben, bewerten und darstellen" 2012, With assistance of Maucher D., Kreienbring O.
- Hurrelmann K. "Einführung in die Sozialisationstheorie" 2006, 9., unveränd. Aufl. Weinheim [u.a.]: Beltz (Beltz-Studium).
- Karabenick, S.A., and Urdan, T.C. "The decade ahead: Theoretical perspectives on motivation and achievement" 2010, Advances in motivation and achievement, v. 16A. Emerald, Bingley, UK.
- Kuckartz, U. "Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung" 2014, 2. Aufl. ed. Juventa Paperback. Beltz Juventa, Weinheim, Bergstr.
- Lawler III, E. E. "Rewarding Excellence" 2000, San Francisco: Jossey-Bass.
- Lindert, K. "Anreizsysteme und Unternehmenssteuerung: Eine kritische Reflexion zur Funktion" 2001, Wirksamkeit und Effizienz von Anreizsystemen. Hampp, München [u.a.].
- Mayring, P. "Qualitative Inhaltsanalyse" 2010, In Günter Mey, Katja Mruck (Eds.): Handbuch Qualitative Forschung in der Psychologie. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 601–613.
- Pagell, M. et al. "Motivating the Purchasing Professional" 1996, pp. 27–34.
- Rheinberg, F. "Motivation" 2008, 7., aktualisierte Aufl. ed. Kohlhammer-Urban-Taschenbücher, Bd. 555. Kohlhammer, Stuttgart.
- Roylance, D. "Purchasing performance. Measuring, marketing, and selling the purchasing function" 2006, Aldershot, Hants, England: Gower.
- Ryan, R. M. "The Oxford Handbook of Human Motivation" 2012, Oxford University Press.
- Sprenger, G. "Leistungsorientierte Vergütungssysteme – Leitungsmotivation, Arbeitszufriedenheit und Unternehmenserfolg aus Sicht der Motivationstheorie" 2014
- Stoppel, M. "Anreizsysteme im Einkauf: Mit den richtigen Mitarbeiterzielen zum Erfolg" 2012, With assistance of Gaulty, C.
- Wolff, S. "Leistungsorientierte Vergütung im produzierenden Mittelstand" 2011.

Conferences webpages:

www.conference.ispim.org

www.waset.org/conference/2016/05/amsterdam/ICME