

PERFECT Intellectual Output 2: Feature on ‘The role and competences of the ‘Purchaser from tomorrow’ – A case study to compare demands in German SMEs and large enterprises’

Research design of the case study

The qualitative case study methodology provides researchers to study complex phenomena. It enables to gather and converge data from multiple sources (Baxter & Jack, 2008). A case study is an empirical inquiry to research contemporary phenomena in depth and within their real-life context (Yin, 2009). Since the objective is a newly designed and empirically validated PSM curriculum, an exploratory qualitative case study methodology has been applied to answer the following central research question and six sub-questions:

What education and skills should a professional ‘Future purchaser’ with regard to SMEs and large enterprises possess to meet demands in the context of a strongly evolving Purchasing & Supply Management (PSM) field to a key strategic business function?

- 1. What are past and present developments towards a strategic PSM business function?*
- 2. How can a professional ‘Future purchaser’ be characterised?*
- 3. What particular education should this person obtain?*
- 4. Which competences should this person have?*
- 5. Which differences exist in job profiles comparing SMEs and large enterprises?*
- 6. Which key findings from the benchmark study should be taken into account for designing the empirically validated European best practice curriculum?*

These questions have been analysed by means of theoretical and empirical investigations. In order to identify possible differences between job profiles in SMEs and large enterprises as well as to gain in depth information from PSM executives for the new harmonised pan-European curriculum in this domain, semi-structured interviews have been conducted with nine companies of distinct sizes. The interviews have been recorded, transcribed and coded by means of the software Atlas.ti. For the overall data management, a proposed six step approach from the authors Halcomb and Davidson (2006) has been used: 1) audio taping of interview and concurrent note taking, 2) reflective journaling immediately post-interview, 3) listening to the audiotape & amending / revision of field notes & observations, 4) preliminary content analysis, 5) secondary content analysis and 6) lastly a thematic review. A coding handbook with in total 39 codes has been established prior to the analysis

in order to enable an objective, professional and consistent process. In the context of this case study, the exerted in-case and cross-case analyses have provided rich insights.

A surprising realisation is that initial assumptions of finding substantial differences in PSM role and competences in relation to an organisation's size could not be strengthened. Even though a few deviations are observed, the overall consent goes to a strategic PSM role with a multitude of managerial and function specific competences in both SMEs and large enterprises. This conclusion has certain implications: The fact that various-sized organisations from different industries confirm a necessity of broadly educated purchasers shows the rising importance of PSM in the entire economic world. It entails for higher education institutions the call for action in intensifying training for this specific business function.

SMEs and large enterprises have both recognised PSM importance and try to foster this business function

It is unambiguously stated that the PSM business function has a strategic character with impact on an organisation's competitive position and overall success (Dyer & Hatch, 2006; Barney, 2012). Demands and job profiles of purchasers have developed to a challenging nature (Giunipero & Percy, 2000; Handfield, 2004; Tassabehji & Moorhouse, 2008). The PERFECT project is an answer from educational institutes to meet rising needs and provide enhanced study programs in future. This case study aims to deliver insights for the project by means of theoretical and empirical investigations. The defined CRQ and sub-questions have been analysed and answered. PSM personnel could be identified who see their profession from a strategic perspective by working in interfaces between suppliers, firm and customers. Researchers and executives agree on the fact that profound academic education is a necessity these days to fulfil daily responsibilities and upcoming trends (Giunipero & Handfield, 2004). Academic literature proves the evolution of PSM to a strategic business function. Low status employees have developed to established experts in their area. Milestones for the strategic PSM boost are purchased inputs as primary operating costs, lean management principles, advancements in IT and broader spectra of education options for personnel (Cousins, Lamming, Lawson, & Squire, 2008). Current PSM trends such as the globalisation, digitalisation, sustainability, E-commerce, outsourcing, Industry 4.0, green purchasing and the shift towards early supplier integration in new product developments are only few aspects for the reconsideration of a purchaser's role (Trent & Monczka, 2003; Schiele, 2010; Eatough, 2014; Spina, Caniato, Luzzini, & Ronchi, 2013; Wolter et al., 2015).

PSM professionalism, job profiles, demands and responsibilities also increase. Tassabehji and Moorhouse (2008) present a comprehensive taxonomy that displays contemporary needed qualifications of professionals in the PSM field. The authors define five groupings: technical skills, interpersonal skills, internal enterprise skills, external enterprise skills and strategic business skills. Major purchasing procedures like source-to-contract, purchase-to-pay and supplier management call for various hard and soft skills (Van Weele, 2009; Mohr, 2010; Monczka, Handfield, Giunipero, & Patterson, 2015). Giunipero and Handfield (2004) confirm the growing provision of purchasing training in future and argue that a minimum formal education for purchasers is a Bachelor degree. Within this research, however, it has become clear that there is no existence of an ideal purchaser with a predetermined educational career. Likewise other functions, PSM is broadly set. As for organisations, general universally usable goods and services must be bought as well as potential onetime investigations in highly technical and specific commodities. Thus, commercially, technically and IT focused purchasers are very likely to be in place to cope with any required demands. This observation implies that various specialised purchasers are mandatory. Whether technically or commercially driven purchasers occupy a more superior role, lies beyond the scope of this research but statements from interviewees indicate same conditions and needs for different purchasers (own elaboration).

Surprisingly, the assumption of significant PSM role and competences disparity in relation to an organisation's size could not be validated. The elements of strategic nature, professional employees, separate departments, superior status and contribution to total success could be equally identified in SMEs and large enterprises. Also trends like E-procurement, digitalisation or corporate sustainability are considered as important. This ultimately implies a strategic cross-functional role for today's and tomorrow's purchasers in firms of different sizes which can be only fulfilled with a broad portfolio of competences. Literature proposes that general corporate aspects such as compensation, fringe benefits and promotional activities or PSM related aspects such as more complex structures and performance are affected by a company's size (Crow & Lindquist, 1985; Brown & Medoff, 1989; Kalleberg & Van Buren, 1996; Trent 2004). These statements could be confirmed by means of the field research. Whereas the largest interviewed company has 27 distinct PSM job profiles, follows a strategic cluster management, implements specific in-house training via a campus and includes standardised PSM process management, smaller sized companies tend to use flat hierarchies, external training providers and informal process management. However, the differences do not directly reveal any information about the actual status of a purchaser. Neither aspect points out that a less important PSM role in SMEs dominates. Field research has not verified that large enterprises demand more qualified personnel. Conformity prevails in the opinion of being more a generalist in

SMEs, while purchasers in larger enterprises are mostly responsible for specific commodities or services (own elaboration).

Conclusions for the PERFECT project and design of the new curriculum: A mix of commercial, technical and IT skills is demanded

Employees in business functions other than PSM have difficulties to see the added value and contribution to overall firm success that purchasers provide. In the business environment, the general trend goes to a status improvement with a substantial role within an organisation. Even though two interviewed PSM departments appear to be stuck in a support function, conducted field research was useful to both mitigate initial assumptions and to acknowledge the general impression of rising challenges, demands and attention in the PSM field. In this context, the major issue seems not the PSM role anymore but instead the people who represent this business function. It is realised that specific PSM education for prospective managers and executives is limited so far. Due to these past and present limitations in basic study programs as well as further education options, concerned employees perceive it as difficult to identify themselves with their role and function. The majority of interviewed PSM personnel indicated much experience but neither specific purchasing education backgrounds, nor initiatives to actively acquire more knowledge through relevant continued education. Another observation is that conditioned to restricted education offerings, the great majority of working personnel in PSM departments have various former education and are hired from distinct business functions. In order to counteract on these past developments that have significant impacts on the composition and workforce constellation in today's PSM departments, it must be aimed to train larger pools of specifically educated PSM professionals. In this way, newly and highly cultivated professionals in this business function are likely to transmit the importance of PSM by demonstrating it as consultants or PSM executives in companies. Therefore, the PERFECT project is a meaningful undertaking since the efforts are on building a harmonised pan-European curriculum that enables higher educational institutes to consolidate strengths and to form better-qualified professionals. The message from interviewed personnel for the new teaching content in the curriculum is clear: a mixture of commercial, technical and IT knowledge with strong relation to practice. This is in line with academic literature which proposes different skills taxonomies. Within the commercial domain, indispensable hard skills are analytical capabilities and tools, language and communication skills, organisational competences, negotiation techniques and legal knowledge. Vital soft skills are conflict resolution, compromise and decision-making abilities, resistance and affability for stakeholder management. Within the technical context, relevant market, product and industry knowledge is inevitable as well as at least a technical basic understanding to be able to purchase

technically related commodities. The third main area describes needed competences in IT. Rising trends in supplier, project and interface management as well as the Industry 4.0 era demand purchasers' understanding in SAP/EDI software and skills in computer literacy. The last frequently repeated suggestion is practical relevance and experience. It might be worth thinking about an intensification of practical workshops, case studies and integration of more corporate guest lecturers. They are likely capable to give an understanding of more examples from real life and serve as a networking option. Another suggestion is the integration of internships in selected PSM departments to experience learned theory in practice. In this way, common criticism about the lack of young professionals' practical experiences could also be curbed (own elaboration).

	SMEs	Large enterprises	Link to literature
Assumption testing	General consent to PSM being a separate and contributing business function with a strategic, professional and vital character	General consent to PSM being a separate and contributing business function with a strategic, professional and vital character	Own elaboration; contradicts to e.g. Ellegaard (2006); Zheng et al. (2007); Pressey et al. (2009)
General data & facts	PSM business function is accountable for considerable expenses of total cost of goods sold	PSM business function is accountable for considerable expenses of total cost of goods sold	Own elaboration; in line with e.g. Ryals and Rogers (2006); Paik et al. (2009)
Organisational structure & performance indicators	No outsourcing activities, PSM KPIs and status vary, embedded in middle management, one exclusive CPO in board, PSM domain has gained more importance in the last decades but is still under development	No outsourcing activities, PSM KPIs and status vary, embedded in middle management, no exclusive CPO in board, PSM domain has gained more importance in the last decades but is still under development	Own elaboration; in line with e.g. Akyuz and Erkan (2010); Caniato et al. (2014); Paulraj et al. (2006); Porter and Kramer (2011); Eatough (2014)
Current knowledge requirements of PSM	A purchaser should integrate specific PSM knowledge and commercial, technical and IT competences, practical	A purchaser should integrate specific PSM knowledge and commercial, technical and IT competences, project and	Own elaboration; in line with e.g. Baron and Bielby

employees	experience, flat PSM hierarchies, few PSM titles, little promotional options and no PSM in-house training	interface management, complex PSM hierarchies, many PSM titles, promotional options and PSM in-house training options, standardised PSM process management	(1986); Trent (2004); Tassabehji and Moorhouse (2008)
Future skill requirement of PSM employees	Managerial and function specific skills to cope with trends such as E-procurement, digitalisation, innovation and supplier management	Managerial and function specific skills to cope with trends such as E-procurement, digitalisation, innovation and supplier management	Own elaboration; in line with e.g. Giunipero (2000); Tassabehji and Moorhouse (2008)
Present PSM training programs and advanced education options	Rare specific PSM training exerted by external providers	Selected in-house PSM training, on-the-job training or standardised training facilities/programs through an internal PSM campus	Own elaboration
Role and competences of the purchaser from tomorrow	Purchasers must be a multi-talent and take on a more strategic critical management role, functions rather as a generalist, competences are in the range of identified skills taxonomies, PSM role in corporate hierarchy is differently seen	Purchasers must be a multi-talent and take on a more strategic critical management role, functions rather as a specialist in certain commodity or service groups, competences are in the range of identified skills taxonomies, PSM role in corporate hierarchy is differently seen	In line with e.g. Giunipero and Percy (2000); Handfield (2004); Zheng et al. (2007); Tassabehji and Moorhouse (2008)
PERFECT project/ new curriculum	PSM education should focus on central points of planning & strategy (e.g. demand/ pooling/ strategy/ market analyses) as well as process organisation (e.g. negotiations and supplier selection/ management)	PSM education should focus on central points of planning & strategy (e.g. demand/ pooling/ strategy/ market analyses) as well as process organisation (e.g. negotiations and supplier selection/ management)	Own elaboration

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Management summary

The analysed central research question deals with the theme of what education and skills a professional 'Future purchaser' should possess with regard to SMEs and large enterprises to meet demands in the context of a strongly evolving PSM field to a key strategic business function.

In line with academic literature, major findings of this research indicate that PSM has developed throughout the last decades from a low status support function to a focal business necessity. Today's purchasers take on a strategic cross-functional management role, require a diverse set of managerial and function specific competences and are accountable for a wide range of source-to-contract and purchase-to-pay processes. The conducted field research also validates current equivocal positions, future potential and distinct developments in the PSM domain. Only one out of the nine interviewed companies incorporate an exclusive CPO in their C-suite. The other heads of purchasing are embedded in corporate middle management. Despite broad literature about needed competences and knowledge requirements in this field, it is barely investigated whether there exist significant differences in PSM roles and personnel qualifications relative to an organisation's size. A second knowledge gap comprises missing insight on what teaching material higher educational institutions should utilise to optimally prepare future purchasers for their careers. It is commonly acknowledged that PSM study programs are too limited and do not respond to today's needs of specifically educated purchasers in the economic world.

Authors describe in their literature PSM's low priority, non-strategic character and a non-existence of separate departments with few functional professionals in SMEs. It is further indicated that large enterprises have a more positive feeling in E-procurement, in contributing to the organisation's overall success and that within SMEs, owners mostly include purchasing as a side activity. Surprisingly, these statements of substantial differences in PSM role and competences with regard to an organisation's size could not be confirmed. Quite the contrary, SMEs realise the link between effective purchasing, increasing profitability and disadvantages due to inferior purchasing capability. Likewise large enterprises, interviewed SMEs have stated PSM importance with strategic relevance, rising priority, professional purchasers in separate departments and contribution to total firm success. The realisation of PSM relevance irrespective of size results in an identical high job profile for purchasers. Even though large enterprises engage more specialists for certain commodity groups and demand more project, process and interface management, SMEs also report the need for qualified PSM personnel with commercial, technical and IT competences. These three areas are in line with proposed skills taxonomies from authors of academic studies who consider a Bachelor degree as a minimum formal education for purchasers. Analytical tools, strategic PSM knowledge,

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communication, decision-making and conflict resolution capabilities, negotiation techniques and IT skills in SAP/ EDI software appear to be most relevant. Workshops, work placements, case studies and an integration of more corporate guest lecturers are also recommended to advance practical relevance, experience and networking options. In total, it is realised that the PSM profession has evolved to a complex and challenging nature in both SMEs and large enterprises.

References

- Akyuz, & Erkan, T. (2010). Supply chain performance measurement: a literature review. *International Journal of Production Research*, 48(17), 5137-5155.
- Barney, J. B. (2012). Purchasing, supply chain management and sustained competitive advantage: The relevance of resource-based theory. *Journal of Supply Chain Management*, 48(2), 3-6.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13(4), 544-559.
- Brown, C., & Medoff, J. (1989). The employer size-wage effect. *Journal of political Economy*, 97(5), 1027-1059.
- Cousins, P., Lamming, R., Lawson, B., & Squire, B. (2008). *Strategic supply management: principles, theories and practice*: Pearson Education.
- Crow, L. E., & Lindquist, J. D. (1985). Impact of organizational and buyer characteristics on the buying center. *Industrial Marketing Management*, 14(1), 49-58.
- Dyer, J. H., & Hatch, N. W. (2006). Relation-specific capabilities and barriers to knowledge transfers: creating advantage through network relationships. *Strategic Management Journal*, 27(8), 701-719.
- Eatough, M. (2014). Leader can no longer afford to downplay procurement. *Harvard Business Review*, *hbr.com*, 2014.
- Ellegaard, C. (2006). Small company purchasing: a research agenda. *Journal of purchasing and supply management*, 12(5), 272-283.
- Giunipero, L. C., & Handfield, R. B. (2004). *Purchasing Education and Training II*: CAPS Research Tempe, AZ.
- Giunipero, L. C., & Percy, D. (2000). World-class purchasing skills: an empirical investigation. *Journal of Supply Chain Management*, 36(3), 4-13.
- Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary? *Applied Nursing Research*, 19(1), 38-42.
- Handfield, R., (2004). Key trends, skills, and knowledge required for the supply chain manager of the future: Supply Chain Redesign White Paper.
- Kalleberg, A. L., & Van Buren, M. E. (1996). Is bigger better? Explaining the relationship between organization size and job rewards. *American sociological review*, 47-66.
- Mohr, G. (2010). Beschaffungsspezifische Steuerungsproblematik in mehrstufigen Supply Chains als Ausgangspunkt für ein Supply Chain Sourcing *Supply Chain Sourcing* (pp. 13-130): Springer.
- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2015). *Purchasing and supply chain management*: Cengage Learning.
- Paulraj, A., Chen, I. J., & Flynn, J. (2006). Levels of strategic purchasing: impact on supply integration and performance. *Journal of Purchasing and Supply Management*, 12(3), 107-122.
- Porter, M., Kramer, M. R. (2011). Creating Shared value. How to reinvest capitalism—and unleash a wave of innovation and growth. *Harvard Business Review*.
- Pressey, A. D., Winklhofer, H. M., & Tzokas, N. X. (2009). Purchasing practices in small-to medium-sized enterprises: An examination of strategic purchasing adoption, supplier evaluation and supplier capabilities. *Journal of purchasing and supply management*, 15(4), 214-226.
- Ryals, L. J., & Rogers, B. (2006). Holding up the mirror: The impact of strategic procurement practices on account management. *Business Horizons*, 49(1), 41-50.
- Schiele, H. (2010). Early supplier integration: the dual role of purchasing in new product development. *R&D Management*, 40(2), 138-153.

- Spina, G., Caniato, F., Luzzini, D., & Ronchi, S. (2013). Past, present and future trends of purchasing and supply management: An extensive literature review. *Industrial Marketing Management*, 42(8), 1202-1212.
- Tassabehji, R., & Moorhouse, A. (2008). The changing role of procurement: Developing professional effectiveness. *Journal of Purchasing and Supply Management*, 14(1), 55-68.
- Trent, R. J. (2004). The use of organizational design features in purchasing and supply management. *Journal of Supply Chain Management*, 40(2), 4-18.
- Trent, R. J., & Monczka, R. M. (2003). Understanding integrated global sourcing. *International Journal of Physical Distribution & Logistics Management*, 33(7), 607-629.
- Van Weele, A. J. (2009). *Purchasing and Supply Chain Management: Analysis, Strategy, Planning and Practice*. Andover, UK: Cengage Learning EMEA.
- Wolter, M. I., Mönnig, A., Hummel, M., Schneemann, C., Weber, E., Zika, G., . . . Neuber-Pohl, C. (2015). *Industrie 4.0 und die Folgen für Arbeitsmarkt und Wirtschaft: Szenario-Rechnungen im Rahmen der BIBB-IAB-Qualifikations- und Berufsfeldprojektionen*. Retrieved from
- Yin, R. (2009). Case study research design and methods (4th.) In United States: Library of Congress Cataloguing-in-Publication Data.: London: SAGE Publications Ltd.
- Zheng, J., Knight, L., Harland, C., Humby, S., & James, K. (2007). An analysis of research into the future of purchasing and supply management. *Journal of Purchasing and Supply Management*, 13(1), 69-83.

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