Project PERFECT
Introduction, Overview and First Results

IPSERA Educator’s Conference, Dortmund, 20th March 2016
AGENDA

- Project Overview
- Scope & Terminology
- Methodology Intellectual Output 1
- Results Intellectual Output 1
- Workshop
- Opportunities for Involvement
Project
PERFECT – Purchasing Education and Research for European Competence Transfer

Project Lead
Univ. Prof. Dr. habil. Michael Henke, TU Dortmund

Project Term
01.09.2015-31.08.2018 (36 Months)

Project Objectives/Milestones
- PSM Skill Concept
- Benchmarking study
- Company survey
- Standardized European purchasing curriculum
- Massive Open Online Course (MOOC)
Challenges in Purchasing & Supply Management (PSM)

- More than half of the total turnover of a modern industrial firm in Europe is directly transferred to suppliers.
- The bulk of supplies is no longer of domestic origin, but European and international.
- Network economy with a low depth of production and high reliance on international suppliers
  - Firms struggle to cope with the complexity and the new responsibilities
  - No harmonized skill profile and competence set
  - No standardized higher education program

PERFECT develops a standardized curriculum in Purchasing and Supply Chain Management
Benefit for Business – Academia – Society

Companies will get employees that are prepared to cope with current and future requirements of Purchasing and Supply Management

- Students are provided with the necessary knowledge and learning to join a purchasing department of any size of organization and industrial setting
- Academic organizations strengthen their European ties and ensure that their purchasing curricula reflect the requirements of an increasingly pan-European industry
- Society benefits from a generation’s pan-European understanding as well as the competitiveness of the European economy

The most desired impact of PERFECT is an increase in the number of highly qualified students who are suitable for entering the workplace in purchasing & supply management (PSM) related jobs
The PERFECT Project Team

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Stephen Kelly
Tom Ward

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Advisory Board

- Donna Marshall, IPSERA
- Kai Foerstl, IPSERA
- Arturo Diaz, IFPSM
- Constantin Blome, University of Sussex
- Jorma Ruikka, Valio Corporation/Finnish Association of Purchasing and Logistics
- Thomas Bernstein, Volkswagen AG
- Nigel Peake, Staffordshire University
Project Packages

A1: Development of Purchasing & Supply Management (PSM) Skills Concept

A2: Development of Benchmarking Cases

A3: Pan-European Survey PSM-Skills

A4: Development of PSM Curriculum for higher education

A5: Development of PSM Competence assessment tool

A6: Development of Introductory Massive Open Online Course on PSM
# Overall Timeline

<table>
<thead>
<tr>
<th>PERFECT: Purchasing Education and Research for European Competence Transfer</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A0</strong></td>
<td>Project management, coordination and promotion</td>
<td>M1</td>
<td>M2</td>
<td>M3</td>
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<tr>
<td><strong>A1</strong></td>
<td>Development of Purchasing &amp; Supply Management (PSM) Skills Concept</td>
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<tr>
<td><strong>Output 1</strong></td>
<td>PMS Skills Concept</td>
<td>E1</td>
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<tr>
<td><strong>A2</strong></td>
<td>Development of Benchmarking Cases</td>
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<tr>
<td><strong>Output 2</strong></td>
<td>Best Practice Benchmark</td>
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<tr>
<td><strong>A3</strong></td>
<td>Pan-European Survey PSM Skills</td>
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<tr>
<td><strong>Output 3</strong></td>
<td>PSM Skills and Training Survey Results</td>
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<tr>
<td><strong>A4</strong></td>
<td>Development of PSM Curriculum for higher education</td>
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<tr>
<td><strong>Output 4</strong></td>
<td>Designed PSM Curriculum for higher education</td>
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<tr>
<td><strong>A5</strong></td>
<td>Development of PSM competence assessment tool</td>
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<tr>
<td><strong>Output 5</strong></td>
<td>PSM Skill ladder</td>
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<tr>
<td><strong>A6</strong></td>
<td>Development of Introductory Massive Open Online Course on PSM</td>
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<td><strong>Output 6</strong></td>
<td>Massive Open Online Course on PSM</td>
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<tr>
<td><strong>Milestones</strong></td>
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</table>
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Terms

Procurement, Purchasing and Supply Management

- **Procurement**
  - “[...] procurement represents all the activities required in order to get the product from supplier to its final destination” (van Weele, 2010)
  - “[...] procurement holds a broader meaning than purchasing, as it accounts for strategic as well as operational activities” (van Weele, 2010)

- **Supply Management**
  - “[...] a strategic approach to planning for and acquiring the organization’s current and future needs through effectively managing the supply base [...]” (Monczka et al., 2010)
  - “[...] the identification, acquisition, access, positioning, and management of resources and related capabilities that an organization needs or potentially needs in the attainment of its strategic objectives.” (Institute for Supply Management, ISM)

- **PSM**
  - “[...] is the discipline that is concerned with the management of external sources – goods, services, capabilities, and knowledge – that are necessary for running, maintaining and managing the primary and secondary support processes of a firm at the most favorable conditions” (van Weele, 2010)
Terms
Supply Chain, Value Chain, Supply Chain Management (SCM)

- **Supply Chain**
  - “[…] a set of three or more organizations linked directly by one or more of the upstream or downstream flows of products, services, finances, and information from a source to a customer.” (Monczka et al., 2010)

- **(Extended) Value Chain**
  - “We must expand the original value chain model, which focused primarily on internal participants, to include suppliers and customers who reside well upstream or downstream from the focal organization.” (Monczka et al., 2010)
  - Porter’s value chain concept and the differentiation between primary activities and support activities (Porter, 1985)

- **SCM**
  - “[…] involves a broader perspective than PSM. SCM is the part of the operations management discipline that examines three or more organizations involved in the upstream and downstream flows of products, services, finances and/or information from a source to a customer.” (Van Weele, A.J. and Van Raaij, E.M., 2014)
Terms
Definition for PERFECT Project

- The project refers to the term “PSM”
  - With reference to the scope definition of Van Weele
  - Including a broader scope focusing on the full upstream network (beyond Tier 1)

- PSM definition for the PERFECT project:
  - Purchasing and Supply Management comprises the management of external inputs – materials, services, capabilities and knowledge – that are required for building, running and maintaining the focal firm’s processes, while simultaneously managing the external and internal stakeholder network with an extended upstream supply network understanding.

Adapted from: Kummer, Grün, & Jammernegg, 2013
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Intellectual Outputs Links

- PSM Academic Skills Literature (covering current & future)
- PSM Practitioner Skills Literature
- Related Academic Skills Literature (e.g. Marketing)
- PSM Job Adverts
- PSM Educational Landscape

Dealing with overlaps/differences

- White Paper
- Journal Paper (expanded literature review)
- Journal Paper (case studies)
- Journal Paper (survey)

Refined PSM Skills Model with links to current and future needs, verified by practitioner feedback

Case Studies with industry PSM best practice to identify required skills and competences to cope with current requirements and future trends

Surveys to validate/develop results, how these link to performance outcomes and future requirements

New PERFECT PSM Curriculum
Skills Analysis Tool
MOOC

Discussion in Vision Workshops
Gap Analysis
Summary Activities in IO1 – PSM Skills Concept

- Skills overview and description, based on literature, practitioner and academic workshops to create a set of skills profiles (“skills ladders”)

→ Systematic literature review, following by Tranfield et al. (2003), with 3 main stages:
  (i) detailed a-priori planning of the review, precise definition of the aim and research question(s),
  (ii) rigorous execution of the review,
  (iii) reporting and dissemination of the review results

- Broad aims:
  • To establish what skills have been identified as necessary for PSM practitioners
  • Develop a conceptual skill model through a literature review of academic PSM literature, practitioner literature and the PSM education landscape
  • Used as the basis for the later IOs of the project
Summary Activities in IO1 – PSM Skills Concept

- **Detailed outputs:**
  1. A detailed report synthesising academic, practitioner and education literature to develop a skill profile
  2. Output 1 forms the basis of the data collection concept for the two future PERFECT workshops (academic and practitioner) and the survey and results in a framework for the running of these sessions
  3. A journal paper will be developed for the Journal of Purchasing & Supply Management (JPSM) or the Journal of Supply Chain Management (JSCM), which draws together the literature review and presents tangible findings in the form of a PSM skill concept model and compare the academic and practitioner based literature
  4. Two vision workshops (academic and practitioner)
Outlook on Current Activities in IO1 – PSM Skills Concept

Academic literature


Practitioner Trainings

Overlap & differences

PSM Skills and competences

current requirements

Overlap & differences

Academic Curricula/ educational landscape

Google search – “Procurement” and “Purchasing” in conjunction with the following search terms “Capabilities”, “Competencies”, “Skills” and “Human Capital” = 21 relevant practitioner models were identified

Scopus search in relevant PSM journals using the following terms: “Purchasing” OR “Supply” OR “Supply Chain” OR “Supply Chain Management” or “Professional” OR “Manager” with “Skill”/“Capability”/“Competence” = 50-60 results
Impact of IO1 – PSM Skills Concept

Current:
- Competences
- Performance

Future:
- Competences
- Performance

PERFECT PSM Curriculum:
- Content coverage: Current and future skills and competencies
- Didactic format: Anticipation of new educational formats and learning possibilities
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Results IO1 – PSM Practitioner Review

- For example:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Location</th>
<th>Brief Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>APICS (American Production and Inventory Control Society)</td>
<td>US</td>
<td>Competency models developed as actionable tools to allow professionals to rank their skills against other professionals and identify areas for improvement and also to assist hiring managers as they evaluate and compare candidates. These models follows guidelines set by the Employment and Training Administration of the United States Department of Labor.</td>
<td><a href="http://www.apics.org/careers-education-professional-development/competency-models">http://www.apics.org/careers-education-professional-development/competency-models</a></td>
</tr>
<tr>
<td>Scottish Government Procurement Competency Framework</td>
<td>UK</td>
<td>Developed by the Cross-Sectoral People and Skills Working Group in response to recommendations from the Review of Public Procurement in Scotland (2006). Has been endorsed by each of the Centres of Expertise for use in their sectors – Advanced Procurement for Universities and Colleges (APUC) for Scotland’s universities and colleges, NHS National Procurement the centre of procurement expertise for health, and Scotland Excel for the local government sector. Identifies the skills and competency levels required by all staff involved in the procurement process and helps people take ownership of their personal development through a skills assessment, identifies training and development needs, and career planning.</td>
<td><a href="http://www.gov.scot/Topics/Government/Procurement/Capability/proccompfww">www.gov.scot/Topics/Government/Procurement/Capability/proccompfww</a></td>
</tr>
<tr>
<td>Danish Purchasing &amp; Logistics Forum</td>
<td>Denmark</td>
<td>Compass is a comprehensive competency assessment solution for procurement. Individuals assess their competencies against ideal role profiles, these assessments are compared with managers views, gaps against the ideal profile are identified and prioritised, and personal development plans produced.</td>
<td><a href="http://www.dilf.dk/dk/arrangementer/kurse/competenceprofiler/competence-purchasing/">www.dilf.dk/dk/arrangementer/kurse/competenceprofiler/competence-purchasing/</a></td>
</tr>
</tbody>
</table>

- Practitioner review characterised by the following:
  - Mainly public sector organisations
  - Task and/or process focused (e.g. tender evaluation, business case development, draw up contract)
  - Some areas are very general (e.g. negotiation)
Results IO1 – PSM Education Landscape

For example:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Country</th>
<th>Programme</th>
<th>Level</th>
<th>Content</th>
<th>Course aims or Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Greenwich</td>
<td>UK</td>
<td>Business Purchasing &amp; Supply Chain Management</td>
<td>BA</td>
<td>YEAR 1: Personal and Professional Development 1; Introduction to Business Processes; Business Planning and Development – Quantitative Methods 1; Introduction to Economics for Business; Organisation Behaviour 1: Managing the Performance of Individuals. Optional Erasmus Exchange Programme. YEAR 2: Personal and Professional Development 2; Project Management; Creativity and Decision Making – Quantitative 2; Purchasing and Distribution; Operations Management: Processes and Value Chains. Further course information is available on our website. Optional Sandwich Year (Work Placement). FINAL YEAR: Advanced Project Management; Managing Strategy; Sustainable Business Development; International Purchasing and Supply Chain Management; One option from: Consultancy Project; Thematic Independent Study. Further course information is available on our website.</td>
<td>Every organisation procures materials and resources, so procurement and purchasing skills are much sought after by employers. This specialist Business programme gives a well-rounded approach to business management and allows students to specialise in the purchasing and supply chain management functions of business, including retail, service, manufacturing, fashion. In this programme, students will be equipped with knowledge on the functions of purchasing and supply chain management and comprehend their impact in the overall efficient management of a business. These functions will be studied within the context of the changing global environment and taking into account the societal requirements for sustainable management and reduced carbon footprint from business operations. The programme is accredited by the Chartered Institute of Purchasing and Supply (CIPS), the leading professional body in the field of purchasing and supply chain management. Students completing the programme gain partial exemption from the CIPS, giving them accelerated entry into this professional body (subject to approval).</td>
</tr>
</tbody>
</table>

Education landscape characterised by the following:

- Short courses
- Professional courses (post-graduation)
- Mainly supply chain management courses
- Heavy emphasis on PG courses in this area
- Suggests a need for an UG PSM curriculum
## Results IO1 – PSM Academic Literature

- **For example:**

<table>
<thead>
<tr>
<th>Literature</th>
<th>Giunipero &amp; Peary</th>
<th>Fae et al.</th>
<th>Muller</th>
<th>Burt and Dobler</th>
<th>Cousin &amp; Spekman</th>
<th>Trent and Monczka</th>
<th>Giunipero and Handfield</th>
<th>Giunipero et al.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>KODE - Kompetenzatlas</td>
<td>JSCM EJP SM</td>
<td>CAPS</td>
<td>McGraw JPSM</td>
<td>IJPDLM</td>
<td>CAPS IMM</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Synonym ENG</th>
<th>Grundkompetenz ENG</th>
<th>Gruppe ENG</th>
</tr>
</thead>
<tbody>
<tr>
<td>functional credibility</td>
<td>technical appreciation*</td>
<td>Professional Recognition</td>
</tr>
<tr>
<td>Internal perception</td>
<td>Trustworthiness</td>
<td>Credibility</td>
</tr>
<tr>
<td>Manage external advisers</td>
<td>Partnership</td>
<td>Capacity to Cooperate</td>
</tr>
<tr>
<td>Managing internal customers</td>
<td>Partner-oriented</td>
<td>Dialog Ability</td>
</tr>
<tr>
<td>managing internal relations</td>
<td>Building Relations</td>
<td>Ability to be on a team</td>
</tr>
<tr>
<td>Materials mgt._ inv.JIT</td>
<td>Planning know-how</td>
<td>Talent for Planning/Scheduling</td>
</tr>
<tr>
<td>Team building facilitation</td>
<td>Team-oriented</td>
<td>Ability to be on a team</td>
</tr>
<tr>
<td>team-building</td>
<td>staff selection*</td>
<td>Employee/Staff Promotion</td>
</tr>
</tbody>
</table>
Results IO1 – PSM Academic Literature

- Literature as per methodology section
- Use of KODE®X system for categorising competencies – 64 competency areas and 29 PSM papers have currently been integrated:

Purchasing competences as mentioned in scientific literature

- 53% Methods and Professional competences
- 27% Socio-communicative competences
- 12% Activity and Action competences
- 8% Personal competences

Purchasing skills as mentioned in scientific literature - spread over the 64 KODEX skills

1) Specialized Knowledge 15%
2) Talent for Planning/Scheduling 9%
3) Multidisciplinary 8%
4) Proceed in a systematic-methodic manner 7%
5) Ability to be on a team 5%
6) Language Proficiency 4%
7) Market knowledge 3%
8) Ability to Communicate 3%
Results I01 – PSM Academic Literature – Types of Purchasers

- **Type 1** A communicative, result-driven experimental personality (27%)*.
- **Type 2**: An intelligent, systematic thinking team player with professional knowledge of the profession and the market. (63%)*.
- **Type 3**: A responsible, ethical person with ‘spirit’. (8%)*
- **Type 4**: eliminated (2%)*

*) percentage of the total in the 29 articles mentioned purchasing skills.
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Workshop

In small groups, please consider the following questions:

1. **Our initial findings have identified three types of person. Consider what skills could be taught to develop individuals in these ways (Dr. Steve Kelly, Orange Team):**
   - *Type 1:* A communicative, result-driven experimental personality (27%).
   - *Type 2:* An intelligent, systematic thinking team player with knowledge of the profession and the market. (63%).
   - *Type 3:* A responsible, ethical person with ‘spirit’. (8%)

2. **Identify different modern teaching methods that would best fit the delivery of these skills and capabilities (Laura Berger & Natalia Straub). **Cherry Team**

3. **Identify best practices in PSM from your experience of industry (Heike Schulze, Strawberry Team).**

4. **Identify best practices in PSM academical education (Klaas Stek, Lemon Team).**

5. **Identify future challenges in PSM (Prof. Dr. Lydia Bals, Raspberry Team).**
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How to get involved

We are looking for...

• ...current PSM curricula and invite you to share yours
• ...best practice case companies and are grateful for any hints/contacts
• ...participants in the expert workshops
• ...other constructive comments/ideas for this project

You will be getting back...

• ...the skill concept
• ...access to the assessment tool
• ...the developed curriculum (based on a comprehensive review of current ones, the case studies and the survey)
How to get involved

Interested to closely cooperate with the PERFECT project?

We are considering to integrate partners or associates...

• ... to involve current research on related issues (→ cooperation on specific intellectual outputs)
• ... to get linked to other educational or textbook activities (→ cooperation on dissemination)
• ... to enlarge our European network

Please contact us for more details on our cooperation models.
Be welcome at our booth!

- Location: ZFT hall
- Open in the breaks during the whole conference