Future development of Project Management competences

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Abstract
This paper describes a study into the expected development of the competences of the project manager in the year 2027. The study was performed amongst the members of IPMA-Netherlands during the summer of 2007. In the study the 46 competences of the International Competence Baseline 3 (ICB 3) were tested against the expectations of the respondents for the development of project management. Based on four scenarios for the future of Europe, the members indicated which of the competences are expected to become more important, equally important or less important than today.

The aim of the study was to provide insight in the expected future development of the project management competences. This goal is relevant for both practitioners and educators.

The conclusions are that the study shows indications that project management is developing from an ‘occupation’ into a true ‘profession’. Part of this development is a broader orientation of the project manager in which especially the competences related to the relationship of the project with its environment grow strongly in importance.

1. Introduction
‘Panta rhei’ was the immortal wisdom, spoken 2500 years ago by the Greek philosopher Herakleitos. ‘Everything flows’, everything changes, and nothing remains the same. Organizations are continuously adapting to changes in their environment. Many of these changes are managed like projects, unique efforts that require the mobilization of resources of different disciplines, capabilities and organizational units. Organizing and managing change in an effective and efficient way is becoming a critical success factor for business agility and in fact sustainable success. Given the rise of project management standards and certificates, the task of managing projects is developing into a ‘real’ profession [11, 21].

For Utrecht University of Applied Sciences this development implies the desire to include project management competences in the different curricula that are taught at the university. But for a professional educator it is not sufficient to teach just what is required for the professional of today; a university educates professionals for the next 20 to 40 years. That is why the a study was conducted into the development of project management competences in the year 2027: Project Management 2027.

The question how project management will evolve in the next 20 years is relevant for educators, but also for professionals. For that reason Project Management 2027 is a cooperation between the Dutch chapters of the International Project Management Association (IPMA), and the IT Service Management Forum (itSMF) and Utrecht University of Applied Sciences.

This report first presents an overview of earlier research into the future of project management. Section 4 than looks into the competences of the professional project manager. After this some scenarios of the future are presented in section 5. After this groundwork has been done, section 7 reports the results of the study. The paper is concluded by discussing the interpretation and implications of the study.

2. The future of project management
The future of project management is frequently addressed in visionary papers and presentations. Notable studies are: Jaafari [14], Barnes [2 and 3], Gorrino-Arriaga & Eraso [9], Woollett [25], Hartman [10], Heerkens [11], Foti [8], Baumann, et al. [4], Bigelow, et al. [5], Brochta [6], Hutson [12], Lambert [17], Zwerman, et al. [26], Kloppenburg, et al. [16] and Soderlund [21].

Overlooking these studies, a few issues stand out.
First of all, most authors seem to share the belief that competitiveness of organizations in the future requires constant change of these companies. This change will mostly be organized in projects and project management therefore becomes a core competence of any organization. [2, 3, 4, 5, 10, 11, 12 and 25]

This development requires project management in the future to be more oriented on the business context of a project and less on the (triple) constraints of a projects itself. This necessary shift in orientation seems to result from an increasingly dynamic and turbulent environment which does not allow for fixed goals over any realistic period of time. [2, 4, 6, 9, 10, 11, 14, 16, 21 and 25]

Thirdly, and aligned with the development described above, ‘soft values’ and leadership tend to become more important compared to technical project management skills. [2, 4, 9, 12, 17 and 25]

Fourthly and finally the authors seem to agree on the observation that the sometimes accidental job of project manager is developing into a profession. At this moment still an emerging profession, but the rising academic interest for project management also adds to this development. [2, 3, 5, 8, 10, 11, 15 and 21]

The development summarized here is acknowledged by the International Project Management Association (IPMA) in version 3 of the International Competence Baseline (ICB), presented in October 2006 [13]. This ICB provides the official definition of the competences expected from project management personnel by the IPMA for certification using the universal IPMA certification system. It is the common framework document that all IPMA Member Associations and Certification Bodies abide by to ensure that consistent and harmonized standards are applied.

In ICB3 IPMA added two new groups of competences to the baseline: behavioral and contextual. ICB3 now breaks professional project management down into 46 competences that cover the following categories:

- technical competences for project management;
- behavioral competences of project personnel;
- contextual competences of projects, programs and portfolios.

The explicit recognition of these last two categories fit the development of project management that the studies show.

The studies listed above were in general expert opinions, based on analysis of the literature or by a panel of specialists. In the research project ‘Project Management 2027’ we add to these expert opinions the vision of the practitioners. Based on the literature overview we formulated the expectation that the behavioral and contextual project management competences would be expected to grow more in importance then the group of technical competences.

3. Research design

Project Management 2027 studied the expected development of project management competences. The research questions of the study were:

- How will the competences of the project manager develop in the future, according to practitioners?
- Which project management competences will grow in importance and which will decline?
- Does the expected development of competences differ for specified scenarios of the future?
- Are the future expectations of project managers influenced by personal or work related variables?

The study was conducted in the Netherlands amongst the members of IPMA and itSMF, using a structured web-survey, the respondents were asked to indicate whether they thought a specific project management competence would in 2027 be less important, equally important or more important than today. This question was asked for all 46 project management competences of the ICB3 and related to four scenarios of the future. A 7 point Likert-type scale was used with ‘equally important’ as the middle score.

4. Project Management

Project Management can be defined as the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements [22]. The comments on this definition are that it is technically correct, but does not help a lot in understanding more of the tasks of the project manager. For the purpose of the Project Management 2027 study however, a recognized definition of project management competences is more important than to settle the discussions about the definition of project management in general. A well recognized baseline for the competences of the project manager is provided by the ICB3 that was mentioned above.
As stated ICB3 breaks professional project management down into 46 competences in three categories [13]:

- technical competences for project management (20 competences);
- behavioral competences of project personnel (15 competences);
- contextual competences of projects, programs and portfolios (11 competences).

These competences are specified in table 1.

Table 1. Project Management competences.

<table>
<thead>
<tr>
<th>Technical competences</th>
<th>Behavioral competences</th>
<th>Contextual competences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01 Project management success</td>
<td>2.01 Leadership</td>
<td>3.01 Project orientation</td>
</tr>
<tr>
<td>1.02 Interested parties</td>
<td>2.02 Engagement &amp; motivation</td>
<td>3.02 Programme orientation</td>
</tr>
<tr>
<td>1.03 Project requirements &amp; objectives</td>
<td>2.03 Self-control</td>
<td>3.03 Portfolio orientation</td>
</tr>
<tr>
<td>1.04 Risk &amp; opportunity</td>
<td>2.04 Assertiveness</td>
<td>3.04 Project, programme &amp; portfolio orientation</td>
</tr>
<tr>
<td>1.05 Quality</td>
<td>2.05 Relaxation</td>
<td>3.05 Permanent organization</td>
</tr>
<tr>
<td>1.06 Project organization</td>
<td>2.06 Openness</td>
<td>3.06 Business</td>
</tr>
<tr>
<td>1.07 Teamwork</td>
<td>2.07 Creativity</td>
<td>3.07 Systems, products &amp; technology</td>
</tr>
<tr>
<td>1.08 Problem resolution</td>
<td>2.08 Results orientation</td>
<td>3.08 Personnel management</td>
</tr>
<tr>
<td>1.09 Project structures</td>
<td>2.09 Efficiency</td>
<td>3.09 Health, security, safety &amp; environment</td>
</tr>
<tr>
<td>1.10 Scope &amp; deliverables</td>
<td>2.10 Consultation</td>
<td>3.10 Finance</td>
</tr>
<tr>
<td>1.11 Time &amp; project phases</td>
<td>2.11 Negotiation</td>
<td>3.11 Legal</td>
</tr>
<tr>
<td>1.12 Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.13 Cost &amp; finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.14 Procurement &amp; contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.15 Changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.16 Control &amp; reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.17 Information &amp; documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.18 Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.19 Start-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.20 Close-out</td>
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</table>

The ICB3 represents the integration of all the elements of project management as seen through the eyes of the project manager when evaluating a specific situation.

5. Scenarios of the future

Research into the future is not about fortune-telling. Some developments, like demographic developments, can be calculated with high precision. A more difficult factor to foresee is technical development. It is now expected that Moore’s law, an important and remarkably reliable indicator for information technology development in the past 35 years, will continue to predict the growth of computer processing power for another 20 years to go [7].

More uncertain than long-run developments in, for instance demography and technology, are the responses to them by societies. Both at an international and at a national level, institutions are under pressure. International organizations must find ways to improve their decision making. Whether they succeed depends on both the ability and the willingness of member countries to cooperate, which renders the outcome uncertain. National governments can maintain strong public responsibilities or move towards more private initiatives. It is uncertain which choices countries will make and whether they are able to avoid potential pitfalls along each of these routes.

In order to present the respondents of the study a specified and validated view of the future, we built upon the study ‘Four Futures of Europe’ by the Dutch Bureau for Economic Policy Analysis [19]. This study into the future of Europe and the Netherlands reports four scenarios for the future of Europe. The scenarios provide a structure for discussing the uncertain future of Europe in a comprehensive framework. In this way,
the scenarios may yield early warnings to policy makers about particular challenges in the future. The scenarios may also serve as a tool for policy analyses with a long-term character.

The four scenarios for the future of Europe resulted from two ‘key-uncertainties’. The first key-uncertainty concerns international cooperation: to what extent are member states willing and able to cooperate within international organizations like the World Trade Organization (WTO) and the European Union (EU)? The second key-uncertainty concerns the role of national institutions: to what extent will the mix of public and private responsibilities change? Combining the two key uncertainties, the degree of international cooperation and the mix of public and private responsibilities creates the following four scenarios for the future of Europe [19].

5.1 Regional Communities

In the first scenario, the EU cannot adequately cope with the Eastern enlargement and fails to reform her institutions. As an alternative, a core of rich European countries emerges. More generally, the world is fragmented into a number of trade blocks, and multilateral cooperation is modest. European countries rely on collective arrangements to maintain an equitable distribution of welfare and to control local environmental problems. At the same time, governments in this scenario are unsuccessful in modernizing welfare-state arrangements. A strong lobby of vested interests blocks reforms in various areas. Together with an expanding public sector, this development puts a severe strain on European economies. Competition, innovation and economic growth are relatively low.

5.3 Transatlantic Market

In Transatlantic Market, countries are reluctant to give up their sovereignty. Reforms of EU decision making fail. Instead, the Western EU member states redirect their attention to the United States; they agree upon transatlantic economic integration. This yields welfare gains on both sides of the Atlantic. This, however, sharpens the distinction between the club of rich countries and the group of developing countries. Following social preferences for individual freedom and diversity, European countries limit the role of the state and rely more on market exchange. This boosts technology-driven growth. At the same time, it increases inequality. The heritage of a large public sector in European countries is not easily dissolved. New markets, e.g. for education and social insurance, lack transparency and competition. The elderly dominate political markets. In this scenario, they effectively oppose comprehensive reforms of the pay-as-you-go systems in continental Europe.

5.2 Strong Europe

In this scenario, reforming the process of EU decision-making lays the foundation for a successful, strong EU. The enlargement is a success and integration proceeds further, both geographically, economically and politically. Europe is the driving force behind broad international cooperation, not only in the area of trade, but also in other areas such as climate change and poverty reduction. European countries maintain social cohesion through public institutions, accepting that this course limits the possibilities of improving economic efficiency. Nevertheless, they cannot prevent that some groups in society lose (in relative terms). The reason is that governments respond to the growing pressure on the public sector by undertaking selective reforms in the labor market, social security and public production. Combined with early measures to accommodate the effects of ageing, this policy helps to maintain a stable and growing economy.

5.4 Global Economy

Economic integration in this scenario is broad and global. As countries find it in their mutual interest, the new WTO round succeeds and economic integration in an enlarging EU intensifies. Closer cooperation in non-trade areas is not feasible; international organizations in these areas cannot overcome the problem of conflicting interests and free riding. The problem of climate change intensifies. National institutions become increasingly based on private initiatives and market-based solutions. European governments concentrate on their core tasks,
such as the provision of pure public goods and the protection of property rights. They engage less in income redistribution (not only between rich and poor but also between young and old) and public insurance. Incomes become more unequal, but grow relatively fast on average. Besides, social-economic mobility is high.

6. Survey respondents

For the survey the members of the Dutch chapters of IPMA and itSMF were approached. In total 124 (18%) complete responses were received. Some background characteristics of the response group are presented in Table 2.

Table 2. Background characteristics of the respondents.

<table>
<thead>
<tr>
<th></th>
<th>% respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>86.3</td>
</tr>
<tr>
<td>Female</td>
<td>13.7</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>8.9</td>
</tr>
<tr>
<td>35-44</td>
<td>37.9</td>
</tr>
<tr>
<td>45-54</td>
<td>33.1</td>
</tr>
<tr>
<td>55-64</td>
<td>19.4</td>
</tr>
<tr>
<td>65+</td>
<td>0.8</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Lower education</td>
<td>0.8</td>
</tr>
<tr>
<td>Middle education</td>
<td>1.6</td>
</tr>
<tr>
<td>Higher education</td>
<td>42.7</td>
</tr>
<tr>
<td>Academic master</td>
<td>48.4</td>
</tr>
<tr>
<td>PhD</td>
<td>4.0</td>
</tr>
<tr>
<td>Unknown</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Male respondents are over-represented, as well as the age group between 35-54 years and the higher (academic) educated. This is not surprising considering that our target group consists of professionals and managers.

Professionals working in projects make up for about 50% of the response, leaving the other 50% to professionals working with projects. Table 3 shows the full list of positions of the respondents.

Table 3. Positions of the respondents.

<table>
<thead>
<tr>
<th>Position</th>
<th>% respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Manager</td>
<td>4.6</td>
</tr>
<tr>
<td>Program Manager</td>
<td>12.2</td>
</tr>
<tr>
<td>Project Manager</td>
<td>38.3</td>
</tr>
<tr>
<td>Project Support Officer</td>
<td>4.1</td>
</tr>
<tr>
<td>Project Worker</td>
<td>2.0</td>
</tr>
<tr>
<td>Financial Manager</td>
<td>0.5</td>
</tr>
<tr>
<td>ICT Manager</td>
<td>4.1</td>
</tr>
<tr>
<td>General Manager</td>
<td>8.2</td>
</tr>
<tr>
<td>Quality Manager</td>
<td>4.6</td>
</tr>
<tr>
<td>Consultant</td>
<td>11.7</td>
</tr>
<tr>
<td>Educator / Trainer</td>
<td>9.7</td>
</tr>
</tbody>
</table>

The respondents are employed in quite diverse industries, such as the public sector (51%), financial sector (38%), manufacturing (23%), transport (16%) and construction sector (11%). In addition, we see that the response group occupies relative high, responsible and senior positions. Over 70% have an average work experience in or with projects of 6 years or more. These projects are mostly ICT projects or change management projects, and have a duration of one year or more. 42% of the respondents are also involved in international projects. While 61% of the respondents are employed in organizations with 500 employees or more, the organizations they do projects for are also relatively large (i.e. 74% have 500 employees or more).
7. Survey results

7.1 Development of competences

The respondents were asked to indicate whether they thought a specific competence would in 2027 be less important, equally important or more important than today. A 7-point Likert scale was used with a value of ‘1’ attached to the ‘far less important’ answer and ‘7’ to the ‘far more important’ answer. The ‘equally important’ middle score was thus rewarded a value of ‘4’. Figure 2 shows the mean values for all 46 competences, sorted by average and aggregated over all scenarios. The black bars represent the technical competencies, the white bars the contextual, the gray bars the behavioral competencies. The numbers at the x-axis correspond with the competence codes as presented earlier in Table 1.

As the means for all competencies are 4 or higher, the respondents expect that all competences will be more important in the future. This may be a result from a systematic overestimating effect as is found in other fields (e.g. [20]). More importantly however, the perceived growing importance of all competences can also be interpreted as in indicator for the growing complexity of project management in the future. This growing complexity results from the increasingly dynamic environment in which projects take place. The result of the expectations for the four scenarios, shown in the next paragraph, provides some support for this interpretation.

The expected growth in importance of the competencies is quite equally spread over the three competence domains, indicated by the three different colors in Figure 2. The averages are rather close to each other. Technical competence 1.18 (‘communication’) clearly holds the highest mean, while another technical competences (1.17 ‘information & documentation’) has the lowest average. The contextual and behavioral competencies are also widely spread over Figure 2. Still it can be noted that the highest scoring competences all concern the relationship of the project and its environment.

Table 4 shows the expected development of all competencies in terms of mean score and standard deviation of the scores.

<table>
<thead>
<tr>
<th>Competence</th>
<th>Mean</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01 Project management success</td>
<td>4.68</td>
<td>0.90</td>
</tr>
<tr>
<td>1.02 Interested parties</td>
<td>4.82</td>
<td>0.96</td>
</tr>
<tr>
<td>1.03 Project requirements &amp; objectives</td>
<td>4.49</td>
<td>0.88</td>
</tr>
<tr>
<td>1.04 Risk &amp; opportunity</td>
<td>4.75</td>
<td>0.97</td>
</tr>
<tr>
<td>1.05 Quality</td>
<td>4.70</td>
<td>0.97</td>
</tr>
<tr>
<td>1.06 Project organization</td>
<td>4.53</td>
<td>0.99</td>
</tr>
<tr>
<td>1.07 Teamwork</td>
<td>4.67</td>
<td>0.96</td>
</tr>
<tr>
<td>1.08 Problem resolution</td>
<td>4.55</td>
<td>0.98</td>
</tr>
<tr>
<td>1.09 Project structures</td>
<td>4.66</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Figure 2. Expected development of importance of project management competences.
(<4 = less important than today, 4 = equally important as today; >4 = more important than today)
### 1. Scope & deliverables

- 1.10 Time & project phases: 4.39, 0.94
- 1.12 Resources: 4.52, 0.83
- 1.13 Cost & finance: 4.52, 0.91
- 1.14 Procurement & contract: 4.70, 1.04
- 1.15 Changes: 4.49, 0.94
- 1.16 Control & reports: 4.40, 0.86
- 1.17 Information & documentation: 4.10, 0.90
- 1.18 Communication: 5.25, 1.11
- 1.19 Start-up: 4.85, 1.10
- 1.20 Close-out: 4.61, 0.96

**Average Technical competences**: 4.61, 0.95

### 2. Behavioral competences

#### Mean StDev.

- 2.01 Leadership: 4.62, 0.95
- 2.02 Engagement & motivation: 4.41, 0.87
- 2.03 Self-control: 4.41, 0.91
- 2.04 Assertiveness: 4.71, 0.97
- 2.05 Relaxation: 4.76, 1.00
- 2.06 Openness: 4.48, 0.90
- 2.07 Creativity: 4.71, 1.00
- 2.08 Results orientation: 4.51, 0.89
- 2.09 Efficiency: 4.34, 0.83
- 2.10 Consultation: 4.60, 0.92
- 2.11 Negotiation: 4.61, 0.91

#### Average Behavioral competences: 4.55, 0.92

### Contextual competences

#### Mean StDev.

- 3.01 Project orientation: 4.90, 1.00
- 3.02 Programme orientation: 4.67, 1.00
- 3.03 Portfolio orientation: 4.67, 1.06
- 3.04 Project, programme & portfolio orientation: 4.58, 1.04
- 3.05 Permanent organization: 4.50, 0.95
- 3.06 Business: 4.45, 0.97
- 3.07 Systems, products & technology: 4.42, 0.89
- 3.08 Personnel management: 4.48, 0.96
- 3.09 Health, security, safety & environment: 4.74, 1.12
- 3.10 Finance: 4.26, 0.83
- 3.11 Legal: 4.90, 1.06

**Average Contextual competences**: 4.60, 0.99

**Average all competences**: 4.59, 0.95

Although the expectations are not equally spread

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**Figure 3. Development of competences by scenario.**

*center = equally important as now; outside ring = more important than now*
over the competences, this does not strongly reflect in the expected growth in importance of the three groups of competences. Table 5 shows the summarized results for the three groups of competences.

**Table 5. Development of competences, summarized per group of competences.**

|                          | Mean | StDev.
|--------------------------|------|--------
| Average of Technical competences | 4.61 | 0.95  
| Average of Behavioral competences | 4.55 | 0.92  
| Average of Contextual competences | 4.60 | 0.99  

The groups differ not significantly in expected development and standard deviation. The expectation that was derived from earlier studies, behavioral and contextual competences will grow more in importance compared to technical competences, is not confirmed by the practitioners in this study. We have to note however that most of the competences that are expected to develop most strongly are related to the relationship of the project with its environment.

7.2 Development by scenario

Analysis of the results for each future scenario shows remarkably the same pattern of development of the competences over all four scenarios (figure 3). However, the intensity of development differs per scenario. The scenario Global Economy shows the largest increase in importance of the competences. Second in line is Strong Europe, followed by Transatlantic Markets. The scenario Regional Communities shows the least development of the competences.

The growth in intensity over the four scenarios is similar to the expected economic growth in these scenarios. This is projected to be strongest in Global Economy and weakest in Regional Communities. An explanation for this similarity could be that with an increasing economic growth also the rate of change of the environment grows. This would especially affect the contextual competences. The typical technical project management competences could be expected to be equally important in all scenarios.

7.3 Differing opinions?

Another interesting analysis is whether certain characteristics of the respondents or their working environment are relevant for their expectations of the future development of the project management competences.

The analysis shows that the expectations were not sensitive to most of the personal characteristics of the respondents. Gender, experience as project manager, level of education and job did all not provide significantly different results. This is in itself surprising because some difference in opinion between professionals working within projects and professionals working in the environment of projects was expected. The fact that no difference showed may be an indication that projects are more and more a ‘normal’ business activity.

The only personal characteristic that delivered differing results was the age of the respondent. Both relatively young respondents (<35 years of age) and relatively old respondents (>55 years of age) are ‘stronger’ in their expectations than their colleagues with an age between 35 and 55.

Regarding the working environment none of the variables (company size, industry sectors, type of projects and duration of projects) deliver differing results.

8. Conclusion and discussion

This paper describes a study into the expected development of the competences of the project manager in the year 2027. The study was performed amongst the members of IPMA-Netherlands during the summer of 2007. In the study the 46 competences of the ICB 3 were tested against the expectations of the respondents for the development of project management. Based on four scenarios for the future of Europe, the members indicated which of the competences are expected to become more important, equally important or less important than today.

The aim of the study was to provide insight in the expected future development of the project management competences. The scope of the study was restricted by the two starting points of the study: the ICB 3 for the identification and definition of project management competences and the ‘Four Futures of Europe’ for the scenarios of the future.

The research questions of the study were:

- How will the competences of the project manager develop in the future, according to practitioners?
- Which project management competences will grow in importance and which will decline?
- Does the expected development of competences differ for specified scenarios of the future?
- Are the future expectations of project managers influenced by personal or work related variables?

Regarding the first two questions it can be concluded that the study shows a broad expected increase in importance of project management
competences. This result can be caused by a selection bias in the respondent group, all respondents were involved in projects, but the fact that almost 50% of the respondents is not working in projects makes this explanation less plausible. Another explanation is that the respondents recognize the development of project management from an ‘occupation’ into a true ‘profession’, that was found in the literature.

Part of this development is a broader orientation of the project manager in which the contextual competences grow strongly in importance. In the even more dynamic environment of the future, the project manager cannot take the assignment as a fixed and given goal. He or she has to develop also as a consultant and advise the organization on the appropriateness of the project goal.

Regarding the third question, the study shows that the development of the importance of project management competences differs over the four scenarios only in intensity. This intensity appears to be related to the expected economic growth.

Regarding influences of personal or work related variables, the study shows that respondents in the young (25-34 years) and old (>55 years) age groups have different expectations than the group in between (35-54 years of age). Other variables did not provide a significant influence on the expectations.

References


