

Innovation in Consulting

A QUANTITATIVE APPROACH

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WHAT IS INNOVATION

Like so many other things qualitative, innovation is to a large extent intangible and somehow elusive. Even with the same thing in mind and asked the simple question whether or not the item or concept was innovative or not, different people would arrive at different answers. This is in part owed to the fact that they might have different knowledge, for example about prior art, but to an arguably larger extent to the fact that innovation or innovativeness is largely subjective or relative in that it depends on the entity innovating whether and to which extent something can be considered new and therefore innovative.

A company introducing new machinery, which is already in use with a competitor, would consider this introduction innovation. If said company had the kind of machinery already in use and would only order more of it, this would be less innovative if at all, as the risk and cost usually associated with the new are obviously smaller.

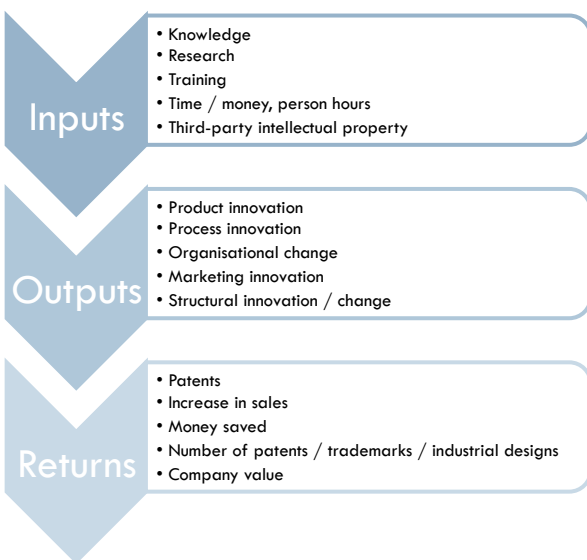


FIGURE 1: THE INNOVATION BUSINESS PROCESS

There is however objective innovation. The patent system and intellectual property rights are applicable only when something is completely new, i.e. new to everyone.

Many measures of innovation focus on the return³ of technical product and process innovation (TPP¹), which can be patents, increase in sales or market value or other quantitative benefits. Research on measuring non-TPP¹ is comparatively scarce and only more recently gained interest and can be considered to be still in its infancy.

Measuring the economic effects and returns³ of innovative activity on the company involved or the economy as a whole has a long-standing tradition². This kind of measurement has the disadvantage of lagging

significantly behind the actual innovation, which can be attributed to the fact that the return³ of innovation can only be collected sometimes years after the actual innovation was made⁴.

It has long been argued, for example by Hage⁵, that innovations lie on a continuum between the poles incremental and radical or disruptive on the higher end. This implies a unidimensional measure for innovativeness. Such a measure was developed in this project and applied to a number of case studies that were kindly provided by the Management Consulting Association.

¹ OECD and EUROSTAT. 2005. *OSLO Manual 3rd ed.* Luxembourg: Eurostat.

² For examples see: Lanjouw, J. O. and Schankerman, M. 2004. Patent Quality and Research Productivity: Measuring Innovation with Multiple Indicators. *The Economic Journal* 114, pp. 441-465 or

Westlake, S. et al. 2009. *The Innovation Index: Measuring the UK's investment in innovation and its effects.* London: NESTA

³ See figure Figure 1 for the definition of input, output and return applied here.

⁴ Adams, R. et al. 2008. *Proposal for measures of firm-level innovation performance in 12 sectors of UK industry.* London: NESTA.

⁵ Hage, J. 1980. *Theories of Organizations: Form, Process and Transformation.* New Jersey: John Wiley and Sons.

SCORING APPROACH

Score-based assessment has many other applications in different fields and has previously performed well where only qualitative data and sometimes vague knowledge existed. Those applications include many different domains from medical diagnosis or assessment⁶ to psychometric testing⁷ and credit rating⁸.

The scoring method developed does not rely on any domain specific attributes, so that projects from different backgrounds such as IT or Organisational Change can be compared. It is based on factors commonly used in research on innovation, especially the OSLO Manual⁹, Richter and Niewiem (2009)¹⁰, Blackman (1986)¹¹ and the 2008 UK Community Innovation Survey Questionnaire¹², which were slightly adopted for the purpose of measuring innovation in consulting projects. The dimensions chosen are applicable before, during and after a project, thus allowing for continued evaluation as a project progresses.

Compared to an unstructured approach relying entirely on a judge, a score or other more objective metric offers higher reliability and less interjudge bias.

The metric applied here takes into consideration the relative nature of innovation by including the client's perspective, the consultant's perspective and a neutral more objective point of view.

The overall score of a given project is calculated as the geometric average of the scores in each category/question. This score then divided by one-hundredth of the maximum achievable geometric average, which produces an overall project score ranging from 1 (very little or no innovation) to 100 (very innovative). The values observed in the sample ranged from 29 to 80 with a mean of 53.5. The scores awarded to each possible answer can be found in Figure 2. The overall results were mostly consistent with a ranking of the projects regarding their innovativeness and satisfy statistical requirements and assumptions.

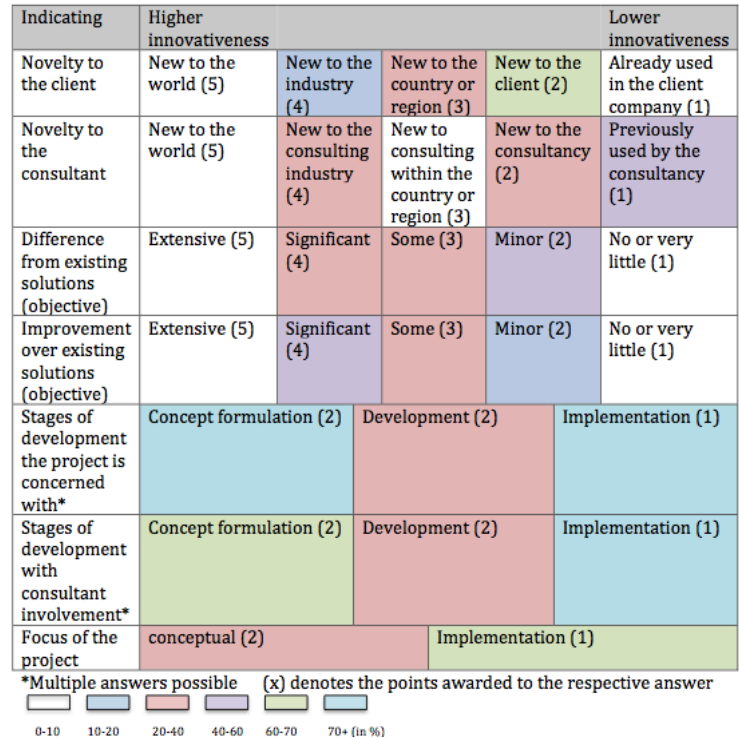


FIGURE 2: VARIABLES, ANSWERS AND SCORES ASSIGNED, AND THEIR RELATIVE FREQUENCY WITHIN THE SAMPLE (COLOUR-CODED)

⁶ Le Gall, J.-R. et al. 1993 .A New Simplified Acute Physiology Score (SAPS II) Based on a European/North American Multicenter Study. *JAMA* 270(24), pp. 2957-2963.

⁷ For an example see Nadler, D. A. and Lawler III., E. D. 1988. Motivation: A Diagnostic Approach. In: Leavitt, H. J. et al. eds. *Readings in Managerial Psychology*. Chicago: University of Chicago Press. pp. 3-19.

⁸ For an example see Thomas, L. C. et al. 2002. *Credit Scoring and Its Applications*. Philadelphia: Society for Industrial and Applied Mathematics.

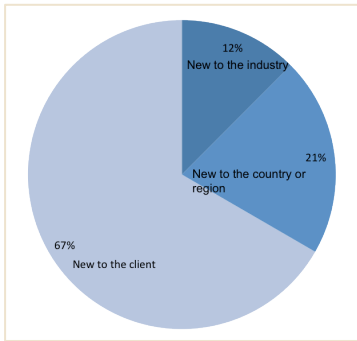
⁹ OECD and EUROSTAT. 1992/1997/2005. *OSLO Manual 1st/2nd/3rd ed.* Luxembourg: Eurostat.

¹⁰ Richter, A. and Niewiem, S. 2009. Knowledge transfer across permeable boundaries: An empirical study of clients' decisions to involve management consultants. *Scandinavian Journal of Management* 25, pp. 275—288

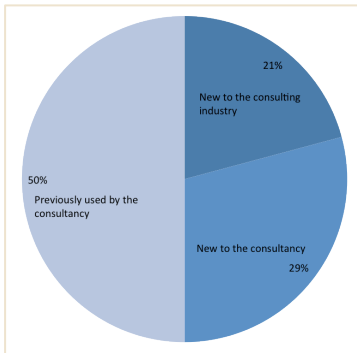
¹¹ Blackman A. W. 1986. The Use of Innovation Diffusion Models in New Venture Planning and Evaluation. *Technological Forecasting and Social Change*. 29, pp. 173-181.

¹² Department for Business, Innovation and Skills. 2008. UK Community Innovation Survey Questionnaire. Available at: <http://www.bis.gov.uk/policies/science/science-innovation-analysis/cis/cis6-questionnaire>

FINDINGS AND IMPLICATIONS



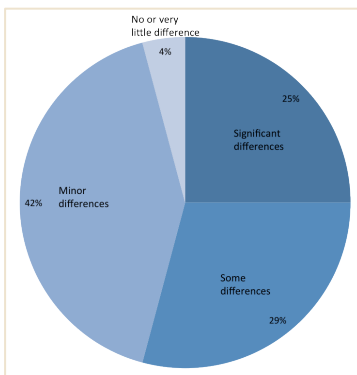
The results for novelty of the solution from the client’s point of view, the consultant’s point of view, difference of the solution from and improvement over existing solutions are displayed to the left. It is noteworthy that all projects posed some novelty to the client, which is often considered the threshold for innovation. The majority of projects fell in the category “new to the client”.



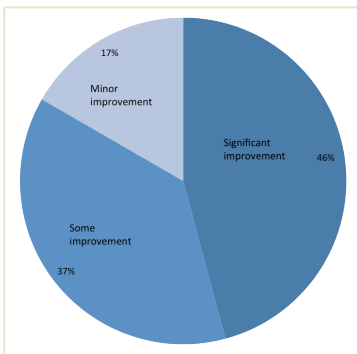
From the consultant’s point of view 50 pc of the projects posed no real novelty to the consultant. This points to a role of the consultant as agent of diffusion¹³. However this also means that in 50 pc of the projects the consultants involved had to develop a somewhat novel solution and therefor innovated.

Combined with previous research on the topic by O’Mahoney (2011)¹⁴ who found that working with the client was the single most important way for consultants to innovate the results have two important implications for practitioners:

1. Innovation is usually rather small step and clients prefer tailored solutions¹⁴. Therefor consultants should focus on finding innovative solutions that are specifically designed for the client’s situation without being overambitious as to the extent of the innovation.



2. Small step innovation provides an effective and efficient means for consultancies to improve and innovate without the detrimental effects on utilisation rate, which are usually associated with big innovation projects initiated by a consultancy without client involvement.



Comparing the degree of difference and degree of improvement, which are both objective measures, confirms that small differences can lead to relatively big improvements. While almost 50 pc of the projects were found to have led to significant improvements, only 25 pc of the solutions were found to be significantly different from existing solutions. This again is consistent with previous findings that management consultants often have a standardising role¹⁵. However, standardising from the consultant’s viewpoint can still be considered innovation by a client, even to the extent of disruptive change. A meaningful assessment of innovation must take into account relative, subjective nature of innovation. If innovation in a consulting environment is only assessed objectively, challenges that innovation often entails might be underestimated and necessary precautions might be missed.

¹³ in terms of Hansen, M. T. and Birkinshaw, J. 2007. The Innovation Value Chain. *Harvard Business Review* 85(6), pp. 121-130.

¹⁴ O’Mahoney, J. 2011. *Management innovation in the UK consulting industry*. London: Chartered Management Institute.

¹⁵ Wright, C. et al. 2012. Management innovation through standardization: Consultants as standardizers of organizational practice. *Research Policy* 41, pp. 652–662.