How can a purchasing competency be assessed?

Purchasing Assessment Tool – Assessment and benchmarking of strategic purchaser skill set

The role of strategic purchasing has become increasingly important for financial success, and the portfolio of necessary skills and competencies has evolved. However, ways of assessing current competency levels for strategic purchasing development are not standardized, objective or efficient. In our thesis, we created and validated a Multiple Choice Question assessment tool for this purpose, covering 7 areas and 77 questions.

The thesis focused on three steps. (1) identifying a handful of relevant competency areas for strategic purchasing professionals, (2) designing a test for assessing these competency areas, and (3) validating and investigating the reliability of the tool, as well as creating a benchmark based on the performance of 143 participating purchasing professionals.

A handful of competency areas were firstly proposed through literature studies centered around purchasing responsibilities and best practices. Afterwards, the proposed competencies were validated by comparing them with the contents of course curricula from five advanced university courses in purchasing and conducting complementary interviews. The seven chosen competency areas were Sourcing Strategy, Negotiation, Contracting & Contract Management, Cost & Value Mangement, Risk Management, Sustainability, and Financing.

After these were found, the tool was to be created. This was done in four steps; (1) design, (2) pilot study i.e., real-life implementation, (3) analysis of validity, and (4) final choice of test questions and analysis of the reliability of the tool. In the first step, 77 questions were proposed and validated through discussions with three experts within purchasing. Each question that was not clear, correct, and relevant enough was redesigned until there was a consensus among the three experts that all 77 questions were valid. The resulting test was ready to be analyzed statistically in the pilot study.

Secondly, the pilot study was conducted by letting 143 purchasing professionals conduct the 2-hour long test. Purchasing managers were also asked to rank the perceived competencies of the participants. This extensive analysis gave important data for analysis of the test, and also a useful benchmark so that future participants can compare their performance.

After the pilot study effort, four statistical validity measures were assessed, and the results showed that 68 out of 77 questions successfully contribute to distinguishing between competencies. The test results overall showed a significant correlation with subjective ranking ($p=0,0021$), and the correlation was also positive for all responding companies ($p=0,0078$). This showed that the resulting test of 68 questions fulfills its purpose with strong significance.

Finally, when the test had been proven valid, the reliability of the test was analyzed. The resulting findings showed the following uses for the tool. The tool is reliable for assessing (1) overall competencies for a group, (2) overall competencies for an individual, and (3) competencies within a specific area for a large enough group. Further investigation on the group size is needed. The tool is not reliable for assessing individual competencies within a specific area. If the test can reliably distinguish top and bottom performers could be investigated.

In conclusion, this thesis has successfully fulfilled its purpose of an objective measurement with a comparable benchmark. The practical implications of this results for competency development purchasing function were enthusiastically stated in discussions with e.g. participating Global Sourcing Managers, CPO:s and individual purchasers. The complete study can be read in the report "Purchasing Assessment Tool – Assessment and benchmarking of strategic purchaser skill set" by Harald Österling The Faculty of Engineering – LTH, Lund University