

# Exploring the link between training and innovation using the Longitudinal Small Business Survey

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This paper explores the link between different types of training and innovation outcomes using the Longitudinal Small Business Survey (LSBS). Innovation policy often emphasises research and development (R&D) expenditure as the driving force, with human resource inputs less prioritised. And to the extent that skills are included, much of the evidence on innovation and the link to the capabilities of the workforce is based on evidence from the Community Innovation Surveys and as a result emphasis is on larger businesses and on formal skills acquired in higher education institutions. This paper adds to the literature by focusing on a) micro-businesses and b) on-the-job and off-the-job training and on specific types of manager training.

## Key findings

The main findings are that: a) there is a positive relationship between training and innovation, and in particular product innovation; b) that this relationship is strongest among micro-businesses with 1 to 9 employees; c) that the strength of the effect of on- and off-the-job training is similar; d) specific manager training in IT and 'financial management' shows relatively strong correlations with product and process innovation; e) among the group of innovating businesses, novel – new-to-market - product innovation is also significantly enhanced by leadership training, but not by other forms of training.

In our results, both on- and off-the-job training are positive and significant for innovation and with roughly the same coefficient values. For product innovations, the link with training is more pronounced for micro firms. As the economy includes very large numbers of such firms, this finding could have important implications for policy towards innovation.

However, training that leads to a formal qualification – which is likely to be less employment specific - is not positively linked to innovation propensity.

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A set of questions, unique as far as we know, to the LSBS, covers some particular types of training offered to managers rather than the workforce in general. The analysis finds positive and significant relationships between some of the types of manager training and innovation. In particular:

1. Manager training in financial management is significant for both product and process innovation;
2. Manager training in leadership skills is significant for novel product innovation and also (but statistically more weakly) for novel process innovation.

## Policy implications

Despite occasional forays into other domains, public policy towards innovation has a strong tendency to revert to prioritising R&D, through subsidies or tax incentives. By taking account of the dominance of non-R&D intensive services in the UK economy this paper proposes an important additional area for policy.

The paper contributes to an alternative view that stresses the role of human capital and its enhancement through training, as a source of innovation for small and especially for micro firms.

**Full paper link:**

<https://www.enterpriseresearch.ac.uk/our-work/publications/?type=research-paper>