

## SUPPORTING SMALL TO MEDIUM SIZED ENTERPRISES IN PRODUCT DEVELOPMENT

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The European Regional Development Fund (ERDF) provides baseline funding for projects that enable the economic development of target regions in the European Community. The Innovative Product Development Centre (IPDC) at the University of Wolverhampton was created using ERDF funding. The funding enabled the University to build a new engineering centre and equip it with state-of-the-art manufacturing and rapid prototyping facilities and computer aided design and simulation equipment. These facilities have been in operation since the beginning of 2000 and have since enabled several hundred small to medium sized enterprises (SMEs) in the manufacturing sector and in the West Midlands region of the UK access to product development facilities normally beyond their investment.

This paper will describe, with examples, how SMEs have been able to improve their product development activities through using the knowledge, skills and capability of the IPDC. In particular, the paper will demonstrate the continued need to develop the use of computer aided design in SMEs and the importance that rapid prototyping has made to their innovation process.

However, providing access to state-of-the art technologies is not sufficient. There have been difficulties in establishing appropriate levels of service to the manufacturers. This is partially due to the difficulties of accessing the skills and knowledge of the university academic staff, partially due a gap in the capabilities available, and partially due to the expectations of the manufacturers about the service they would receive. As a consequence, it has proven difficult to demonstrate that significant changes have

been made to way that some companies are operating.

As a consequence of this experience, a different level of support for SMEs is being adopted, which is more strategic and holistic in its product development approach. Whilst the physical resources of the IPDC are still highly relevant to its role in the West Midlands region, the paper will describe two new ERDF supported programmes that put more emphasis on employing experienced people who can provide advice and support to the assisted companies. Both of these programmes require a more significant level of engagement with a company than, for example, merely rapid prototyping of a part. In one of the projects, the continued use of "best practice" product development tools and techniques by the consultants during these "assists" will ensure that the SMEs are taken through a more effective product development process, which will address both short and medium term needs. In the other, the IPDC is linked with several other centres across the West Midlands region to give SMEs access to a more diverse capability, which enables each centre to continue to develop its niche expertise.

The paper will conclude that centres such as the IPDC can make an impact on the economic performance of a company and that they provide a useful, if not critical, means of ensuring that industry can access the "best practice" tools and techniques and that its adopts an integrated approach to product development.