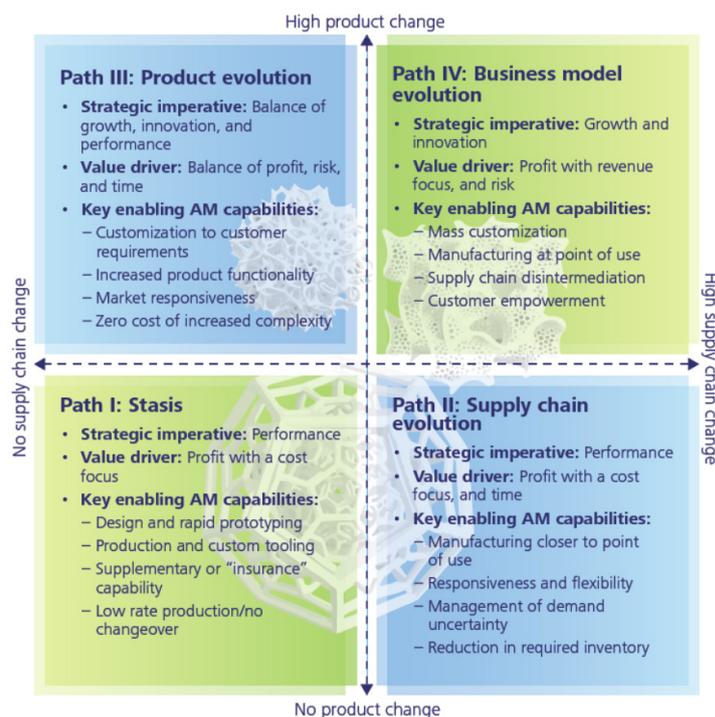


## Delcam, Birmingham – 14/10/2014 – Transforming the business model and perfecting the polishing!

Project Coordinator Chris Lewis Jones, Delcam, opened the meeting by welcoming all partners to the Delcam office and congratulating everyone on another successful quarter within the Precious Project. The project aims to demonstrate the viability of precious metal additive manufacturing (AM) within the UK Jewellery industry and with several demonstrator pieces passing through the entire process, from design through to manufacturing and polishing, results indicate strongly that high quality finished parts can be produced.

Gay Penfold of the JIIC in Birmingham followed by sharing with partners the business optimisation plan which serves as a framework for understanding AM paths and value. A brainstorming session was held in July to get the project partners' expert opinions to form a SWOT analysis regarding the current state of the art. Conclusions were drawn from the data collected and a matrix was created showing the four paths towards AM adoption and the level of change for both the product and supply chain.



Framework for understanding AM paths and value. Graphic: Deloitte University Press DUPress.com

The matrix shows four business models ranging from minimal change through to complete evolution where innovation and customer empowerment are imperative. The consortium recognise that AM will never replace cheaper methods of manufacturing, but companies and individuals will place a high value on the design opportunities it offers for creating bespoke jewellery. Currently, partners agreed that most companies adopting AM fall into Paths II and III.



*Samples polished with ceramic media with increasing polishing time from left to right*

More trials for finishing and polishing have taken place in the fourth quarter of the project at Fintek. The cycle duration (cutting times) and media amounts were varied to observe the effects on the samples as well as using different machines in order to try to establish the optimum combination to produce the best finish. The aim of this part of the Precious project is to minimise hand finishing and the project has come a long way to maximising the mechanical element to finishing, however the approach is still determined by the shape and size of the piece. Richard Ainsworth, Fintek, stated that stream finishing has been the most successful method to date and that several pieces have been prepared, finished and polished already and that he was looking forward to getting his hands on the Demonstrator pieces.

With possibly up to 10 demonstrator pieces the coming months will be busy and challenging ones for all the partners and Chris Lewis Jones closed the meeting saying that "Tracking the entire process for the demonstrator pieces is critical to show what we have achieved and how we got there – the spark that we were looking for from this exciting project is still very much alive!"

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