Title: E-Commerce strategy and the A/E/C sector: an investigation into e-commerce strategies of leading construction firms operating in the German, UK and Irish A/E/C sectors

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Purpose:
The influence of the Internet on businesses across almost all sectors of the economy has been discussed extensively. The purpose of this study is to identify the relevance of e-commerce for the A/E/C sector. The study examines the affect of e-commerce on the business strategies of A/E/C firms operating in Germany, UK and Ireland.

Methodology:
A literature review to obtain an overview of the NE/C sector in each of the three countries is included. This is followed by a review of the current literature on e-commerce in general and e-commerce in NE/C in particular. The process of business strategy development is explored and a framework to develop and implement an e-commerce strategy is provided. The research methodology employed for the purpose of this study is a survey approach, using the distribution of questionnaires. Four out of the top ten construction firms in each of the three countries took part in this survey. Senior managers responsible for ecommerce or corporate strategy were contacted. The results of the survey showed that the importance of e-commerce is recognised in the A/E/C sector of the three countries. Not all of the surveyed companies have defined a particular strategy to exploit the benefits of e-commerce, but an increasing importance of e-commerce is expected by all of the respondents. Using the Internet to conduct business on a regular basis is not yet typical, rather most of the surveyed companies are at the stage of experimenting with the new technology or even at planning stage. Presently ecommerce is preferentially used to facilitate the tendering process and to improve collaboration within the project team. Online procurement and electronic market places to purchase building materials have so far not reached significant levels.

Findings:
The research concludes that e-commerce can contribute to a more integrated construction process and can partly help to overcome the fragmentation of the sector. Data sharing along the supply chain can remove duplicated effort and strengthen the relationships between business partners. The adoption of e-commerce in the A/E/C sector is slow and successful business models have yet to be demonstrated. Pilot projects to experiment with the new technology should be encouraged to improve these business models and to enhance the speed of innovation within the sector.
Keywords:

Classification: Information & Communication Technologies (ICT)