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## The design and testing of a tool for developing responsible innovation in start-up enterprises

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## Abstract

Innovation leads to new products, business models and even changes to socio-economic systems. However, it is important that innovation has the 'right impacts'. Responsible innovation can help to achieve this; however, it is unclear how to introduce responsible innovation to real-world, competitive, industry settings. We explore this challenge in the context of sustainability orientated start-up enterprises, developing innovations within agriculture, food or energy. We develop a tool that provides innovators with a systematic way to identify socio-ethical issues. Using the concept of experiential learning, we track the impact of the tool across 12 cases. For the tool to install responsible innovation, we propose that a full learning cycle must be completed. We find evidence that the tool can enable a full learning cycle and provide a method to identify socio-ethical factors. We contribute by articulating and operationalising an approach to introduce responsible innovation principles into real-world contexts.