

Strategic Technology and Innovation Management Programme 2020

21. IoT-driven Mass Customisation suitability tool

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One of the most interesting applications for Internet of Things (IoT) in manufacturing is to derive data for the development of designs to drive the mass customisation (MC).

However, suitability of different products for IoT-driven MC has not been established yet.

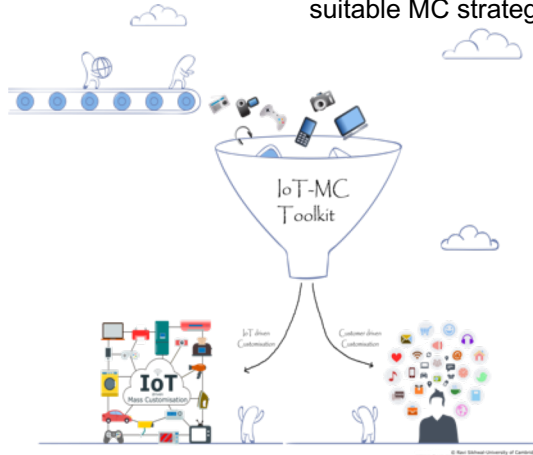
In the first situation, when CPV remains negative or decreases with time, would be suitable for IoT-driven MC.

Opposite would be suitable for Human-driven MC, as shown in situation 3.

However, in situation 2, further details would be required to take the decision on suitable MC strategy.

Aims

Develop a tool that helps manufacturers determine what types of goods could be more suitable for IoT-driven MC versus those where human intelligence needs to drive customisation.



Deliverables

A theoretical model that describes how/when, for equally appreciated customised products, users would favour an IoT-driven MC offer over a human-driven MC one.

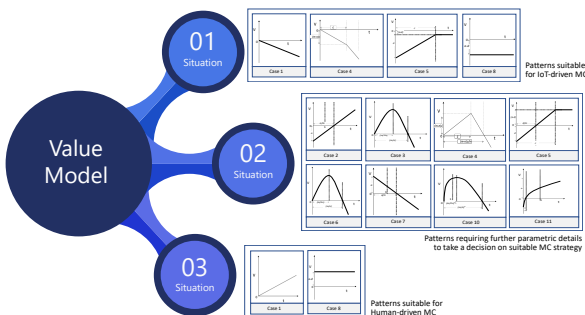
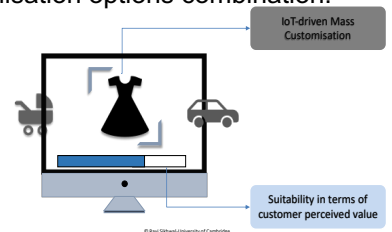
Approach

A theoretical model is developed describing how the time invested by a user in designing customised products might be perceived as a benefit (the experience is pleasurable) or a sacrifice, presenting different potential customer-perceived value (CPV) patterns.

These patterns provided three different situations as shown in this figure.

Future research

The theoretical value model developed will be used as a basis for designing experiment aimed to measure customer perceived value from different product and customisation options combination.



Engagement opportunities

Industrial partners who are interested in understanding how IoT might deliver mass customisation are invited to participate and contribute.

Interests are welcomed for the upcoming empirical study and following pilot implementation of the final tool.