

# **Cornish Wasted Apples: A Case Study of a Circular Business Model**

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## **Abstract**

The circular economy has attracted the interest of different stakeholders including academia recently. Yet circular entrepreneurship is just emerging in the circular economy literature and the empirical evidence about how the circular economy is implemented through innovative business models is still limited. Therefore, the purpose of this article is to work towards a contribution at the intersection between the circular economy, circular business models and entrepreneurship literature. Particularly, we look at entrepreneurship in a circular economy from a business model perspective.

## **1. Introduction**

There is a growing scholars and practitioners' interest in both the entrepreneurial process to address sustainability concerns (Blok, 2018), and alternative business models (BMs hereafter) wherein the concept of value creation is expanded to include ecological and social value creation (Brehmer *et al.*, 2018). Research and practice of corporate sustainability have evolved to embrace new concepts such as the circular economy (Blomsma and Brennan, 2017; EMF and McKinsey, 2012).

The Circular Economy (CE hereafter), which proposes the shift towards a more resource-efficient industrial model wherein economic growth is decoupled from the consumption of finite natural resources (EMF and McKinsey, 2012; EMF, McKinsey and Sun, 2015), has recently attracted the attention of policy makers and business leaders alike for its potential to address ecological and social sustainability concerns and unlock sources of economic and business opportunities (Hazen, Mollenkopf and Wang, 2017; Ranta, Aarikka-Stenroos and Mäkinen, 2018). And yet, the intersection between the CE, circular business models and entrepreneurship literature is rather scant (Zucchella and Urban, 2019, p. vi) and circular entrepreneurship is just about emerging in the CE literature (Veleva and Bodkin, 2018). This article aims at investigating the entrepreneurship process with a particular focus on the BM

element from the circularity perspective. To support our argument, a case study of a local Cornish company will be drawn upon. The company is a good example of a circular business producing apple juice and apple cider from local apples that would have been otherwise wasted.

## **2. Planned structure of our paper**

We intend to structure our article in the following way. We start by reviewing entrepreneurship and CE literature to highlight the rationale for conducting this research. Entrepreneurship is a complex phenomenon involving a set of activities with technical, human, managerial and entrepreneurial characteristics, the performance of which requires a diverse set of skills. Filion (2008, p.7) posits that a definition of entrepreneurs should include at least these six elements: an entrepreneur is an actor who *innovates* by *recognizing opportunities*; he or she makes moderately *risky* decisions that leads into *actions* requiring the efficient *use of resources* and contributing an *added value*. It is widely accepted that an opportunity exploitation can only be achieved when the BM is designed and developed to enable the entrepreneur to do so (George and Bock, 2011; Masaro, 2016).

Velenturf and Jensen (2017) point out that much of the sustainability concerns today are caused by widespread traditional linear BMs that operate on a ‘take-make-dispose’ basis. To improve resource efficiency and make the wider economy more sustainable, businesses are being encouraged to transition towards circular business models (CBMs hereafter) which focus on the preservation of resources and their efficient use and reuse within and between supply chains. On the entrepreneur’s side, today’s eco-vision enforces conventional entrepreneurs to add the elements of purpose, accountability and transparency to their vision to make their enterprises more socially sustainable in a more holistic way and embracing all stakeholders (Kuratko, 2014). The value creation paradigm considers the entrepreneurs as a source of wealth for the entrepreneur and society in general. However, the scholarly literature integrating BMs and sustainability-oriented entrepreneurs is rather scant (Davies and Chambers, 2018; Schaltegger *et al.*, 2016).

As a means for seizing a circular advantage, CBMs have gathered the interest of corporate leaders and, consequently, businesses of different sizes and across diverse sectors are experimenting with their implementation (Jones and Comfort, 2017; Mayer *et al.*, 2018). They

have also attracted a considerable amount of interest in the academic literature. Yet, circular entrepreneurship, i.e. “the discovery, creation and exploitation of profitable opportunities with a circular economy approach” (Diacono, 2017, p. 39), is just about emerging in the CE literature (Veleva and Bodkin, 2018) and empirical studies showing how CBMs are implemented are limited (Fraccascia, Giannoccaro, Agarwal and Hansen, 2019). Since the CE opens up the way for a wealth of entrepreneurial opportunities and entrepreneurs are crucially important for implementing innovative BMs (Veleva and Bodkin, 2018), this research is interested in exploring the entrepreneurial process and orientation in a circular context. Particularly, we look at the entrepreneurial orientation (EO hereafter) from a BM perspective because the entrepreneurship literature has only recently started paying attention to the study of the BM within the entrepreneurial process (Andersén, Torbjörn and Lotten, 2014; Foss and Saebi, 2017).

In terms of research method, our research draws upon a qualitative, single case study methodology (Stake, 1995; Yin, 2014). The case subject of this research article, is a Cornish, ‘born-circular’ firm whose circular ethos is grounded on diverting perfectly good apples from disposal. Using locally grown apples from orchard owners who are unable to pick or use all of their crop and that would have otherwise ended up as waste, our company offers locally crafted, 100% natural apple juice and dry apple cider. A case study methodology is appropriate because of the contemporary nature of the phenomenon under investigation, for the exploratory characteristic of the research and to gain an in-depth, contextual understanding (Yin, 2014). We use a best practice, exemplary case study, to maximise the results obtainable from the research. Data collection relied on primary and secondary data. The collection of primary data was performed throughout an ongoing dialogue with the informant established by one of the authors of this paper, over a period of twelve months and interviews. The questions used in the interviews were derived from the CE, BMs and entrepreneurship literature, particularly they encompassed: a) the entrepreneurial process, and b) value proposition, creation, delivery and capture including environmental and social angles. To mitigate the risk of biased interviews and reporting, primary data were complemented by the use of secondary data resulting from the company’s website, blogs and corporate documents. The collected data were analysed qualitatively using narrative analysis (Langley, 1999) and thereby avoiding data fragmentation (e.g., developing categories, codes) in order to preserve the integrity of the data. Our approach to theory building from case-based research resonates with the case view as an example of ‘contextualised explanation’ (Welch *et al.*, 2011), in which causal and context-related

explanations result and theory development is neither deductive nor inductive but rather abductive (*ibid.*). Abduction, as opposed to deduction and induction which are based on a unidirectional line of reasoning (either from theory to data or from data to theory respectively), relies on an iterative, circular line of reasoning between theory and data to produce theory that is context sensitive (Polsa, 2013).

The remaining parts of the article will be structured to highlight the characteristics of the entrepreneurial process in a CE context and the EO from a BM perspective. The CE has become the subject of a growing scholarly focus and the involvement of the business community is pivotal in steering the transition towards the CE and bring it to scale. However, “the lack of case studies, as well as other empirical evidence, makes it challenging to understand how companies can design and implement (circular business models)” (Fraccascia *et al.*, 2019, p. 430). Additionally, whilst the CE is amongst the major entrepreneurial approaches that can address the quest for more inclusive forms of value creation, a gap remains between the theory and practice of environmentally and socially sustainable entrepreneurial endeavours (Villa Todeschini *et al.*, 2017), i.e. how this is achieved in practice through innovative BMs is rarely investigated (Gregori *et al.*, 2019). Therefore, this research seeks to respond to the limited cross-fertilisation of the entrepreneurship, CE and CBMs literature, building a research stream in the CE literature whose relevance is likely to increase since the transition towards the CE is dependent on the emergence of new entrepreneurial ventures and the transformation of existing ones.

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