

Northumbria Research Link

Citation: Singh, Pallavi, Brown, David, Chelekis, Jessica, Apostolidis, Chrysostomos and Dey, Bidit L. (2022) Sustainability in the beer and pub industry during the covid-19 period: an emerging new normal. *Journal of Business Research*, 141. pp. 656-672. ISSN 0148-2963

Published by: Elsevier

URL: <https://doi.org/10.1016/j.jbusres.2021.11.066>
<<https://doi.org/10.1016/j.jbusres.2021.11.066>>

This version was downloaded from Northumbria Research Link:
<https://nrl.northumbria.ac.uk/id/eprint/47860/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

SUSTAINABILITY IN THE BEER AND PUB INDUSTRY DURING THE COVID-19 PERIOD: AN EMERGING NEW NORMAL

Abstract

The COVID-19 pandemic created significant challenges for the British pub industry, due to the uncertain conditions caused by the virus, changes in consumption patterns and government measures. Studies recommend that organisations adopt innovative and flexible business models to generate added value for customers and other stakeholders as a survival and growth strategy. However, such measures require business ecosystems which encourage co-creative engagement. This qualitative study extends the concept of value co-creation beyond its current boundary as a customer-driven experiential paradigm, reconceptualising it as a driver for societal benefits. Over the period March – December 2020, we carried out in-depth interviews with pub and brewery owners, managers, and customers, combined with netnographic and offline observations of pubs' engagement with customers. We uncovered three stages of strategies and innovation during this period, which we term 'survive', 'secure', and 'sustain'. We demonstrate how multiple stakeholders benefit from the innovations of pubs and breweries negotiating each stage, advancing current scholarship on sustainable value co-creation.

Keywords: SME Innovation, COVID-19, Pub Industry, Value Co-Creation, Service Networks

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

SUSTAINABILITY IN THE BEER AND PUB INDUSTRY DURING THE COVID-19 PERIOD: AN EMERGING NEW NORMAL

1. Introduction

British pubs and brewers have suffered disproportionately throughout the UK Government's COVID-19 lockdown measures. Whilst the UK economy contracted by 9.9% in 2020 (Office for National Statistics (ONS), 2020), beer sales dropped by 56% (British Beer and Pub Association (BBPA), 2021). As people worldwide adapt to an emerging 'new normal' of home-based working and less unmediated social interaction, many businesses which are dependent upon social gatherings have struggled to trade sustainably or have collapsed entirely (Ågerfalk et al., 2020; Donthu & Gustafsson, 2020; Venkatesh, 2020). This is especially pronounced within the hospitality, travel and tourism sectors, including British 'public houses', which are licensed to sell alcoholic beverages for social consumption upon their premises (Foroudi et al., 2021; Kaushal & Srivastava, 2021). A major part of the UK hospitality industry, pubs contribute greatly to the local and national economies. In 2018, around 40,000 pubs, employing over 450,000 people, generated revenues totalling approximately £25m (Baker, 2019; ONS, 2019), supporting local businesses and creating employment and training opportunities for local residents (Markham & Bosworth, 2016; Jones et al., 2013; Bosworth & Farrell, 2011).

The most creative owners and managers adopted innovative, entrepreneurial, and technology-led responses to these existential threats, and such approaches quickly penetrated the sector through resource sharing, disruptive innovation, and replication of good practice. Innovative business models are required to cope with today's dynamic business environments (Bughin & Woetzel, 2019), as the ever-changing needs within the macro-environment can pose particular challenges to businesses. These challenges are particularly acute for SMEs

(small and medium enterprises), which have limited resources to cope with dynamic external changes (Hughes et al., 2019; Gronum et al., 2012). Extant literature recommends that SMEs adopt innovative and flexible business models that generate added value for customers as a survival and growth strategy (Babu et al., 2020; Lee & Trimi, 2018). Research on the pub and brewery industry, in particular, also echoes similar strategic pursuits (Cabras & Higgins, 2016; Lewis, 2001). However, such measures may require supportive and sustainable business ecosystems which encourage a co-creative engagement through resource sharing, cross-fertilisation of ideas and expertise, and symbiotic inter-relationships (Dey et al., 2019).

Co-creation of value, which has drawn significant research attention, underpins the essence of symbiotic and sustainable inter-relationships amongst organisations and their stakeholders. Although scholars and practitioners increasingly recognise value co-creation (Sklyar et al., 2019; Balaji & Roy, 2017), few scholarly works explore how co-creation of value can propel organisational survival and sustainability. While there is evidence of academic consensus on multi-stakeholder engagement for value co-creation (Babu et al., 2020; Brodie et al., 2019), the conflicting interests of various actors within the value co-creation process (Hollebeek et al., 2020) warrant further research to solidify the conceptualisation of the nature of, and motivation for, value co-creation. Partial understanding can be obtained through the dialectic nature of the value co-creation concept (Rahman et al., 2019). However, categorising types of actors and beneficiaries, and the nature of their engagement within the value co-creation process, still remains an understudied area. This paper seeks to fill this vacuum in the body of knowledge by achieving the following research objectives:

- 1) To identify and analyse different types of actors and beneficiaries involved in the value co-creation process, and to develop a taxonomy of different types of value sought and enjoyed by different stakeholder groups.

- 2) To propose a processual framework for value co-creation, constituted through the involvement of various actors and represent how those stages benefit different stakeholders.

We aim to achieve the above objectives by analysing strategies and operations of the British pub industry during the COVID-19 period, which constituted a unique scenario characterised by disruptive and uncertain macro environmental conditions. Accordingly, we conceptualise value co-creation in crisis situations as a processual flow driven by a strategic pursuit for organisational survival, security and sustainability. The contribution is juxtaposed against a taxonomy of three different types of value: business value, experiential value and spill over value. The taxonomy provides a robust understanding of how various stakeholders contribute to, and benefit from, value co-creation process. Our research does the following: (1) proposes a conceptual foundation by identifying and analysing the importance of pubs and breweries to the social and financial sustainability of community lives in the UK; (2) conceptualises the essence of value and value co-creation, locating a theoretical lacuna; (3) explains our interpretive methodological approach and triangulation mechanisms; and (4) presents our findings, coherently structured against our theoretical contributions, and defined through a robust model in the discussion section.

2. Theoretical Background

The theoretical construct of this paper is informed by the concept of value co-creation, rooted in the S-D logic theory. We provide a thorough review of value co-creation literature, with particular attention to its multi-stakeholder dimension and aspects relevant to experiential value. We also explore the sustainable value co-creation that is relevant to this research.

2.1 Value Co-Creation

Value co-creation has gained theoretical currency since Prahalad and Ramaswamy's (2004) seminal article, which coincided with, and was solidified by, Vargo and Lusch's (2008) theorisation of service-dominant (S-D) logic. Value co-creation is integral to one of the fundamental premises of S-D logic, which considers the exchange of service central to the interactions amongst organisations, markets and society. As such, value is created through the interaction between organisations and markets in a socio-cultural context (Vargo & Lusch, 2016), and is an outcome of co-creative activities by various networked parties (Dey et al., 2016; Vargo & Lusch, 2016).

The equitable exchange between suppliers and customers underpins the classic concept of value co-creation (Ballantyne & Varey, 2006). However, businesses do not operate solely through customer-supplier dyadic inter-relationships (Brown et al., 2019). Neither do suppliers, customers, nor organisations exist in isolation. Different entities involved in value creation and consumption processes have varied motivations (Fujita et al., 2020) and roles (Dey et al., 2019), complicating value co-creation as a dynamic process. Therefore, scholars argue that the outcome of stakeholder interactions may constitute value co-creation, value non-creation, as well as value co-destruction, reflecting the complex, often dialectic nature of this process (Rahman et al., 2019; Plé & Cáceres, 2010). To address these debates, we must identify what constitutes value and who benefits from the value co-creation process.

Vargo and Lusch (2008) suggest that beneficiaries determine value uniquely and subjectively during the value-in-use, as value is partially experiential. The differentiation between value-in-use and value-in-exchange demonstrates how value can be subjective, transcending purely financial interpretations. Subsequent marketing literature expands this concept, highlighting consumer experiences and roles as key determinants of value co-creation (Zhang et al., 2018; Nobre & Ferreira, 2017). Payne et al. (2017) alluded to the

experience of value from customer perspectives whilst conceptualising the customer value proposition in both B2B and B2C contexts.

The experience and creation of value may also involve various actors' contributions, as value can be created at micro, meso, and macro levels (Sugathan et al., 2017). Value is phenomenologically experienced and perceived during the consumption experience, so value co-creation may be considered an outcome of the service ecosystem (Ramaswamy & Ozcan, 2016) and/or bricolage of businesses (Dey et al., 2019; Getnet et al., 2019). Whilst earlier prominent scholarship (e.g. Grönroos & Voima, 2013; Brodie et al., 2011; Payne et al., 2008; Prahalad & Ramaswamy, 2004) acknowledged actors' involvement, more recent scholars have emphasised the roles of actors other than producers and their customers, raising further questions concerning how value is co-created and what motivates parties to engage in co-creation (Babu et al., 2020; Loureiro et al., 2020). In line with the above, several authors (e.g. Lacoste, 2016; Barile et al., 2020; Apostolidis et al., 2021) highlight that value co-creation can integrate economic, social and environmental dimensions, leading to the creation of 'sustainable value'. This means that value is created, not only for the actors directly involved in the process, but also for different stakeholders, including the local communities and the wider society, and can improve the sustainability of the ecosystem within which the actors collaborate. Table 1 below provides a summary of the development of the value co-creation concept and how our study aims to extend this area of research. In the following section, we explore the evolution of the value co-creation concept and its interdisciplinary applications in more detail to ascertain the theoretical gap and position the scope of our research.

[Table 1 here]

2.2 Stakeholder Value Co-Creation

The interrelationship between various actors within an ecosystem can host interactions at various levels, as service ecosystems should be sufficiently flexible to adopt different forms which accommodate the adaptive requirements at micro, meso, and macro levels. Recent scholars argue that value co-creation requires actor engagement through the collaboration of resources, knowledge and ideas (Babu et al., 2020; Loureiro et al., 2020). However, Hollebeek et al. (2020) argue that although actor engagement can support value co-creation, differing stakeholder goals and value-creating aims can generate tension and conflict, impeding the value co-creation process. This highlights the importance of research which considers the engagement of different actors within the service ecosystem and the impact of this engagement upon value co-creation.

As we have seen, a burgeoning theoretical tradition encourages analysis of value co-creation from the perspectives of customers, firms and other actors within value ‘spheres’ (Mingione & Leoni, 2020; Ferraris et al., 2018; Storbacka et al., 2016). This is particularly crucial for SMEs, who enjoy limited resources and usually aim to thrive by leveraging their business and community networks (Bryson et al., 2017; Jang & Grandzol, 2016). Often SMEs’ operations are informed by their knowledge of, and interaction with, their local communities. Business innovation and resource integration are therefore inspired by communal needs and an understanding of local business culture. For instance, local teashops in rural Bangladesh offer top-up services to smartphone users (Dey et al., 2013), poor entrepreneurial ventures based on Indian railway stations harness communal support (Mason & Chakrabarti, 2017), and small Swedish technology firms have gained sufficient differentiation through their professional service networks to meet specific localised requirements (Rydehell et al., 2019). Thus, value co-creation also involves business innovation through resource and knowledge integration and is embedded within communal and business networks (Breidbach & Maglio, 2016).

Payne et al.'s. (2008) process-based framework offers useful understanding of co-creation by identifying the three major processes - the customer value-creating process, the supplier value-creating process, and the encounter process. Ramaswamy and Ozcan's (2016) interactional framework of value co-creation identifies interactive system-environments, actors, material entities, and digital technology as key components, whilst Ranjan and Read (2016) considered co-production as integral to co-creation. Hence, co-creation precedes the consumption stage and may arise from the production and distribution of goods and services (Lemke et al., 2011). Co-production is executed through collaboration (Lusch et al., 2007) and dialogue (Grönroos, 2012), which is crucial to value creation.

Organisations need to interact with stakeholders in their networks, to generate sustainable value whilst fulfilling customer needs. Several studies have emphasised how value co-creation can help organisations achieve not only their financial, but also social and environmental, objectives (e.g. Apostolidis et al., 2021; Tsolakis et al., 2020; Lloret, 2016; Lan et al., 2017). For instance, studies of the hospitality industry have explored how developing strategies and business models which enable value co-creation can yield sustainability-related benefits. These include waste reduction (Apostolidis et al., 2021), consumer empowerment and wellbeing (Sigala, 2019), customer attraction and retention (Junaid et al., 2020; Yen et al., 2020), and improved financial performance (Lambert & Enz, 2012).

So far, most studies have focused on interactions between businesses and customers as the main driver of the value co-creation process. Nevertheless, the value co-creation concept transcends what customers experience and obtain, as value is deemed to be created, experienced, and appropriated by the wider stakeholder group. The COVID-19 pandemic detrimentally affected organizations and their wider ecosystems, influencing how businesses

interact with stakeholders in their networks to create the value they strive to deliver (Rapaccini et al., 2020). Several studies argue that disruptive events demand innovative solutions and stakeholder network engagement if businesses are to adjust and overcome challenges such as loss of markets, collapse in consumer demand, supply chain disruption, and loss of resources (Cankurtaran & Beverland, 2020; Crick & Crick, 2020). This engagement, however, should transcend the supplier-consumer approach to value co-creation, as a dyadic perspective of stakeholder engagement may oversimplify business relationships (Alexander et al., 2018; Okazaki et al., 2020). Therefore, in line with the arguments of earlier studies that highlighted the important role that different stakeholders play in value co-creation (e.g. Alexander et al., 2018; Hollebeek et al., 2020; Loureiro et al., 2020), our study explores beyond the narrow boundaries of business-consumer relationships, considering value co-creation as an interdisciplinary concept relating to different stakeholders who influence (or are influenced by) the value created by the business during the crisis period.

In addition to the above, limiting the scope of value co-creation may inhibit a sector's sustainability, as sustainable value co-creation requires wider stakeholder engagement (Annosi et al., 2021). To date, limited research has explored the spill over effect that innovation and value co-creation activities have on the wider network of stakeholders and organisations (e.g. Barlie et al., 2020; Sashi, 2021; Lacoste, 2016). Hence, questions remain in relation to the nature of, and motivation towards, sustainable value co-creation by organisations and their stakeholders, and the resulting benefits during crises. In our study, we propose a framework which focuses on value co-creation, acknowledging the impact of the pub sector on financial and social sustainability within local society, and the role of different stakeholders in the co-creation process.

3. Methodology

3.1 Research Context

We chose the pub industry as an example of a sector with an extensive and dynamic service network, which plays an important role in supporting sustainable, communal interactions and contributes to the local and national economy (e.g. Hubbard, 2019; Cabras & Mount, 2017; Jones et al., 2013; Roberts & Gornostaeva, 2007). Pubs are important to British culture, supporting social sustainability in local communities, from small villages to major cities (Cabras & Mount, 2017; Knox & Mayer, 2013; Roberts & Gornostaeva, 2007). Social sustainability comprises concepts relating to inclusivity, wellbeing, social capital development, and support for the local community. It also incorporates factors affecting the ability of a community to sustain itself, such as charitable giving, trust, and place attachment (e.g. Balderjahn et al., 2018; Jones et al., 2016; Dempsey et al., 2012).

In this context, pubs are institutions which support social capital development, community cohesion, and liveability (Cabras & Mount, 2017; Knox & Mayer, 2013; Roberts & Gornostaeva, 2007). UK pubs provide the physical settings for social aggregation and interactions, which in turn facilitate social relationships between residents, improving communal wellbeing and social capital (Cabras & Mount, 2017; Jones et al., 2013). Furthermore, access to pubs (among other services) is considered an indicator of social inclusivity (e.g. Fahmy & Sutton, 2018), and pubs also support local societies by participating in CSR and charity initiatives (Jones et al., 2006). For instance, in the 2019 ‘Hugs4Snugs’ initiative, many UK pubs invited donations of unwanted clothing in exchange for free beer (Caddy, 2020).

In addition to their contribution to local communities, pubs create economic sustainability benefits. Economic sustainability is a business's ability to generate profit for survival while providing customer value and benefiting the local and national economies.

Therefore, indicators such as business revenue, profitability, employment, and contributions to other business sectors make up this dimension of sustainability (Roberts & Tribe, 2008).

The above context suggests that pubs can offer multiple sustainability benefits, both social and economic. Therefore, we view pubs as enabling the creation of ‘sustainable’ value through their interactions with stakeholders such as employees, customers, local businesses and the local community (Lacoste, 2016). Nevertheless, the enforced closure of food and drink business premises in March 2020 greatly affected the sustainability of the pub industry and the sustainable value which it could create for different stakeholders (Caddy, 2020).

Before the COVID-19 outbreak, UK pubs and restaurants employed 4% of the national workforce - half in unskilled roles - attracting an average weekly spend of £27.40 per household (Coronavirus & the Economy, 2020). However, they had already declined in number from 50,000 in 2008 to 39,000 in 2018 – a decrease of 23% in a decade (ONS, 2018) – due to government and police anti-drink driving policies, cheaper canned and bottled alternatives available in shops, and a decline in wages in real terms during the same period (FullFact, 2018). From 2001 to 2018, the percentage of UK household income spent on alcohol consumed outside the home fell from 2.2% to 1.4% (ONS, 2020). With the addition of 2020’s lockdown measures, UK pubs appeared to be facing a perfect storm. By May 2020, six weeks into the government’s “Stay at Home, Save Lives” campaign and enforced closures, 65% of pubs had suspended trading entirely, jeopardising many jobs (Coronavirus & the Economy, 2020). The following table (Table 2) demonstrates the impact of lockdown measures on UK pub beer sales. As such, the sector needed to respond to pandemic-related challenges with agility, flexibility, and resilience.

[Table 2 here]

3.2 Research Philosophy and Strategy

We adopted an interpretivist stance and exploratory approach appropriate for elucidating and analysing strategic processes and interactions within a dynamic environment. Our qualitative enquiry was underpinned by in-depth interviews with pub and brewery owners, managers and customers, and netnographic and offline observation of pubs' engagement with customers. This facilitated the emergence of deep insights into pubs' evolving strategies. We interviewed pub owners and managers to explore their business approaches and strategies for coping with difficult trading conditions. Offline observation and interviews with consumers further revealed pubs' operations, as well as their interactions with, and influence on, customers and stakeholders. Subsequently, we studied some pubs' social media (Facebook) pages and conversations on a Facebook group on pubs and beers to analyse their business innovations through technology during the COVID-19 period. As such, our multi-method approach facilitated a deeper understanding of the phenomena from multiple perspectives and triangulated the findings.

3.3 Sampling and Data Collection

We interviewed 12 pub owners, landlords, and brewers/managers from Sheffield, Newcastle, North Yorkshire, and London. This purposive sampling (Bryman, 2012) was necessary because government trade restrictions have differed in severity according to local COVID infection rates. We particularly sought pubs which introduced home delivery of bottled and draught beer, to explore the characteristics and influence of this new business model. We also interviewed ten customers from the same locations to assess consumer perceptions of, and engagement with, the innovative business models. These interviews allowed us to explore the value offered by pubs and breweries, and how those might be co-created by customers and other stakeholders.

We used netnography to complement and triangulate the interview responses. As a

pragmatic, interactionist method, it considers the online environment as a social world and online data as the social actions of online users (Kozinets, 2010). Netnography enables unobtrusive researcher immersion into online communal interactions (Kozinets, 2010). Following extant literature (Kozinets, 2002; Dey et al., 2018; D'Ambra et al., 2019) we commenced netnographic observation by identifying appropriate online forums for this study. We chose Facebook pages and forums as our interviews with pub and brewery managers and owners had confirmed the dominance of Facebook in their online activities. We pasted and coded relevant posts and customers' comments into NVivo, and analysed consumer perceptions of business innovation. We also observed and analysed a public Facebook group of 1,800 pub owners and consumers to identify key industry trends and concerns.

[Table 3 here]

Data collection took place between May 2020 and December 2020. We commenced by identifying and recruiting four pub/brewery owners as participants, conducting four interviews, and following their pub/brewery's Facebook pages longitudinally throughout the data collection stage. Emerging insights from these interviews and netnographic data informed subsequent interviews, facilitating triangulation. We conducted most interviews with pub/brewery owners (n=10) and all consumer interviews via Zoom, as face-to-face interaction was impossible due to lockdown legislation. We conducted two interviews with pub/brewery owners through Skype/telephone, where participants were uncomfortable with Zoom. Nevertheless, identifying and recruiting participants during lockdown presented significant challenges. We selected customers from the same regions as the participating businesses.

The netnographic data analysis entailed reviewing publicly shared posts and comments from Facebook groups. We adopted a passive approach to netnography, neither revealing our research activities to community members, nor participating in online exchanges. This ensured authentic, uninhibited participant interaction (Mkono & Markwell, 2014). Despite certain researchers questioning the ethics of covert online lurking and observation (e.g. Kozinets, 2015), its pragmatic advantages in uninhibited observation (Wu & Pearce, 2014) and the non-sensitive nature of the research topic justified the stance. We joined the group as members in May 2020, read discussions thoroughly, made research notes, and pasted relevant ‘threads’ (conversations) from March to December 2020 into a Word document for analysis. We transcribed interviews, and any identifying comments and context from interviews and netnographic data were omitted to preserve the anonymity of participants and organisations. Table 3 summarises the data collection strategy.

3.4 Data Analysis

To commence analysis, we adopted Corley & Gioia’s (2004) qualitative data structure framework, collated data thematically by iterating between emergent patterns from interviews, then analysed Facebook group conversations and the extant literature for triangulation. We used multi-method triangulation to ensure reliability and validity of the findings of our qualitative research (Carter et al., 2014; Akter et al., 2020). Figure 1 summarises the research design for this study.

[Figure 1 here]

First-order initial concepts emerged from a back-and-forth approach to interviews and Facebook data, gradually cementing the key categories. In the second stage, we undertook abductive second-order investigation of themes, questioning whether the emerging themes suggested concepts which might help explain the observed phenomena (Gioia et al., 2013).

Accordingly, we juxtaposed theory-driven codes with the emergent codes from the data. In the third stage, we collated the grouped codes and classified them to build theories. Figure 2 summarises our coding strategy. In the findings presented below, all respondents and organisations have been anonymised with pseudonyms.

[Figure 2 here]

4. Findings

A close reading of interview transcripts and netnographic data revealed a chronological pattern in which breweries and pubs traversed three key stages of response to government restrictions and lockdown conditions, often at short notice and in unanticipated directions. As restrictions came into effect, businesses adopted defensive ‘survival’ strategies to buffer the commercial and social impacts of lockdown. In the second stage, they found more enduring ways of inhabiting a ‘new normal’ through alternative products and service delivery, thereby ‘securing’ their previously established positions. The final stage represents their determination to capitalise upon desirable aspects of the new conditions. Publicans sought a ‘sustenance’ of benefits that arose from their recent innovation and experimentation in commercial and consumption practices. We classify these three stages of innovation as 1) survive; 2) secure; and 3) sustain, forming the framework of our analysis. For each stage, we identify specific external and internal drivers of adaptation, as well as how these changes benefit the organisations, the relationships between and with suppliers and/or customers, and the community at large.

4.1 The ‘Survive’ Stage

The principal external driver of pubs and breweries into the survival stage was the anticipation and eventual implementation of the first national UK lockdown. When the expected March 2020 lockdown was implemented, pubs and breweries hurriedly decided how best to sell or preserve their existing stock of beer. As the owner of ABC brewery commented, this was their first concern: *“We had a lot of beer in the tank.”* This dilemma was compounded by uncertainties surrounding lockdown duration. To survive temporary closure, pubs and breweries responded in this stage by increasing their canning operations, announcing takeaway sales on social media, and opening web shops for deliveries and click and collect purchases.

Canning draught beer became a widespread response to lockdown (as shown in Appendix A). The ABC brewery owner further explained:

“We made the decision to increase the amount that we're going to can... [and] to develop our own web shop so we weren't relying on selling to other people because we didn't know how many other people we would be able to sell to... we didn't know whether or not we would have to get a delivery deal nationwide...”

Similarly, real ale enthusiast Ted heard of mobile canning services:

“[Brewery ‘S’] did it...a van that goes to them, and they’ll have ale ready, and they’ll actually can them...the guy drives around to different breweries, and it’s all set up like this canning line.”

Clearly, this nimble operation enables breweries to employ a service provider to overcome barriers to market without investing heavily in time, space or capital equipment.

Elizabeth, another ale enthusiast, also noticed a well-known chain of craft beer pubs creating novelty and word-of-mouth by canning beer in front of customers:

“Just the novelty of it was, like, fresh out...they had some sort of strange mechanism...being pushed straight into the can, and the can was being sealed right

there and then...you can see them pouring the drinks that are coming straight from the pump...and then they put it in this can sealed.”

Although canning facilitates takeaway and home consumption, Elizabeth noted that the bar also used the technique when serving customers using the beer garden. Whilst unnecessarily costly and wasteful of resources, this approach may help nurture customer familiarisation with, and acceptance of, techniques that would subsequently become necessary.

Our interview and netnographic data show that some breweries opened web shops (as shown in Appendix C) and/or introduced smartphone apps, letting customers browse and pay for collection. One representative commented that the initiative was “*our Plan Z*”, and that “*we may well be adding new letters to the alphabet soon, as we are busy working out how best to adapt.*”

This appeared not the latest step in a predetermined process, but an idea emerging partway through their lockdown journey. Similarly, XYZ Brewery introduced a web shop in May 2020, “*selling draught and craft (and snacks) for free local delivery...some whisky/cocktails/spirits*” – an embellishment of a survival tactic by extending the product offering beyond real ales and basic food. Manager of CDE brewery explained:

“The servers are clicking collect so that people could buy beer and if they were relatively local to Sheffield, they could have just arranged to come in and pick it up from us.”

Consumer Daniel likewise commented that one brewer “*had a link online...from Twitter...to the homepage...straight to the order, and then it just, it was delivered.*”

However, increasing canning operations to sell beer as takeaway only partly addressed stock perishability. Businesses with significant real ale stock, normally stored in casks, had to find more creative solutions to avoid waste and losses:

“We had a reasonable amount of beer in cask...we don’t want to pour it down the drain. So, we initially found a source for someone that did...these cardboard boxes at five litres and ten litres, which have a plastic bag inside them... And this could be distributed around the country...so, we started out doing that and the sales went well.”

Some pubs asked customers to bring containers to purchase ale for takeaway. For instance, EFG pub announced on Facebook (16th April):

“We have a few casks of beer left and we will be open this Friday and Saturday from 3pm to 6pm for off sales. Cask beers are £2 a pint. We have some plastic containers for sale - or bring your own bottle or beer jug to fill. We tried limited off-sales last weekend and are confident that we have a system allowing only one person in at a time that keeps people physically distant and safe. We are also only accepting card payments. Please come along if you are already going to be out shopping or exercising - otherwise - stay home, stay safe and help protect the NHS.”

Likewise, GHI posted on Facebook, (28th April):

“We are trialling opening for off sales on cask and keg this week to allow us to keep the staff on 100% wages (collection only). We have a limited supply of 1 pint and 2-pint milk cartons available so please bring your own clean containers if you have them. Strict social distancing will be in place.”

Meanwhile, some businesses innovated frugally by repurposing existing space for commercial activities. Facebook conversation threads showed that ABC brewery recognised opening a shop as an incremental revenue stream that could enhance their adherence to government criteria for selling alcohol. They therefore turned their “warehouse...into a warehouse with a shop in it”, also gaining coverage on a regional news and magazine programme.

4.1.1 Resulting Benefits

For pubs and breweries required to close and lose on-premises custom, quickly pivoting to takeaway sales was essential to avoid permanent closure. To assist local businesses, the Campaign for Real Ale (CAMRA) and Society of Independent Brewers (SIBA) announced on 6th May the launch of Brew2You, a national app allowing customers to order beer for collection or delivery. Pubs, breweries and beer shops have traded on the platform, which takes the order and payment whilst the seller fulfils the order. CAMRA's National Chairman, Nik Antona, explained: *"The longer the lockdown lasts, the harder hit our pubs and breweries will be, and the more we risk many closing their doors for good. We urge beer and cider lovers to shop local and support the great beer and pubs trade using Brew2You so that we still have pubs and breweries at the other end of the crisis"* (CAMRA 2020). This partially constitutes an appeal to consumer long-termism. Notably, the app is not-for-profit, and operated *"by CAMRA so that suppliers receive the full price charged for their products, without any commission charged to them. A small fee for use is charged to cover the Stripe payment service"* (CAMRA, 2020). While most businesses were focussed on making changes simply to survive temporary closures, some like ABC brewery experienced unanticipated increases in demand due to their adaptations, leading them comfortably into the 'secure' stage.

Despite increasing canning operations (please see Appendix A and B) and frugal innovation for selling takeaway cask and keg ale, many businesses still had surplus stock. Rather than 'pour it down the drain,' many offered discounted and free beer to consumers and retailers, fostering goodwill and profit maximisation. For example, the landlord of a real ale pub in rural North Yorkshire describes an initial strategy which benefitted customers as he gave away excess beer:

“We told people to come at midday the following day, pass us their containers through the kitchen window, and we’d pour them the leftover ale...they’ve all paid for it over the years anyway. We gave away around 150 pints” [customer purchase price approximately £700].

Discounted and free beer did not simply build customer goodwill but helped pre-lockdown profit maximisation. He further explains:

“...the breweries had deals to get rid of their stock and give all their pubs an opportunity to get some discounted ale, and that allowed everyone to trade until lockdown.”

As real ale is unpasteurised, it perishes quickly. By discounting ale heavily, brewers enabled pubs to stock up and risk having surplus unsellable beer at lockdown, whereas without such discounts, pubs would have pursued a more cautious stocking strategy, perhaps running out prior to lockdown, missing brisk trade, and undermining customer goodwill. However, Facebook conversations show that other breweries and pubs, such as the HIJ, introduced discounts – *“50% off our craft cans as we know [how] much lockdown sucks!”* – to accompany later initiatives, in this case a food and drink collection scheme. Therefore, discounting was not simply used to clear perishable stock, but to maintain customer relationships and drive sales later in lockdown.

A second unanticipated benefit for consumers and businesses was a surge in activity on the beer rating site Untapped. For businesses, customers were providing comments and feedback on specific beers, which was otherwise difficult to communicate. As Ted recalled:

“When I drink stuff, I’ll put it on social media like Untapped and rate beer. You tend to post what you’re drinking, and I’ve got friends to do the same thing...and you’ll be seeing what other people are drinking at the same time.”

The owner of ABC brewery observed:

“drinkers give it a rating out of five [on Untapped] ...some people won’t make any comments, but other people will also make videos and talk about the flavour of the beer and whether they liked it, whether they were disappointed or whatever. So that’s interesting for us as well, particularly with the newer beers.”

For consumers, Untapped became a useful site for up-to-date information on available beers at different pubs. As drinkers need to plan visits to pubs more carefully under social distancing measures, Ted’s pub capitalised on this by enabling those customers to maximise the efficiency of their nights out by planning to visit establishments which have stock of their favourite ales. They potentially also capitalised on this increased level of consumer planning, using drinkers’ pre-trip internet research as a ‘shop window’ to drive footfall.

While the lockdown temporarily ended pub visits as important, regular social occasions for customers, the move to takeaways and deliveries encouraged consumers to socialise in other ways. Laura, a pub regular, explained that she had started visiting a specialist craft ale shop weekly to combine walking exercise with the functionality of restocking, and that *“I’ve had some Zoom quizzes with the family. You know, we’ve bought drinks from there for that.”* Likewise, she described some family friends who *“put a gazebo in the garden...and sourced a keg every Saturday...and then my mates go around and drink in this gazebo in the garden.”* Although subsequent government lockdowns have not permitted this, such an improvised consumer solution may compete with pubs upon reopening.

In a similar manner, Ted recalled how *“we got an ice cream van for a kids’ party to pull up, and for Father’s Day you can get someone up with a beer van to pull out the front. He was actually doing house delivery. So he’d come around and he’s got a van, and he’s kitted out with beer taps on it and stuff.”* Here, novelty, convenience and leisure are combined to find a new, mobile route to market. Elsewhere, netnographic data appertaining

to the CDE pub and brewery scene demonstrated that customers were increasingly using third party delivery providers to fulfil orders from pubs and especially breweries, and that these often worked in conjunction with food deliverers, including one which specialises in *“afternoon teas, dine-in meals, handmade treats and hampers.”*

4.2 The ‘Secure’ Stage

Businesses reached the ‘secure’ stage upon fully and successfully transitioning to takeaway and delivery sales via the aforementioned ‘survive’ initiatives. In the ‘secure’ stage, uncertainty around subsequent lockdowns, and changes and reversals in government rules throughout the summer and autumn of 2020, remained the dominant external driver of more structured innovation, collaborations, and continued community engagement. With the first lockdown lifted and pubs reopening in July, questions around the safety of patronising pubs plagued the industry. For example, at the local level, Sheffield City Council tweeted warnings against visiting pubs (2nd July):

“Great news that the pubs are opening this weekend, right? Do you know who is happiest? #Coronavirus. The virus loves crowded places and thrives on close contact. It won’t be queuing to get inside the pub – it will already be there waiting for you. #DontBeAContact #StaySafeSheff.”

This prompted strong reactions on the Facebook pages for pubs, breweries, and enthusiasts, forcing the council to retract the tweet and apologise. Nonetheless, business and consumer reactions alike demonstrate a widespread sentiment against perceived government bumbling, neglect of local businesses, and the prioritisation of the needs of big businesses.

The internal drivers characterising the ‘secure’ stage include: 1) more structured innovation in brewing (breweries) and subscription sales (pubs); 2) community engagement through online events; and 3) collaborations between businesses, and cause-related

marketing. Our Facebook data suggests that, whilst some breweries and pubs implemented certain strategies in March and April 2020 as the first restrictions came into force, such as mailing to subscribers lists of beers for pre-order, others only reached this stage in October or November. This is perhaps due to positive factors such as holding cash reserves, or negative ones such as taking longer to acquire the necessary resources or expertise.

Businesses like ABC brewery translated their successful adaptation into further experimentation with other new formats, such as multipacks and 5-litre mini casks (more suited to distributing their branded boxes), and the need to start brewing again, making innovative product and process changes:

“We started emptying tanks and then saying, okay, well, what are we going to brew back into these tanks, because we don't know how long the lockdown's going to last... we wanted to transition more into can and into keg... and so when we started having the tanks available, we said, okay, there's no advantage in brewing our regular beers because we don't even know when the pubs are going to be open again. So, we're brewing beers to sell direct to consumers... so we said, okay, well let's play. Let's do some interesting beers.”

In addition to experimentation with new beers, real ale enthusiast Ted notes that during lockdown, some breweries began offering consumer subscriptions by direct debit or standing order: *“like a monthly club where you subscribe, and they send you six ales a month...a lot of them are trying to get regular repeat business that way.”* In a variation of the ‘book club’ model, these breweries establish automated customer orders by using financial mechanisms, so that customers have to opt-out rather than opt-in to purchases. This might be interpreted as a relationship marketing initiative to increase customer touch points, add value and focus on customer lifetime value rather than conquest sales. Ed views this as pubs’

attempts to establish exit barriers for new customers, equating it with on-premises tactics such as *“a pub quiz or some sort of music theme to try and get people to stay a bit longer.”*

Ed also explained how some pubs have mimicked consumers' home-based strategies for coping with lockdown and tapped into them. For example, *“Zoom calls where they'll do tastings...I know some pubs are doing that as well. They'll sell you a case of beers or ciders, and they'll do a tasting sort of thing. So everyone tries the same stuff. I've been on a virtual beer festival as well...they have a set budget and go through and explain all the different views”*. This approach appropriates technology associated with work and family relationships, reapplying it to enable remote, synchronous social occasions between *paying* customers.

We also found more inter-organisational collaboration during the secure stage. For example, Newcastle-based LMN brewery announced on Facebook a collaboration with Sheffield-based CDE pub and brewery, to produce a new beer offering in June 2020, and in October they collaborated on a new gin range with a Derbyshire distillery. In August, HIJ and ABC breweries co-produced a new beer, and ABC formed a strategic alliance with a FairTrade coffee producer and a local chocolatier to sell limited edition beers. In October 2020, the EFG pub in Sheffield joined the PQR brewery to sell their growlers (bottles sold for transporting draft beer) during Tier 3 lockdown (stringent localised lockdown conditions). Although such collaborations could be practiced before lockdown, they are absent within our data until businesses, especially breweries, reach the secure stage. Some collaborations were used in cause-related marketing, such as the FCQ/HBW collaboration, in which some proceeds were donated to frontline workers in Newcastle. In an interview, the owner of ABC brewery explained that their collaborations were motivated by a new confidence in their ability to launch successful new offerings under the lockdown conditions.

4.2.1 Resulting Benefits

Breweries have benefitted from sales and community engagement through takeaway and delivery and achieved an unexpected creative freedom within their brewing and brand consolidation. For example, ABC brewery started brewing unusual beers: *“We’ve done a lot of interesting stuff that we wouldn’t really have had the latitude to do without the lockdown.”* ABC is particularly passionate about stronger beer styles, so the restricted trading conditions provided opportunities to focus on them. Our netnographic data also reveals that breweries such as FCQ and HBW have been able to focus on their branding, such as revised/new logos and images, as this excerpt from HBW’s 16th September Facebook post illustrates:

“It is looking unlikely that we will be open this year, but this delay, although inconvenient, has been a real blessing in disguise and given us time to spend on the planning and organisation of the business and the brand ready for an even better launch campaign.”

The security benefits stemming from online and takeaway sales look very different for pubs than breweries. Some pubs transformed into crucial suppliers of meals for vulnerable community members. For example, the initial customer benefits of heavily discounted or free ale at William’s pub evolved into something more strategic as he extended his food offering from meals sold through the kitchen serving hatch to customers who were missing the convenience and community of pub life, to more vulnerable housebound locals. *“We have essentially been a meals-on-wheels service,”* he explains, drawing a parallel with a lifeline service normally provided by local government to elderly and infirm citizens. Likewise, he noticed that some people in the village had *“started ordering in larger quantities because they have started to see it as a solution to looking after elderly and vulnerable people in their*

bubble” [i.e. – the small number of close family members with whom the government allows people to have contact during lockdown].

Explaining the role of his pub within the village, William demonstrates the reciprocity which helps blur the boundaries between supplier and customer, organisation and environment:

“The pub is their meeting place, an overflow living room, a committee room for the clubs. For a lot of locals, it’s the place where they met their partners, where they had their wedding receptions. I suppose a few of them must have had their first kiss in there...they always look after us. They’ve brought us vegetables and grouse and pheasants, which have been a massive help for us while our income has been restricted.”

Here, William provides tradition and continuity as a cornerstone of the community, receiving nourishment – albeit perhaps poached from the local gentry – in return.

4.3 The ‘Sustain’ Stage

During the ‘sustain’ stage, organisations plan for the ‘new normal.’ Rather than anticipating a full return to previous practices upon resumption of unhindered (or less hindered) trading conditions, breweries and pubs leverage experiences gained during the ‘secure’ stage to select which initiatives or strategies to retain or expand, and which to disengage or scale down.

Their decisions may account for changes in microenvironmental conditions such as decreased consumer spending power or the pent-up demand for socialising, and in internal environmental conditions such as increased managerial experience of innovation and entrepreneurship. The data suggests that retail and hospitality industry members are keen to enter the ‘sustain’ phase but are often prevented by uncertainties around trading conditions and the unpredictability of the pandemic, government responses, and economy.

The key *external* driver within the ‘sustain’ stage is the continued uncertainty around the duration of lockdown conditions, the level of restrictions likely to be in place when trading resumes, and the extent to which vaccinations will produce a permanent or stable solution. The owner of ABC brewery commented that:

“It depends how quickly it rolls out and, you know, what happens to overall infection rates and...the number of people that are affected versus the number of people who were vaccinated and...I think there's still going to be some restrictions on our lives for some time to come. But how much we just don't know.”

As elsewhere, his ability to plan a sustainable strategy is thwarted by uncertainty.

The key *internal* driver in this stage appears to be concern over the anticipated customer response to medium and long-term changes. As William explained:

“I know what they want now, and I'm busy giving them that...I also know what they've wanted historically...but what I don't know is what they're going to want in the future. They might all be terrified of catching the virus and want to stay at home. They might realise that they've quite enjoyed their home brew or lying on the sofa with a joint and a movie – the younger ones, I mean – and visit the pub less frequently. And if I try to second guess what they want, I risk doing something to discourage their custom.”

Although William and others had taken the opportunity to develop a healthy dialogue with customers during quieter trading conditions, conducting informal customer research, post-lockdown consumer preferences and behaviours are unpredictable due to uncertain host conditions. Whilst many participants expressed a desire to plan strategically for a post-pandemic world, they were largely prevented by the unpredictable, dynamic and constantly evolving nature of ‘the future’. Therefore, the research yielded far less data on the ‘sustain’ stage of innovation than for ‘survive’ and ‘secure’, although future research may address this.

4.3.1 Resulting Benefits

Pub owners and landlords benefitted from increased organisational efficiencies, skillsets and knowledge gained through responding to lockdown, which would not have been developed under ‘normal’ conditions – to borrow a British adage, ‘necessity is the mother of invention.’ William found that, when implementing strategies to trade during difficult conditions, he enjoyed some unanticipated benefits. For example, to deal with the peaks and troughs in food sales (in an establishment where 70% of the income is ‘dry sales’), he rescheduled staff shifts into blocks to maximise productivity and implemented a booking system to minimise wastage:

“Our regulars phone us, tell us when they would like to pick up their meal, and we plan to get everything ready at the requested times...our chef is timetabled to work Thursday to Sunday for 12 hours each and have Monday to Wednesday off.....On Thursdays and Fridays I do prep, but there is more demand on Friday evenings as people want to start winding down for the weekend, so we look after that.”

William continues to explain that batter can be produced in bulk and frozen, ready for quick, unskilled use during the week in Yorkshire Puddings, pancakes and deep-fried food, whilst minced beef and tomato sauce can be stored to form the basis of pasta Bolognese, cottage pie and other dishes. In this approach, not only is William using synchro-marketing to manage supply and demand; he has also rationalised and simplified the menu, cutting food wastage and (skilled) preparation time.

Consumer Elizabeth complained that having allocated timeslots in which one may be admitted to a table to drink is not conducive to leisurely outings to several pubs:

“it’s not something you can do like you can with food...and I think that it has definitely impacted footfall... [a staff member] seemed to take great pleasure in saying we’re full

and you can't come in, and then you look around and the tables aren't [all being used]."

Whilst most owners and managers want plentiful customers, it appears that some staff were abusing lockdown restrictions to lower their workloads – perhaps a form of co-destruction in which the government is destroying some trade through necessity, but some staff are reducing trade through self-interest. She did however notice that some bars with a convenient layout and proactive management introduced a one-way system allowing her to “go to the bar...[get] your drinks, and...then you could come back down and sit outside.” William explained that the table booking system, introduced when pubs reopened from the first lockdown, might benefit both his business and customers if retained:

“It would maximise use of my tables. People wouldn't linger over desserts and coffees and prevent the table being used for someone walking in looking for a meal. On Sunday afternoons, I could probably use every cover seven times between midday and 8 o'clock...on the other hand, I'd probably have to turn away quite a few walk-ins.”

If necessity has borne a benefit, William is mindful of risks produced by evolving customer practices:

“I don't want to keep selling anything on a takeaway basis which steals my own sit-down business...I don't want people paying £12 for a meal in a carton to eat in the beer garden when I can serve it in the dining area for £16 or £18.”

Clearly, William understands that the ‘new normal’ could cannibalise profitable elements of his business, and he worried about how to manage precedents.

4.4 Summary of Findings

The findings indicate that breweries and pubs pass through three distinct phases of innovative strategizing as they adapt to the difficult trading conditions arising from COVID-related lockdowns. First, a largely reactive ‘survive’ stage in which managers and owners draw upon existing or readily available knowledge to address urgent existential threats to their businesses. Typically, they seek to liquidate stock – even where this necessitates temporarily selling at a loss. They simultaneously create or expand other routes to market, such as web shops, and explore minor innovations such as the canning and off-site distribution of real ale.

Second, the ‘secure’ stage is characterised by businesses adopting more entrenched and stable positions where inter-organisational collaboration is used to achieve economies of scale, and consumer relationship-building initiatives are exploited for the commercial purposes of customer retention and for more community-oriented purposes. A liminal mentality is evident at this stage, as actors expect their strategies to endure for weeks and months but not to be retained wholesale upon resumption of ‘normal’ conditions. Third, the ‘sustain’ stage, although less well evidenced by the emerging data, entails adoption of a longer-term orientation and a refocus on commercial outcomes, as traders plan to discontinue demanding and costly lockdown measures post-COVID but retain and expand those profitable innovations which had been discovered unavoidably and serendipitously during restricted trading conditions. We also observed that the three distinct beneficiary entities – the businesses, the relationships between businesses and suppliers/customers, and the community in general – benefitted in different proportions from one stage to the next, either by design or default. Table 4 summarises the findings and offers a taxonomy of different values sought and enjoyed by the stakeholders:

[Table 4 here]

5. Discussion

Our research explores survival and growth strategies amongst UK pubs and breweries during the COVID-19 pandemic period. The findings provide deeper insights into how the industry was affected after the outbreak, what factors contributed to subsequent developments within the industry, how pub and brewery owners and managers responded, what measures they undertook at different phases of the COVID-19 period, and how they planned to sustain their businesses and retain some of the strategies past the lockdown period. As such, we can unpack their strategic decisions to analyse how innovation can sustain and create value for various stakeholders.

5.1 Value Recipients

Concurring with Lee & Lim (2018), we argue that the agile, innovative response during a crisis period is often driven by collective efforts, leading to value for multiple entities. Therefore, the value is co-created and co-consumed by multiple stakeholders. The findings indicate that the benefits derived from the innovation add value to three major parties: 1) pubs and breweries; 2) customers and support businesses; and 3) other stakeholders.

5.1.1 Pubs and brewery benefits (business value)

As we present in detail above, breweries and pubs benefit from their own survival and growth strategies, driven by business innovation, resource sharing, and customer and community engagement. We term this part as business value, which denotes financial value generated at the micro level. As mentioned, pubs' continuous operations and their financial sustainability contribute to local employment, boosting local economies by encouraging and supporting local suppliers.

5.1.2 Customer and support business benefits (experiential value)

As the difficulties faced by UK pubs and breweries during the COVID-19 crisis affected the entire supply chain, the innovation initiated by pubs and breweries also enabled the growth of support businesses, such as mobile app services and packaging companies, creating a positive feedback loop of mutual support. This symbiotic relationship between pubs, breweries, and support businesses creates a bricolage in which the ecosystem is a mutual supporting mechanism. We also noted the strategic collaboration between breweries and pubs from two adjacent regions and which are not direct competitors of each other. As such, business innovation by one organisation benefits others, and collaboration between two organisations may facilitate innovation.

Our customer interviews also highlight the non-monetary form of value delivered through the supportive network of businesses. The functional, social, and psychological utilities generated by consumption of alcoholic beverages in general, and during the pandemic time in particular, are significant to consumers' daily lives. Essentially, this constitutes value in experience, and we classify it as experiential value. Although consumers profoundly missed the social interactions of visiting pubs, continued product availability enabled them to re-create some of the experience by arranging family garden parties, or by sharing consumption experiences with other beer enthusiasts on online platforms. Hence, co-creation is not confined to the organisational level, and it continues through the consumption stage. Inventive measures by consumers are equally important in adding to the value in experience.

5.1.3 Other stakeholders' benefits (spill over value)

The benefits derived through organisational innovation go far beyond the realm of industrial entities and consumption spheres. Pubs remain at the fulcrum of UK community life, offering employment, socialisation, and dynamic inter-relationships between community members. As

such, we have identified the community as a significant recipient of value generated through pub and brewery innovation. Likewise, the survival and sustainability of pubs and breweries has significant impact on the macro-economy of the UK. The UK government's efforts to support the hospitality industry in general, and pubs in particular, exhibit the importance of this economic value. Nevertheless, pub and brewery innovation has trickle-down benefits for local communities and contributes to the national economy. We have termed this as spill over value, which goes beyond producers and suppliers.

[Figure 3 here]

Although the identification of the aforementioned value recipients, and classification of different types of value for different stakeholder groups, focuses on pubs and breweries, this taxonomy (Figure 3) is potentially applicable beyond the sector. In this industry-specific study into the nature and outcomes of value, we endeavour to highlight an understudied area within the value co-creation scholarship – a lack of focus on the recipients or beneficiaries of value. It is argued that innovation drives value co-creation through engagement and interaction which go beyond the producer-customer dyadic level (Loureiro et al., 2020; Dey et al., 2018; Roy et al., 2018). However, there is a lack of clarity in existing literature about how value is shared and distributed amongst wider stakeholder groups in various shapes and forms. Our taxonomy addresses this gap in the literature.

The recognition of wider diffusion of value is the first step to assess and analyse how various stakeholders can contribute, and why they contribute, to the process. This is discussed in the next section. We partially agree with Storbacka et al. (2012) by identifying the interrelationship between meso level actors in the value co-creation process. Existing literature discusses social value (Ratten, 2020) and sustainable value (Laukkanen & Tura,

2020) to highlight the transmission of business and customer value beyond the producer-consumer dyadic interface. Our paper extends this work by identifying the key beneficiaries to ascertain the value co-creation process and liberate the concept from a customer-driven experiential paradigm.

5.2 Value Co-creation Process

Our findings suggest that the value co-creation process by UK pubs and breweries during COVID-19 trading conditions involves three major phases, characterised by the strategic pursuits of the businesses (Figure 4). In the findings we mentioned that pubs and breweries survived, secured, and sustained during the COVID-19 time through co-creation. Based on that we now identify three core strategic priorities. These are: (1) survival; (2) security; and (3) sustainability, captured within the 3S model presented in figure 4 below. [Figure 4 here]

5.2.1 Survival

Innovation-led value (Ortiz-Villajos & Sotoca, 2018; Bosma et al., 2004; Van Praag, 2003) and survival of business entities (Côte-Real et al., 2017; Bercovitz & Mitchell, 2007) have been widely discussed in academic literature. However, by studying the creation of value by resource-constrained SMEs in a crisis situation, deeper and richer empirical evidence is available to strengthen the conceptual underpinning for business survival through value co-creation. The first phase of UK pubs' and breweries' strategic pursuits during the COVID-19 period, as presented in the findings, involved immediate measures to ensure the survival of their businesses. Most had insufficient time to prepare themselves for the first (March 2020) lockdown, although later stimulant packages and furlough schemes provided financial support to businesses.

Mere survival was the key priority for those businesses, particularly the small and medium sized concerns. As respondents mentioned during interview, they attempted to reduce the workforce to bring operational efficiency, and some resorted to frugal innovation in the form of arranging home delivery of freshly brewed beers and ales using paper cups and plastic containers. The concept of frugal innovation has been of much interest in the context of developing economies (Fischer et al., 2020; Winterhalter et al., 2017; Hossain, 2017), and this appeared entirely applicable to our research context. During the ‘survive’ stage, businesses were unsure about the duration of the pandemic, lockdown, and government support, and also how customers would respond. Uncertainty within the external environment limited their strategic options.

5.2.2 Security

With pub and brewery owners adapted to the evolving situation, the announcement of the UK government’s financial packages, gave some basis for short- to medium-term financial sustainability. Buoyed by some clarity in the external environment, owners were also encouraged by the positive consumer response. The sharing economy model in the hospitality sector has been driven in recent years by organisations such as Uber Eats, Deliveroo, and Just Eat. This established precedent perhaps inspired business owners to introduce home deliveries of beer. While the strategy was successful early in lockdown (i.e. – the survival stage), pubs and breweries formalised the process during the ‘secure’ stage. This demonstrates an intent to consolidate resources and engagement with suppliers, other pubs and breweries, support business networks, and customers. The availability of technological support and innovation, in the form of apps and social media, became crucial. As discussed, even pubs and breweries with minimal previous social media engagement initiated and intensified their social media activities to promote their offerings and interact with customers.

Technology-led innovation enforced a shift in the overall approach to, and nature of, community and customer engagement. Following the success of some pubs' technology-mediated innovation, and of their community and social engagement, others started to initiate similar measures, and such practices became normative.

5.2.3 Sustainability

In this final stage, businesses look beyond the COVID-19 period. Pubs and breweries attempt to anticipate post-lockdown consumer behaviours and expectations, deciding whether to continue popular measures such as home delivery and web shop orders, or whether these would unnecessarily cannibalise more profitable and established methods of trading. This is a conundrum likely to be faced by businesses in other sectors. Dynamic market changes may stimulate disruptive innovation and new business models (O'Reilly & Binns, 2019; Vecchiato, 2017). However, the abrupt and complex crises caused by the COVID-19 landscape are unprecedented, demanding novel solutions. Some pubs and breweries may need to use innovations which can be gradually appropriated and embedded into their operations. Measures which delivered value during the lockdown period may have altered consumers' expectations, behaviours and consumption patterns, and it is uncertain whether pubs and breweries will return to traditional consumption and engagement patterns. Future research into commercial sustainability must explore not just direct financial outcomes, but also strategic and operational measures, engagement with suppliers and support businesses, and customer interaction. Social, financial and operational sustainability are intertwined, and crucial to the ability of an organisation to emerge successfully into the post-COVID-19 world.

5.3 Theoretical Contribution

The theoretical contributions of this paper are threefold, as stated below:

Our theoretical contribution is underpinned and guided by some of the pertinent ontological questions related to value co-creation, as alluded to by Bordie et al. (2019). First, our interpretivist stance identifies value as a subjective phenomenon and co-creation as a socially constructed process. The COVID-19 period offers us a unique contextual setting to comprehend and conceptualise value co-creation, relevant beneficiaries and actor engagement and processes. We noticed that in this particular scenario, value transcends industrial/sectorial boundaries, and stakeholders and actors exhibit fluid and flexible inter-relationships and innovative, yet pragmatic, processual flows. Based on these findings, we contribute to the body of knowledge by proposing a taxonomy of value and its recipients, and by developing a robust framework of strategic process imbued by value co-creation.

We have identified and classified three types of value for three different stakeholder groups. This classification is a novel contribution to the existing literature that is often criticised for ambiguity surrounding the nature and beneficiaries of value co-creation (Hasse et al., 2018; Makkonen & Olkkonen, 2017; Dey et al., 2016). We have identified the wider nature of value which offers different forms of benefits to various stakeholder groups. Our conceptualisation is based upon Lusch et al.'s (2011) concept of 'value in network context' and is underpinned by the subsequent development of scholarship which identifies social (Ratten, 2020) and stakeholder value (Laukkanen & Tura, 2020). Nevertheless, we depart from the existing literature in terms of our taxonomy, which clearly conceptualises the beneficiaries of value co-creation. In doing so, it also addresses the future research directions suggested in the recent work of Hollebeek et al. (2020).

We endeavour to initiate a shift in the approach toward value co-creation from a customer-driven experiential paradigm which remained central to value co-creation literature

(Zhang et al., 2018; Nobre & Ferreira, 2017; Merrilees, 2016; Bordie et al., 2013). Our 3S model provides a robust framework of how value for various stakeholders can be created through an interactive processual flow. The model provides conceptual scaffolding for value co-creation as a strategically defined process which directly or indirectly involves social, communal and institutional actors who engage for mutually beneficial purposes. It also demonstrates that value is subjective and transient by nature. At different stages of the COVID-19 period, pubs and breweries and their stakeholders co-created and experienced different types of value. As such, customers' experiential value is a component of the overall value which transcends producers and customers, thereby benefitting the wider stakeholder group. Our research advances the multi-stakeholder model of value co-creation (Payne et al., 2008) and the recently developed integrative stakeholder engagement theory which had been informed by S-D logic (Hollebeek et al., 2020). We do this by suggesting that value is not only co-created by different stakeholder groups, but also benefits them.

Finally, we introduce a three-stage survival and growth strategy model for SMEs during a crisis period. The model embodies co-creation and technology-mediated innovation. The 3S model exhibits a systematic approach to co-creation of mutually beneficial value in a crisis situation. The model integrates value co-creation within an overarching strategic pursuit which organisations strive to implement to emerge from a crisis situation.

6. Conclusion

As lockdown measures created challenges for the sustainability of the British pub industry, businesses have responded with innovative solutions and business models to support their operations and the value they offer. Nevertheless, these solutions require business ecosystems which support sustainable value co-creation and encourage stakeholder interactions and resource integration. As sustainable value co-creation requires wider

stakeholder engagement, the current research expands the concept of value co-creation beyond the traditional dyadic business-consumer relationships, as a concept relating to different stakeholders within the ecosystem. This study adopts an iterative process to thematically analyse qualitative data collected through interviews with pub and brewery owners, managers and customers, as well as netnographic and offline observations. In so doing, it not only expands the concept of value co-creation beyond its current boundaries, but also uncovers different types of value, based upon the stakeholder groups which benefit from this value.

In addition to the theoretical contributions, our study offers useful and insightful practical implications for business owners, managers and policy makers. First, our paper evaluates industry practice during the 2020-21 crisis and identifies the three stages which pubs and breweries went through within that period. The knowledge gained from the survival, secure and sustain stages can transcend boundaries with other sectors of the hospitality industry. Furthermore, although COVID restrictions in many parts of the world are still an ongoing concern, learning from the current environment and understanding of how technology and innovation can be used to ensure survival and value creation for the wider stakeholder set will benefit businesses when they return to full-scale operations.

The current study also offers insights into how changes in the practices of pubs and breweries have affected the customer experience. These changed practices, such as online ordering and delivery, innovative packaging, and technology-enabled collaboration in the supply chain, can offer managers in other sectors new ways to operate and enhance the value which they strive to create. Therefore, the practical insights from this paper are applicable beyond the crisis period. Additionally, information on the three types of value identified in the research is also beneficial for managers in different industries, as it explains how value extends beyond the business-customer context. In our research, we demonstrate that value

goes beyond the boundaries of commercial benefits, describing how the practices which pubs and breweries used to survive and secure can help businesses to create value by keeping alive the connection and relationships with customers and stakeholders. Finally, our study offers useful insights for policy makers, as it highlights the sheer importance of timely and adequate government support for this industry during a crisis period. Particularly during the survival stage, government support in the form of financial stimulus packages can be very effective.

6.1 Limitations and future research

The data was collected during the COVID-19 restriction period and therefore very limited face-to-face interactions and observations were allowed. This was a major limitation of our research. If more personal interactions and observations had been possible, the understanding of the process would have been enriched. While extant literature alludes to value co-creation within retail services (Sklyar, et al., 2019; Balaji & Roy, 2017) our paper further solidifies the essence of innovation-led strategic pursuit towards the process. Future research could involve ethnographic immersion into the pub industry's community engagement and business development strategies. Furthermore, the nature and duration of lockdown and pub closure measures in other parts of the world are different from what were experienced in the UK. Therefore, future studies can expand into different sectors of the hospitality industry, and to different countries, to enrich the insights developed in this study. The dialectic (Rahman et al., 2019) and transformative (Dey et al., 2019) roles of value co-creation could better be analysed by tapping into a wide range of industrial sectors. Finally, as our research focuses primarily on business strategies, practices and innovation, we have not fully unpacked how consumers coped with pub closure during the lockdown period. Considering the role of pubs in British communal lives, thick and rich description of this phenomenon would be empirically and theoretically worthwhile.

Scholarly Works	Core Contribution	Relevant conceptual impetus for this research
Prahalad and Ramaswamy (2004)	DART (dialogue, access, risk-benefit, transparency) model demonstrates the underlying importance of interactive and collaborative efforts rooted in both utilitarian and experiential outcomes	The articulation of stakeholders' involvement and their benefits remain unexplored.
Vargo and Lusch (2004; 2008; 2016)	S-D logic provides theoretical grounding for value co-creation. The concept of operand and operant resources provide useful direction toward the comprehension of knowledge and resource collaboration	S-D logic provides theoretical impetus for this research by alluding collaborative and co-creative use of knowledge and resources.
Grönroos (2012); Grönroos and Voima (2013)	Value is phenomenologically experienced. Value in exchange does not necessarily transpire to value in use.	The subjective and experiential part of value offers useful theoretical direction for this research. However, the fact that value can be experienced by all relevant stakeholders, require further clarification.
Payne et al. (2008), Dey et al. (2016), Balaji and Roy (2017), Hollebeek et al. (2020)	Multi-stakeholder dimension of value co-creation	The concept of multi-stakeholder value co-creation opens up an opportunity to assess value co-creation process beyond consumer-producer dyadic inter-relationship. The roles of non-commercial stakeholders such as community and government in particular still remains unexplored.
Breidbach and Maglio (2016); Dey et al. (2019), Rahman et al. (2019), Babu et al. (2020)	Value co-creation is an outcome of industry wide collaboration of resources and knowledge. Particularly in resource constrained scenarios, the co-creation process requires inventive resource and knowledge sharing mechanism.	Inventive resource and knowledge sharing across supply chain is a useful understanding for this research.
Lacoste, (2016);	Resource integration and collaboration among stakeholders can lead not only	By adopting a sustainable value co-creation lens, this research

Barile et al. (2020); Apostolidis et al. (2021)	to financial benefits, but also benefit the environment and the society as a whole, sustaining the organisation and the ecosystem within which it exists and operates.	aims to explore how innovation and more flexible business models can benefit not only an organization and its customers but also the society and the ecosystem within which the organization operates and can enable the creation of long-term value.
---	--	---

Table 1: Summary of the scholarly works relevant to this paper and their contribution to theoretical impetus

Period	Conditions	Year-on-year pub beer sales
Q2, 2020	First complete government-enforced lockdown	-96%
Q3, 2020	Restricted reopening, VAT (sales tax) cut on food and soft drinks, UK Government ‘Eat Out to Help Out’ incentive	-27%
Q4, 2020	Severe national and local restrictions, then another complete lockdown	-77%

Table 2: Year-on-year quarterly reductions in UK pub beer sales (BBPA, 2021)

Data collection tool	Sample size	Purpose and rationale
Interviews with pub owners/managers	Twelve	To explore their challenges, strategies, operational tactics, post-lockdown plans, and motivations for innovative measures targeting financial/social/environmental sustainability.
Interviews with consumers	Ten	To explore more deeply the influence of pubs’ and breweries’ business innovation upon community members, and how the engagement propels value co-creation and contributes to financial/social/environmental sustainability.
Offline observation	Five pubs, breweries, their Facebook pages and one Facebook group	When permitted (July–September 2020, when the UK government’s ‘Eat Out to Help Out’ policy led to pub opening), we visited five pubs. We observed how pubs apply business innovation and continue to engage customers and communities.

Netnography of pubs' social media engagement	Seven pubs/breweries (February 2020 to December 2020)	We recorded 78 pages (20,000 words) of Facebook posts and comments to analyse the social media-led customer engagement strategies of the five pubs and breweries which were also studied through interviews and offline observation.
--	---	--

Table 3: Summary of data collection strategy

Stage	Drivers		Strategies and innovations	Benefits	Stakeholders	Value sought
	External	Internal				
Survive	First UK lockdown, March 2020; uncertainty	Making enough sales to stay in business; perishable stock	1. New / increased canning; 2. Operational changes to maximise efficiency, reduce waste; 3. Web shops, social media marketing for takeaway sales	1. Avoid closure; 2. CAMRA app: Brew2U; 3. Free/discounted beer for pubs and customers; 4. Untapped app	1. Pubs & Breweries 2. Support businesses 3. Customers	Business value
Secure	Increasing familiarisation with government policy, tracking the pandemic	Creative innovations to capitalise /extend initial changes for survival	1. New endeavours in brewing (breweries) and subscription sales (pubs); 2. Collaborations among businesses and with charities	1. Positive Customer Relationship Management outcomes 2. Economies of scale; innovation cost-sharing; Positive Cause-Related Marketing outcomes	1. Pub & breweries 2. Support business 3. Customer 4. Community as whole	Experiential value Spill over value
Sustain	Uncertainty and contradictions in policy, progress of pandemic	Planning beyond the pandemic	Decisions regarding which innovations to keep, returning to pre-pandemic practices	1. Focus on capitalising upon long-term opportunities, rather than mitigating short-term risks	1. Pub Owners & landlords 2. Staff 3. Community as whole	

Table 4: UK pubs' and breweries' stages of innovation during restricted trading conditions, the strategies, their drivers, benefits and value sought by different stakeholders.

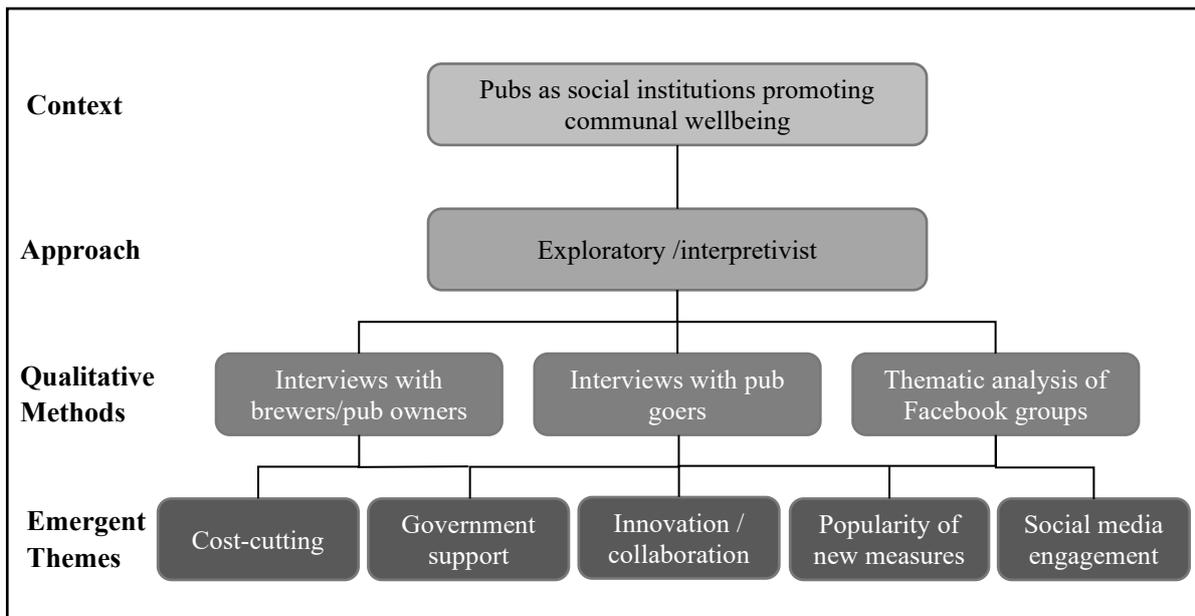


Figure 1: Research Design

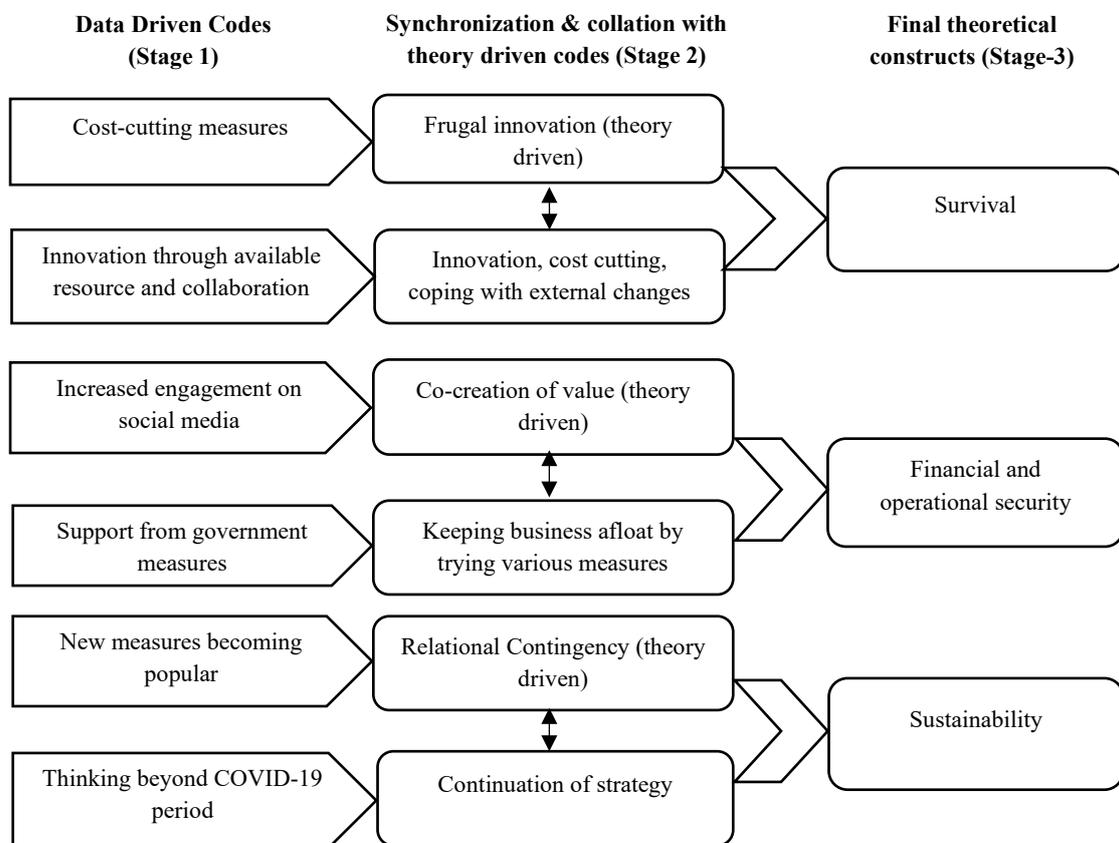


Figure 2: Codes applied to the influences, strategies, and intentions of pubs and breweries during restricted trading



Figure 3: Recipients of value from pub and brewery strategic innovation during restricted trading conditions

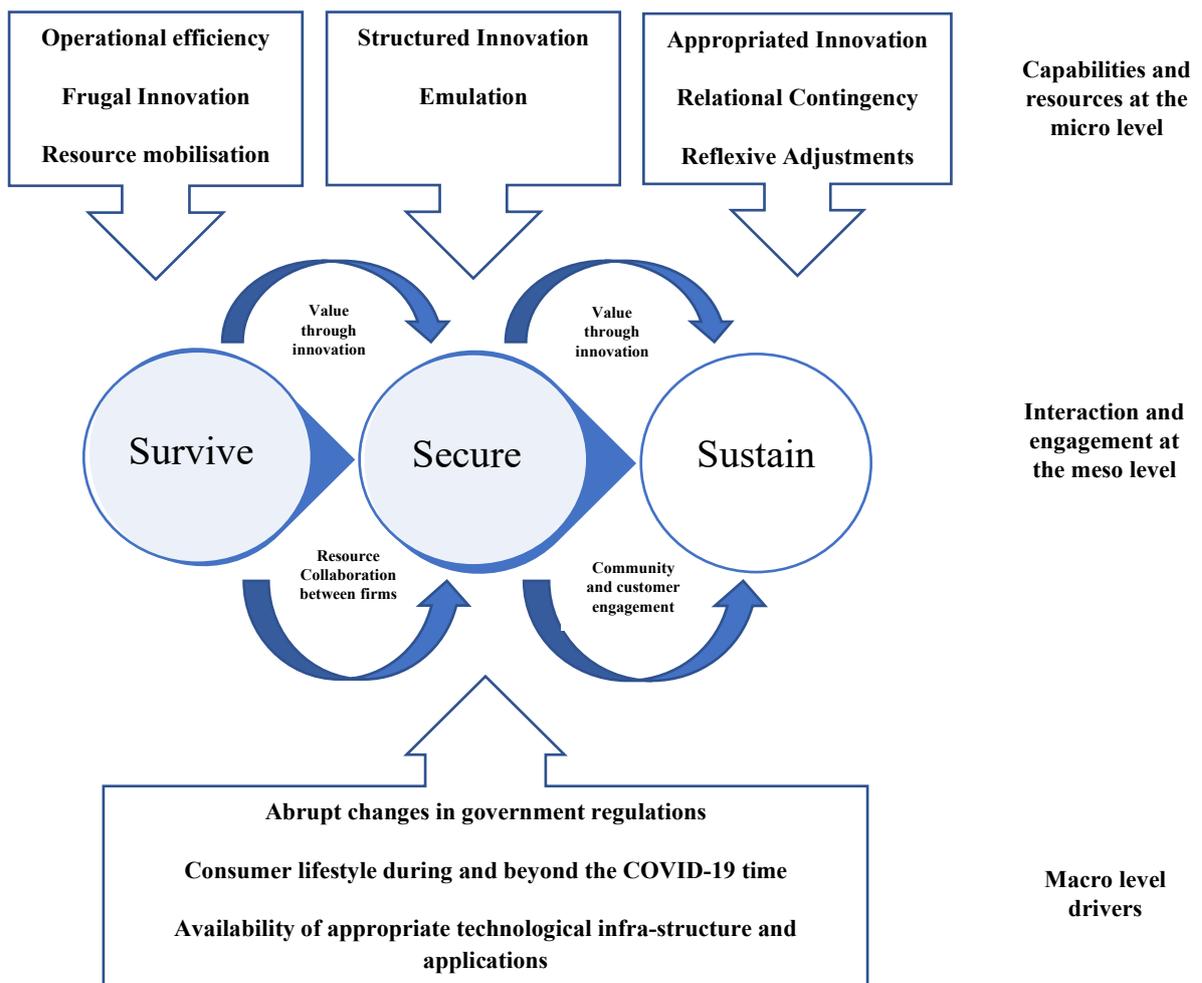


Figure 4: Micro-, meso-, and macro-level factors influencing pubs' and breweries' strategic innovations

References

- Ågerfalk, P. J., Conboy, K., & Myers, M. D. (2020). Information systems in the age of pandemics: COVID-19 and beyond. *European Journal of Information Systems*, 29(3), 203-207. <https://doi.org/10.1080/0960085X.2020.1771968>
- Akter, S., Motamarri, S., Hani, U., Shams, R., Fernando, M., Babu, M. M., & Shen, K. N. (2020). Building dynamic service analytics capabilities for the digital marketplace. *Journal of Business Research*, 118, 177-188. <https://doi.org/10.1016/j.jbusres.2020.06.016>
- Alexander, M. J., Jaakkola, E., & Hollebeek, L. D. (2018). Zooming out: Actor engagement beyond the dyadic. *Journal of Service Management*. 29(3), 333-351. <https://doi.org/10.1108/JOSM-08-2016-0237>
- Annosi, M. C., Brunetta, F., Bimbo, F., & Kostoula, M. (2021). Digitalization within food supply chains to prevent food waste: Drivers, barriers and collaboration practices. *Industrial Marketing Management*, 93, 208-220. <https://doi.org/10.1016/j.indmarman.2021.01.005>
- Apostolidis, C., Brown, D., Wijetunga, D., & Kathriarachchi, E. (2021). Sustainable value co-creation at the Bottom of the Pyramid: Using mobile applications to reduce food waste and improve food security. *Journal of Marketing Management*, 37(9-10), 1-31. <https://doi.org/10.1080/0267257X.2020.1863448>
- Babu, M. M., Dey, B. L., Rahman, M., Roy, S. K., Alwi, S. F. S., & Kamal, M. M. (2020). Value co-creation through social innovation: A study of sustainable strategic alliance in telecommunication and financial services sectors in Bangladesh. *Industrial Marketing Management*, 89, 13-27. <https://doi.org/10.1016/j.indmarman.2020.06.003>
- Balaji, M. S., & Roy, S. K. (2017). Value co-creation with Internet of things technology in the retail industry. *Journal of Marketing Management*, 33(1-2), 7-31. <https://doi.org/10.1080/0267257X.2016.1217914>
- Ballantyne, D., & Varey, R. J. (2006). Creating value-in-use through marketing interaction: The exchange logic of relating, communicating and knowing. *Marketing theory*, 6(3), 335-348. <https://doi.org/10.1177/1470593106066795>
- Balderjahn, I., Peyer, M., Seegebath, B., Wiedmann, K. P., & Weber, A. (2018). The many faces of sustainability-conscious consumers: A category-independent typology. *Journal of Business Research*, 91, 83-93. <https://doi.org/10.1016/j.jbusres.2018.05.022>
- Barile, S., Grimaldi, M., Loia, F., & Sirianni, C. A. (2020). Technology, value Co-Creation and innovation in service ecosystems: Toward sustainable Co-Innovation. *Sustainability*, 12(7), 2759. <https://doi.org/10.3390/su12072759>
- Bercovitz, J., & Mitchell, W. (2007). When is more better? The impact of business scale and scope on long-term business survival, while controlling for profitability. *Strategic Management Journal*, 28(1), 61-79. <https://doi.org/10.1002/smj.568>

- Bosma, N., Van Praag, M., Thurik, R., & De Wit, G. (2004). The value of human and social capital investments for the business performance of startups. *Small Business Economics*, 23(3), 227-236. <https://doi.org/10.1023/B:SBEJ.0000032032.21192.72>
- Bosworth, G., & Farrell, H. (2011). Tourism entrepreneurs in Northumberland. *Annals of Tourism Research*, 38(4), 1474-1494. <https://doi.org/10.1016/j.annals.2011.03.015>
- Breidbach, C. F., & Maglio, P. P. (2016). Technology-enabled value co-creation: An empirical analysis of actors, resources, and practices. *Industrial Marketing Management*, 56, 73-85. <https://doi.org/10.1016/j.indmarman.2016.03.011>
- British Beer and Pub Association (BBPA). (2021, February 10). *Beer and pub sector leaders press Government for reopening date, as sales plummeted 56% in 2020- down by £7.8 billion*. <https://beerandpub.com/2021/02/10/beer-and-pub-sector-leaders-press-government-for-reopening-date-as-sales-plummeted-56-in-2020-down-by-7-8-billion/>
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of service research*, 14(3), 252-271. <https://doi.org/10.1177/1094670511411703>
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105-114. <https://doi.org/10.1016/j.jbusres.2011.07.029>
- Brodie, R. J., Löbner, H., & Fehrer, J. A. (2019). Evolution of service-dominant logic: Towards a paradigm and metatheory of the market and value cocreation? *Industrial Marketing Management*, 79, 3-12. <https://doi.org/10.1016/j.indmarman.2019.03.003>
- Brown, D. M., Dey, B. L., Wäppling, A., & Woodruffe-Burton, H. (2019). Internal demarketing in the UK Civil Service since the 2007–2009 financial crisis. *Strategic Change*, 28(5), 355-368. <https://doi.org/10.1002/jsc.2290>
- Bryman, A. (2012). *Social research methods*. Oxford university press.
- Bryson, J., Sancino, A., Benington, J., & Sørensen, E. (2017). Towards a multi-actor theory of public value co-creation. *Public Management Review*, 19(5), 640-654. <https://doi.org/10.1080/14719037.2016.1192164>
- Bughin, J., & Woetzel, J. (2019). Navigating a world of disruption. *McKinsey Global Institute, January*, 22.
- Cabras, I., & Higgins, D. M. (2016). Beer, brewing, and business history. *Business History*, 58(5), 609-624. <https://doi.org/10.1080/00076791.2015.1122713>
- Cabras, I., & Mount, M. P. (2017). Assessing the impact of pubs on community cohesion and wellbeing in the English countryside: A longitudinal study. *International Journal of Contemporary Hospitality Management*, 29(1), 489-506. <https://doi.org/10.1108/IJCHM-12-2015-0717>

Campaign for Real Ale (CAMRA). (2020, May 6). *Order fresh local beer to your door with just the click of a button*. https://camra.org.uk/press_release/order-fresh-local-beer-to-your-door-with-just-the-click-of-a-button/

Cankurtaran, P., & Beverland, M. B. (2020). Using design thinking to respond to crises: B2B lessons from the 2020 COVID-19 pandemic. *Industrial Marketing Management*, 88, 255-260. <https://doi.org/10.1016/j.indmarman.2020.05.030>

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The Use of Triangulation in Qualitative Research. *Oncology Nursing Forum*, 41(5), 545-547. [10.1188/14.onf.545-547](https://doi.org/10.1188/14.onf.545-547)

Coronavirus and the economy. (2020, July 2). How had coronavirus affected pubs, cafes and restaurants. <https://www.coronavirusandtheeconomy.com/question/how-has-coronavirus-affected-pubs-cafes-and-restaurants>

Corley, K. G., & Gioia, D. A. (2004). Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, 49(2), 173-208. <https://doi.org/10.2307/4131471>

Côte-Real, N., Oliveira, T., & Ruivo, P. (2017). Assessing business value of Big Data Analytics in European firms. *Journal of Business Research*, 70, 379-390. <https://doi.org/10.1016/j.jbusres.2016.08.011>

Crick, J. M., & Crick, D. (2020). Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis. *Industrial Marketing Management*, 88, 206-213. <https://doi.org/10.1016/j.indmarman.2020.05.016>

D'Ambra, J., Wilson, C. S., & Akter, S. (2019). Affordance theory and e-books: Evaluating the e-reading experience using netnography. *Personal and Ubiquitous Computing*, 23(5), 873-892. <https://doi.org/10.1007/s00779-017-1086-1>

Dempsey, N., Brown, C., & Bramley, G. (2012). The key to sustainable urban development in UK cities? The influence of density on social sustainability. *Progress in planning*, 77(3), 89-141. <https://doi.org/10.1016/j.progress.2012.01.001>

Dey, B. L., Babu, M. M., Rahman, M., Dora, M., & Mishra, N. (2019). Technology upgrading through co-creation of value in developing societies: Analysis of the mobile telephone industry in Bangladesh. *Technological Forecasting and Social Change*, 145, 413-425. <https://doi.org/10.1016/j.techfore.2018.05.011>

Dey, B. L., Balmer, J. M., Pandit, A., & Saren, M. (2018). Selfie appropriation by young British South Asian adults. *Information Technology & People*, 31(2), 482-506. <https://doi.org/10.1108/ITP-08-2016-0178>

Dey, B. L., Binsardi, B., Prendergast, R., & Saren, M. (2013). A qualitative enquiry into the appropriation of mobile telephony at the bottom of the pyramid. *International Marketing Review*, 30(4), 297-322. <https://doi.org/10.1108/IMR-03-2012-0058>

Dey, B. L., Pandit, A., Saren, M., Bhowmick, S., & Woodruffe-Burton, H. (2016). Co-creation of value at the bottom of the pyramid: Analysing Bangladeshi farmers' use of mobile telephony. *Journal of Retailing and Consumer Services*, 29, 40-48.
<https://doi.org/10.1016/j.jretconser.2015.10.009>

Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117, 284. <https://doi.org/10.1016/j.jbusres.2020.06.008>

Fahmy, E., Sutton, E., & Pemberton, S. (2018). Understanding social exclusion: The views of the UK public. *Journal of Poverty and Social Justice*, 26(3), 439-458.
<https://doi.org/10.1332/175982718X15361436360832>

Ferraris, A., Belyaeva, Z., & Bresciani, S. (2020). The role of universities in the Smart City innovation: Multistakeholder integration and engagement perspectives. *Journal of Business Research*, 119, 163-171. <https://doi.org/10.1016/j.jbusres.2018.12.010>

Fischer, B., Guerrero, M., Guimón, J., & Schaeffer, P. R. (2020). Knowledge transfer for frugal innovation: where do entrepreneurial universities stand? *Journal of Knowledge Management*. In press, <https://doi.org/10.1108/JKM-01-2020-0040>

Foroudi, P., Tabaghdehi, S. A. H., & Marvi, R. (2021). The gloom of the COVID-19 shock in the hospitality industry: A study of consumer risk perception and adaptive belief in the dark cloud of a pandemic. *International Journal of Hospitality Management*, 92, 102717.
<https://doi.org/10.1016/j.ijhm.2020.102717>

Fujita, M., Harrigan, P., Soutar, G. N., Roy, S. K., & Roy, R. (2020). Enhancing member-institution relationships through social media: The role of other-user engagement behavior and similarity perceptions. *Journal of Business Research*, 121, 642-654.
<https://doi.org/10.1016/j.jbusres.2020.07.050>

FullFact. (2018, November 1). How have wages changed over the past decade?
<https://fullfact.org/economy/how-have-wages-changed/>

Getnet, H., O'Cass, A., Ahmadi, H., & Siahtiri, V. (2019). Supporting product innovativeness and customer value at the bottom of the pyramid through context-specific capabilities and social ties. *Industrial Marketing Management*, 83, 70-80.
<https://doi.org/10.1016/j.indmarman.2018.11.002>

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15-31.
<https://doi.org/10.1177/1094428112452151>

Grönroos, C. (2012). Conceptualising value co-creation: A journey to the 1970s and back to the future. *Journal of Marketing Management*, 28(13-14), 1520-1534.
<https://doi.org/10.1080/0267257X.2012.737357>

Grönroos, C., & Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, 41(2), 133-150.
<https://doi.org/10.1007/s11747-012-0308-3>

- Gronum, S., Verreyne, M. L., & Kastle, T. (2012). The role of networks in small and medium-sized enterprise innovation and firm performance. *Journal of Small Business Management*, 50(2), 257-282. <https://doi.org/10.1111/j.1540-627X.2012.00353.x>
- Haase, M., Becker, I., & Pick, D. (2018). Alternative economies as marketing systems? The role of value creation and the criticism of economic growth. *Journal of Macromarketing*, 38(1), 57-72. <https://doi.org/10.1177/0276146717728776>
- Hollebeek, L. D., Kumar, V., & Srivastava, R. K. (2020). From customer-, to actor-, to stakeholder engagement: Taking stock, conceptualization, and future directions. *Journal of Service Research*, 1094670520977680. <https://doi.org/10.1177/1094670520977680>
- Hossain, M. (2017). Mapping the frugal innovation phenomenon. *Technology in Society*, 51, 199-208. <https://doi.org/10.1016/j.techsoc.2017.09.006>
- Hubbard, P. (2019). Enthusiasm, craft and authenticity on the High Street: Micropubs as 'community fixers'. *Social & Cultural Geography*, 20(6), 763-784. <https://doi.org/10.1080/14649365.2017.1380221>
- Hughes, M., Cesinger, B., Cheng, C. F., Schuessler, F., & Kraus, S. (2019). A configurational analysis of network and knowledge variables explaining Born Globals' and late internationalizing SMEs' international performance. *Industrial Marketing Management*, 80, 172-187. <https://doi.org/10.1016/j.indmarman.2017.12.001>
- Jang, S. H., & Grandzol, C. (2015). Value co-creation in emerging economies: Planting and harvesting innovation perspectives. *International Journal of Services Sciences*, 5(3-4), 171-181. [10.1504/IJSSCI.2015.074217](https://doi.org/10.1504/IJSSCI.2015.074217)
- Jones, P., Comfort, D., & Hillier, D. (2006). Reporting and reflecting on corporate social responsibility in the hospitality industry: A case study of pub operators in the UK. *International Journal of Contemporary Hospitality Management*, 18(4), 329-340. <https://doi.org/10.1108/09596110610665339>
- Jones, P., Comfort, D., Turner, D., & Hillier, D. (2013). Sustainability and the UK pub industry. *Management Research and Practice*, 5(3), 76-93.
- Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the hospitality industry: Some personal reflections on corporate challenges and research agendas. *International Journal of Contemporary Hospitality Management*, 28(1), 36-67. <https://doi.org/10.1108/IJCHM-11-2014-0572>
- Junaid, M., Hussain, K., Asghar, M. M., Javed, M., & Hou, F. (2020). An investigation of the diners' brand love in the value co-creation process. *Journal of Hospitality and Tourism Management*, 45, 172-181. <https://doi.org/10.1016/j.jhtm.2020.08.008>
- Kaushal, V., & Srivastava, S. (2021). Hospitality and tourism industry amid COVID-19 pandemic: Perspectives on challenges and learnings from India. *International Journal of Hospitality Management*, 92, 102707. <https://doi.org/10.1016/j.ijhm.2020.102707>

- Knox, P. & Mayer, H. (2013). *Small town sustainability: Economic, social, and environmental innovation* (2nd ed.). Basel: Birkhäuser.
- Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, 39(1), 61-72. <https://doi.org/10.1509/jmkr.39.1.61.18935>
- Kozinets, R. V. (2010). *Netnography: Doing ethnographic research online*. Thousand Oaks, Ca.: Sage publications.
- Kozinets, R.V. (2015). *Netnography revisited*. Hoboken, NJ: John Wiley & Sons, Inc.
- Lacoste, S. (2016). Sustainable value co-creation in business networks. *Industrial Marketing Management*, 52, 151-162. <https://doi.org/10.1016/j.indmarman.2015.05.018>
- Lambert, D. M., & Enz, M. G. (2012). Managing and measuring value co-creation in business-to-business relationships. *Journal of Marketing Management*, 28(13-14), 1588-1625. <https://doi.org/10.1080/0267257X.2012.736877>
- Lan, J., Ma, Y., Zhu, D., Mangalagiu, D., & Thornton, T. F. (2017). Enabling value co-creation in the sharing economy: The case of mobike. *Sustainability*, 9(9), 1504. <https://doi.org/10.3390/su9091504>
- Laukkanen, M., & Tura, N. (2020). The potential of sharing economy business models for sustainable value creation. *Journal of Cleaner Production*, 253, 120004. <https://doi.org/10.1016/j.jclepro.2020.120004>
- Lee, S. M., & Lim, S. (2018). *Living innovation: From value creation to the greater good*. Emerald Group Publishing.
- Lee, S. M., & Trimi, S. (2018). Innovation for creating a smart future. *Journal of Innovation & Knowledge*, 3(1), 1-8. <https://doi.org/10.1016/j.jik.2016.11.001>
- Lemke, F., Clark, M., & Wilson, H. (2011). Customer experience quality: An exploration in business and consumer contexts using repertory grid technique. *Journal of the Academy of Marketing Science*, 39(6), 846-869. <https://doi.org/10.1007/s11747-010-0219-0>
- Lewis, C. (2001). The future of British brewing: Strategies for survival. *Strategic Change*, 10(3), 151-161. <https://doi.org/10.1002/jsc.525>
- Lloret, A. (2016). Modeling corporate sustainability strategy. *Journal of Business Research*, 69(2), 418-425. <https://doi.org/10.1016/j.jbusres.2015.06.047>
- Loureiro, S. M. C., Romero, J., & Bilro, R. G. (2020). Stakeholder engagement in co-creation processes for innovation: A systematic literature review and case study. *Journal of Business Research*, 119, 388-409. <https://doi.org/10.1016/j.jbusres.2019.09.038>
- Lusch, R. F., Vargo, S. L., & O'Brien, M. (2007). Competing through service: Insights from service-dominant logic. *Journal of Retailing*, 83(1), 5-18. <https://doi.org/10.1016/j.jretai.2006.10.002>

Lusch, R. F., & Webster Jr, F. E. (2011). A stakeholder-unifying, cocreation philosophy for marketing. *Journal of Macromarketing*, 31(2), 129-134. <https://doi.org/10.1177/0276146710397369>

Makkonen, H., & Olkkonen, R. (2017). Interactive value formation in interorganizational relationships: Dynamic interchange between value co-creation, no-creation, and co-destruction. *Marketing Theory*, 17(4), 517-535. <https://doi.org/10.1177/1470593117699661>

Markham, C., & Bosworth, G. (2016). The village pub in the twenty-first century: Embeddedness and the “local”. In *Brewing, Beer and Pubs* (pp. 266-281). Palgrave Macmillan, London.

Mason, K., & Chakrabarti, R. (2017). The role of proximity in business model design: Making business models work for those at the bottom of the pyramid. *Industrial Marketing Management*, 61, 67-80. <https://doi.org/10.1016/j.indmarman.2016.08.005>

Merrilees, B. (2016). Interactive brand experience pathways to customer-brand engagement and value co-creation. *Journal of Product & Brand Management*. <https://doi.org/10.1108/JPBM-04-2016-1151>

Mingione, M., & Leoni, L. (2020). Blurring B2C and B2B boundaries: corporate brand value co-creation in B2B2C markets. *Journal of Marketing Management*, 36(1-2), 72-99. <https://doi.org/10.1080/0267257X.2019.1694566>

Baker, A. (2019). *Pub visiting - UK - May 2019*. Mintel. <https://reports.mintel.com/display/920722/>

Caddy, T. (2020). *Attitudes towards pub catering: Inc impact of COVID-19 - UK - July 2020*. Mintel. <https://reports.mintel.com/display/988764/>

Mkono, M., & Markwell, K. (2014). The application of netnography in tourism studies. *Annals of Tourism Research*, 48, 289-291. <https://doi.org/10.1016/j.annals.2014.07.005>

Nobre, H., & Ferreira, A. (2017). Gamification as a platform for brand co-creation experiences. *Journal of Brand Management*, 24(4), 349-361. <https://doi.org/10.1057/s41262-017-0055-3>

Office for National Statistics (ONS). (2018). *Economies of ale: Small pubs close as chains focus on big bbars*. <https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/articles/economiesofalesmallpubscloseaschainsfocusonbigbars/2018-11-26>

Office for National Statistics (ONS). (2020). *Economies of ale: Changes in the UK pubs and bars sector, 2001 to 2019*. <https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/articles/economiesofalesmallpubscloseaschainsfocusonbigbars/changesintheukpubsandbarssector2001to2019>

- O'Reilly, C., & Binns, A. J. (2019). The three stages of disruptive innovation: Idea generation, incubation, and scaling. *California Management Review*, 61(3), 49-71. <https://doi.org/10.1177/0008125619841878>
- Okazaki, S., Plangger, K., Roulet, T., & Menéndez, H. D. (2020). Assessing stakeholder network engagement. *European Journal of Marketing*, 55(5), 1359-1384. <https://doi.org/10.1108/EJM-12-2018-0842>
- Ortiz-Villajos, J. M., & Sotoca, S. (2018). Innovation and business survival: A long-term approach. *Research policy*, 47(8), 1418-1436. <https://doi.org/10.1016/j.respol.2018.04.019>
- Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83-96. <https://doi.org/10.1007/s11747-007-0070-0>
- Payne, A., Frow, P., & Eggert, A. (2017). The customer value proposition: Evolution, development, and application in marketing. *Journal of the Academy of Marketing Science*, 45(4), 467-489. <https://doi.org/10.1007/s11747-017-0523-z>
- Plé, L., & Cáceres, R. C. (2010). Not always co-creation: introducing interactional co-destruction of value in service-dominant logic. *Journal of Services Marketing*, 24(6), 430-437. <https://doi.org/10.1108/08876041011072546>
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5-14. <https://doi.org/10.1002/dir.20015>
- Rahman, M., Bose, S., Babu, M. M., Dey, B. L., Roy, S. K., & Binsardi, B. (2019). Value co-creation as a dialectical process: Study in Bangladesh and Indian Province of West Bengal. *Information Systems Frontiers*, 21(3), 527-545. <https://doi.org/10.1007/s10796-019-09902-4>
- Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. *International Journal of Research in Marketing*, 33(1), 93-106. <https://doi.org/10.1016/j.ijresmar.2015.07.001>
- Ranjan, K. R., & Read, S. (2016). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science*, 44(3), 290-315. <https://doi.org/10.1007/s11747-014-0397-2>
- Rapaccini, M., Saccani, N., Kowalkowski, C., Paiola, M., & Adrodegari, F. (2020). Navigating disruptive crises through service-led growth: The impact of COVID-19 on Italian manufacturing firms. *Industrial Marketing Management*, 88, 225-237. <https://doi.org/10.1016/j.indmarman.2020.05.017>
- Ratten, V. (2020). Coronavirus disease (COVID-19) and sport entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 26(6), 1379-1388. <https://doi.org/10.1108/IJEBR-06-2020-0387>

- Roberts, M., & Gornostaeva, G. (2007). The night-time economy and sustainable town centres: Dilemmas for local government. *International Journal of Sustainable Development and Planning*, 2(2), 134-152. DOI:10.2495/SDP-V2-N2-134-152
- Roberts, S., & Tribe, J. (2008). Sustainability indicators for small tourism enterprises – An exploratory perspective. *Journal of Sustainable Tourism*, 16(5), 575-594. DOI: [10.1080/09669580802159644](https://doi.org/10.1080/09669580802159644)
- Roy, S. K., Balaji, M. S., Soutar, G., Lassar, W. M., & Roy, R. (2018). Customer engagement behavior in individualistic and collectivistic markets. *Journal of Business Research*, 86, 281-290. <https://doi.org/10.1016/j.jbusres.2017.06.001>
- Rydehell, H., Isaksson, A., & Löfsten, H. (2019). Business networks and localization effects for new Swedish technology-based firms' innovation performance. *The Journal of Technology Transfer*, 44(5), 1547-1576. <https://doi.org/10.1007/s10961-018-9668-2>
- Sashi, C. M. (2021). Digital communication, value co-creation and customer engagement in business networks: a conceptual matrix and propositions. *European Journal of Marketing*, (Forthcoming) doi.org/10.1108/EJM-01-2020-0023
- Sigala, M. (2019). A market approach to social value co-creation: Findings and implications from “Mageires” the social restaurant. *Marketing Theory*, 19(1), 27-45. <https://doi.org/10.1177/1470593118772208>
- Sklyar, A., Kowalkowski, C., Sörhammar, D., & Tronvoll, B. (2019). Resource integration through digitalisation: a service ecosystem perspective. *Journal of Marketing Management*, 35(11-12), 974-991. <https://doi.org/10.1080/0267257X.2019.1600572>
- Storbacka, K., Brodie, R. J., Böhmman, T., Maglio, P. P., & Nenonen, S. (2016). Actor engagement as a microfoundation for value co-creation. *Journal of Business Research*, 69(8), 3008-3017. <https://doi.org/10.1016/j.jbusres.2016.02.034>
- Storbacka, K., Frow, P., Nenonen, S. M., & Payne, A. (2012). Designing Business Models for Value Co-Creation. In *Special Issue – Toward a Better Understanding of the Role of Value in Markets and Marketing (Review of Marketing Research)* (pp. 51-78). Emerald Group Publishing.
- Sugathan, P., Ranjan, K. R., & Mulky, A. G. (2017). Atypical shifts post-failure: Influence of co-creation on attribution and future motivation to co-create. *Journal of Interactive Marketing*, 38, 64-81. <https://doi.org/10.1016/j.intmar.2017.01.002>
- Tsolakis, N., Niedenzu, D., Simonetto, M., Dora, M., & Kumar, M. (2021). Supply network design to address United Nations Sustainable Development Goals: A case study of blockchain implementation in Thai fish industry. *Journal of Business Research*, 131, 495-519. <https://doi.org/10.1016/j.jbusres.2020.08.003>
- Van Praag, C. M. (2003). Business survival and success of young small business owners. *Small Business Economics*, 21(1), 1-17. <https://doi.org/10.1023/A:1024453200297>

- Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. *Journal of the Academy of marketing Science*, 44(1), 5-23. <https://doi.org/10.1007/s11747-015-0456-3>
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of marketing Science*, 36(1), 1-10. <https://doi.org/10.1007/s11747-007-0069-6>
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17. <https://doi.org/10.1509/jmkg.68.1.1.24036>
- Vecchiato, R. (2017). Disruptive innovation, managerial cognition, and technology competition outcomes. *Technological Forecasting and Social Change*, 116, 116-128. <https://doi.org/10.1016/j.techfore.2016.10.068>
- Venkatesh, V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. *International Journal of Information Management*, 55, 102197. <https://doi.org/10.1016/j.ijinfomgt.2020.102197>
- Winterhalter, S., Zeschky, M. B., Neumann, L., & Gassmann, O. (2017). Business models for frugal innovation in emerging markets: The case of the medical device and laboratory equipment industry. *Technovation*, 66, 3-13. <https://doi.org/10.1016/j.technovation.2017.07.002>
- Wu, M. Y., & Pearce, P. L. (2014). Chinese recreational vehicle users in Australia: A netnographic study of tourist motivation. *Tourism Management*, 43, 22-35. <https://doi.org/10.1016/j.tourman.2014.01.010>
- Yen, C. H., Teng, H. Y., & Tzeng, J. C. (2020). Innovativeness and customer value co-creation behaviors: Mediating role of customer engagement. *International Journal of Hospitality Management*, 88, 102514. <https://doi.org/10.1016/j.ijhm.2020.102514>
- Zhang, T., Lu, C., Torres, E., & Chen, P. J. (2018). Engaging customers in value co-creation or co-destruction online. *Journal of Services Marketing*. <https://doi.org/10.1108/JSM-01-2017-0027>

Appendix A: *Moving from coffee mug to plastic jars to sealed cans*



Appendix B: *Innovative practices- Use of technology in packaging and distribution*



Canning of freshly pulled draught beer- labelled with name of the beer, name of the person who pulled it, time it was pulled and canned



Pub on wheel- *packing kegs in a van and pouring pints on people's doorsteps*

Appendix C- Use of technology to connect with consumers - ordering, communication and delivery

