The Collaborative Economy: Implications for B2B Marketing from an IMP Perspective

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Abstract

The 'Collaborative Economy' is a term coined for an apparently new environment for businesses to interact largely online to produce forms of value and innovation. The New South Wales State Government recently released its "NSW Government Releases Collaborative Economy Position Paper", prepared by Deloitte Access Economics (Deloitte, 2015). The European Union has set up a European Collaborative Economy Forum (EuCo Lab, 2016). Several claims have been advocated in support of developing a "Collaborative Economy" including the breakdown of traditional large corporate structures, faster development and delivery of products and services to a market or social requirement, and inclusion of individuals, small groups, communities, businesses and institutions (including minority groups) in production and consumption (McDonald, 2015).

This paper seeks to further define the "Collaborative Economy" within a Business-to-Business (B2B) Context. A history of IMP B2B Research related to online B2B e-marketplaces and activities is outlined including the IMP Interaction Model, enhanced as an IMP Social Model (Sood & Pattinson, 2013), with reference to developments in Collaborative Economy thinking and practice. Advances in digital platform suggest that future networks for production and consumption may or may not be based around what is currently viewed as 'B2B' networks.

WELCOME TO THE 'COLLABORATIVE ECONOMY'

The 'Collaborative Economy' is a popular term for an emerging environment where individuals, communities and businesses can interact largely online to produce forms of value and creation. Deloitte's (2015) review of the Collaborative Economy for the state of New South Wales in Australia offers estimates at about $A504 Million with around 45,000 users having earned income on collaborative economy platforms (less than 1% of the total NSW economy) – up from zero around five years ago. The European Union regards emergence of the Collaborative Economy as a key business and policy issue, setting up the European Collaborative Economy Forum (EUCoLab) in 2015 associated with the European Commission's Digital Single Market Strategy. Government policy-makers view this emerging economy as vital for future economic and business growth.

New businesses such as Uber, AirBnB, Freelancer, and AirTasker are using online environments to connect producers and customers through different networks than

existing large and often dominant corporations with established traditional networks and relationship.

No agreed formal definition exists for the 'Collaborative Economy', but suggestions include:

> "a system that activates the untapped value of all kinds of assets through models and marketplaces that enable greater efficiency and access. Increasingly, those assets include such things as skills, utilities, and time." (Botsman, 2014, p. 24).
>
> "an economic movement where common technologies enable people to get the goods and services they need from each other, peer to peer, instead of buying from established corporations". (Owyang and Samuel, 2015)
>
> "a social and economic system which allows people to share access to their assets, resources, time and skills through network technologies and peer communities". (EuCoLab (2015)

The terms 'Collaborative', 'Collaboration', and 'Sharing' Economy may be used interchangeably. Kane's (2016) definition highlights both interchangeability and evolution:

> "The sharing economy, which is sometimes called the collaborative economy or the on-demand economy, started out as a way for consumers to pay to temporarily access or share products and services rather than buying or owning them. Today, it's really a broad and emerging economic system, with five characteristics:
>
> 1. *market-based*, meaning that there is some sort of digitally enabled market that enables the exchange of goods and the emergence of new services
> 2. *an increase in the impact of capital*, which means that a range of things, from physical assets to people's time to people's money, begin to get used at levels close to their full capacity;
> 3. *The emergence of crowd-based networks that compete with centralized institutions*;
> 4. *the blurring of lines between what used to be personal and what used to be professional*;
> 5. *blurring of lines between a fully employed workforce and casual labor*" (Sundararajan in Kane 2016)

Deloitte (2015) notes that the Collaborative Economy is not new but is developing distinctively through digital platforms:

> "an economy built on distributed networks of connected individuals and communities versus centralised institutions, transforming how we can produce, consume, finance, and learn… Collaboration has always been a part of economic development. It is not a new phenomenon... Recent developments in technology and the use of digital platforms have allowed wider and faster interactivity and connectivity between producers and consumers, which has enabled shared production and consumption around common objectives." (Deloitte, 2015, p.i)

Based on suggestions on discussion around the Collaborative Economy, I offer the following definition:

The 'Collaborative Economy' is an economy based on digital platforms enabling wider and faster distributed networks of connected individuals, communities and businesses, to share production and consumption around common objectives.

The digital platform element of the 'Collaborative Economy' definition is significant because research and discussion into their development and role in marketing activities has typically been understated, ignored and assumed to be a hygiene or operational factor, or pervasive and ubiquitous – to a point where 'digital' seems to be an irrelevant concept. In a world focused on relentless innovation through digitisation, ignoring 'digital' concepts in marketing could be akin to staying with the horse and cart while the rest of the world has moved onto motorised transport.

The term 'platform' emerged at the turn of the century as central to technological innovation particularly from a computing (or digital) perspective. Gawer and Cusanamo (2002) characterised the ''modern high-tech platform (as) "an evolving system made of interdependent pieces that can each be innovated upon''. Examples included Intel (information microprocessor chips), and Cisco (networking), Microsoft (Personal Computer Operating Software) and Adobe (Portable Document Format - PDF- desktop publishing software). Evans et al. (2006) highlighted 15 Software platforms impacting innovation and transformation of PC's, Game Consoles, PDA's/Smartphones, and Digital Media.

Friedman highlighted an emerging global digital economy built on a platform that is ''the basic underlying operating systems for innovation and production''. (Friedman 2007, p. 605).

Digital platforms gained further significant business and marketing visibility around 2004-5 through the emergence of Web 2.0 – defining the Internet as a platform:

> Enabling technical. Business and social learning. adoption and use based on:
>
> - Users controlling their data
> - Users creating content
> - Collaboration and participation
> - Collective development and use (co-creation and production: opal-source)
> - Network effects–applications and services that emerge and/or improve as more users ''use them'' (collective intelligence)
> - Describing software applications and activities in terms of ''services'' (Pattinson, 2014; O'Reilly, 2005)

The Social component of Web 2.0 was defined as 'Social Media'. Collectively, social media and platform principles associated with Web 2.0 are deeply embedded in current digital platform thinking and the Collaborative Economy. Key Collaborative Economy themes related to digital platforms, and based on claims from businesses, consultants, observers and some academics focused on developments on this area include:

- Frictionless Networks
- Extended Nature of a 'Firm'

- Seeking Solutions and Knowledge from Everywhere Through Knowledge Orchestrators
- A 'Maker' design, develop and build paradigm.
- B2B Platform Collaboration and Innovation

FRICTIONLESS NETWORKS

Digital platforms allowing wider and faster interactivity and connectivity friction should enable reduction of friction in 'exchanges'. As these platforms advance friction may be minimised or even eliminated raising several challenges and implications for business networks.

Advocates of the Collaborative Economy highlight speed and efficiency for matching resources and task between suppliers and customers. Fast matching of travellers looking for transport to particular destinations, to individuals with cars available to service those requests is made less frictional through Uber supporting these transaction using a digital platform. Airbnb lowers friction through matching travellers' requests for accommodation with spare private room capacity. Digital platforms supporting friction reduction through the Collaborative Economy not only appear to be improving efficiency – but also favouring faster purpose or outcomes over established interactions and relationships. Purpose or outcomes-based interaction may be instant, episodic or deep and ongoing.

Typical B2B research and analysis is based on an assumption of deep established relationships between actors within and across business networks. Does interaction approaching frictionless (or 'near-frictionless') states favour distributed competitive networks – or can a similar state be achieved through an advanced relatively centralised B2B digital platform among long established businesses?

Collaborative Economy advocates focus on breaking down of centralised institutions, meaning long-established B2B markets and systems are disrupted by smaller, more agile individuals, groups and businesses setting up new networks and relationships through digital platforms. Digital business history might point toward initial disruption and re-organization of business networks and relationships through using digital platforms (e.g. Amazon, eBay, Google) but then consolidation and development of a different established and eventually a centralised set of business networks and relationships.

EXTENDED NATURE OF A 'FIRM'

Approaching frictionless networks may not just highlight changes in B2B networks but could challenge the nature of a 'firm'. According to Coase (1937), "the nature of a firm is to be set up for the efficient co-ordination of resources to produce things". This definition is almost 80 years old but remains the dominant logic for justifying the existence of a firm.

The nature of B2B networks and relationships appears to be effective coordination of resources and production – but it is far more complex and less controllable by actors within the network than from a traditional more centralised view of a firm. This perspective of low actor control within B2B networks is central to the original IMP Group Project (Hakansson, 1982) and their ongoing research agenda (Ford and Hakansson, 2006).

The Collaborative Economy challenges the nature and form of a 'firm', beyond an IMP view of specific B2B networks. Any individuals, groups, communities and businesses who can contribute to sharing production and consumption around common objectives through digital platforms can be included in an extended definition of a 'firm'. A Collaborative Economy perspective suggests individuals, groups, communities and businesses supported through and with digital platforms and network coordinators have control – at least of production and consumption around common objectives. The 'firm' becomes a distributed entity supported by digital platforms that may have a life as short as the required coordination of resources to achieve a specified outcome or as long as coordination is required to satisfy needs and aspirations of communities.

SEEKING SOLUTIONS AND KNOWLEDGE FROM EVERYWHERE THROUGH KNOWLEDGE ORCHESTRATORS

Individuals, communities and businesses, sharing production and consumption around common objectives will look anywhere they can for knowledge and resources. They reach out beyond expected boundaries of expertise, experience and industry or activity domains, seeking solutions from any source regardless of size, through distributed networks. Some will possess sufficient capability to find and connect directly through digital platforms with those sharing production and consumption around common objectives – but many will need to use a third-party or coordinator to manage or broker these connections.

Liebert, Wind and Fenley's (2014) *Network Orchestrator* could be viewed as such a coordinator:

> "These companies create a network of peers in which the participants interact and share in the value creation. They may sell products or services, build relationships, share advice give reviews, collaborate, co-create and more. Examples include EBay, Red Hat, Visa, Uber, TripAdvisor and Alibaba."

The Network Orchestrator supports finding the specific task, service or physical space to achieve a particular outcome. Crowdsourcing applications are often interchangeably presented as collaborative economy applications acting as network orchestrators – some are industry or profession-specific (e.g. Uber, Airbnb, Flight 1, Figure 1), while others are positioned as expert information coordinators (e.g. Quora) (Capati, 2015).

Trust is developed through peer ratings, reputation for actually delivering the services and ongoing recommendations. Ability to deliver is claimed to be more important than size or longevity. Some advocates claim that the Collaborative Economy potentially offers minority groups (e.g. female entrepreneurs, minority groups and decision-makers) a greater opportunity for developing their ideas and businesses as this economy neutralises the image of size and power (e.g. McDonald, 2015).

A 'MAKER' DESIGN, DEVELOP AND BUILD PARADIGM

Common objectives for production and consumption through digital platforms point advocates of the Collaborative Economy toward the 'Maker' concept. The 'Maker' is variously defined as a movement, culture, or community focused but essentially focused around the assumption notion that making 'things' has gone digital i.e.

physical objects begin as designs on screens which are shared online as software files, and are then turned into physical outputs using equipment such as 3D Printers and supporting additive and computerised manufacturing devices (Anderson, 2012, Pattinson, 2016, Lipson & Kuman, 2013). McDonald's (2015) view of the Collaborative Economy incorporates a 'Maker' culture.

Anderson (2012) highlighted 'Maker' communities as analogous to the Homebrew Computing Club in the Bay Area of San Francisco in the 1970's as a community tinkering, developing and using electronics kits and personal computers in the 1970's. Their outputs evolved into key technologies and companies for the digital age (Herther, 2015). Today's 'Makers' tinker, develop, produce and use key technologies to share production and consumption around common objectives usually within their interests and passions (e.g. small customised runs of hobby items such as model train engines, buildings, parts and figures, dolls, war-gaming figures and equipment, parts for model aeroplanes, real hobby aeroplanes). Collectively these Makers contribute to the Collaborative Economy as key actors in extended distributed shared production and consumption – with digital platforms offering an almost complete innovation cycle environment from ideation to feasibility and production (Pattinson, 2014).

B2B Platform Collaboration and Innovation

Makers and associated communities seek and share information, software programs, applications, and designs. Larger businesses are now realising that they can save substantial resources through an Open-Source (or just Open) approach to acquiring and using information, processes, services and applications through the Collaborative Economy.

Building blocks for running a business, developing advanced products and services and entering information-brokering businesses are sought from outside the business – so it can then focus on developing innovative solutions. Botsman (2014) outlined examples where Marriott worked with Liquidspace to broker booking of spaces in their hotels for local professionals and workers to use for work and meetings. In effect Marriott is moving toward becoming a network orchestrator.

Several larger companies are innovating using digital platforms but focusing on built on the Internet of Things (IOT) which feeds big data to technology and application layers within a collaborative economy. This area of the Internet of Things (IOT) feeds into marketing big data, datafication, marketing analytics, marketing data science, and digital business ecosystems (Pattinson and Johnston, 2015; Nachira At al 2007).

As more services and tasks become encoded into algorithms and programs and incorporated into sensors and chips, more collaboratively developed activities and routines will be completed at the IOT level. In effect the IOT becomes the 'Internet of Collaboratively Created Things' with more advanced and intelligent network actor, resource and activity built into this level of the digital platform.

General Electric is developing an "Internet of Industrial Things" strategy where methods, applications, systems and subsystems are sourced and linked right to the sensor level to enable GE to develop innovative products, services and processes (Leonard and Clough, 2016). GE is moving toward becoming an industrial network orchestrator, but directing coordination to the implementation of 'digital foundries" within an industrial or directed B2B Industrial Collaborative Sub-Economy. Siemens,

Cisco, Honeywell, HP and China Mobile are also developing similar systems and sub-systems (Economist, 2016).

Will such moves by larger businesses to connect and then potentially stake out digital platforms at the IOT level undermine the distributed and size-flattening directions favoured by Collaborative Economy advocates? Or will new and extended Collaborative B2B networks become dominant as businesses push to develop and deliver products faster in the face of relentless innovation?

THE "COLLABORATIVE ECONOMY" FROM A B2B IMP PERSPECTIVE

The original IMP Project focused on human B2B relationships and interaction (Hakansson, 1982). Information technology at that point of the Fifth Age of Information and Telecommunications (Perez, 2010; Pattinson, 2014) was basic with many industrial and manufacturing businesses using either no or very limited computing technology. The Dot.com boom highlighted the emergence of the Internet through the Worldwide Web as a possible environment for a variety of business and exchange activities. B2B E-Marketplaces emerged in the late 1990's (Kpalan and Sawhney, 2000). The IMP Group focused on B2B E-Marketplace discussion from around 2002-2005 highlighting information, financial, product and information exchanges (e.g. Lancastre and Lages, 2006; Oppel et. al, 2001). However, most early B2B E-Marketplaces failed and research attention moved elsewhere. Ford and Hakansson's (2006) IMP Research Agenda reaffirmed a focus on human networks and relationships regardless of information technology developments.

This review of the IMP Agenda was around the same time that advancing online business applications, trading systems and networked logistics/Supply Chain systems were emerging. Principles from earlier B2B E-Marketplaces and E-Commerce Systems continued to evolve as B2B E-Commerce activities grew rapidly through the mid-2000's. Unprecedented levels diffusion of Mobile online access and advancing Social Media applications contributed to a transformation of digital platforms – and ways individuals, small groups, communities, businesses and institutions interacted.

Some B2B researchers continued to explore the emergence and application of Social Media and advancing digital platform principles to B2B Marketing. Sood and Pattinson highlighted Social Media and online developments for Sales and Consulting activities (Sood and Pattinson, 2010). Social Media in B2B Marketing was explored in a Special Session at the IMP 2011 Conference, and Key Account Management of B2B online communities (Sood and Pattinson, 2014). The IMP Social Media Interaction Framework (IMP Social) (Sood & Pattinson, 2012) was developed using the original IMP Interaction Model (Hakansson, 1982) exploring exchanges, cooperation and adaptations as social media and information flows.

The IMP Social Model was developed into an essentially early Collaborative Economy framework as a Social Layered Model for Social Media Driven Online B2B Service Capabilities and Activities (Sood & Pattinson, 2013). The Layered Model includes:

1. The Internet of Things (IOT)
2. Social Technologies

3. Social Media
4. Social Media Driven Online B2B Service Capabilities and Activities

The top layer of the Social Layered Model for Social Media Driven Online B2B Service Capabilities and Activities – Layer 4: Social Media Driven Online B2B Service Capabilities and Activities included

- Internal activities including supply chain, Research and Development
- Information Service Innovations
- Location/Presence Services and Activities
- New B2B Marketing Activities
- Other Collaborative B2B Activities
- Collaborative Business-to-Institutional Activities
- Collaborative Business-to-" Citizen" (Community, Crowdsourced) Activities

In effect, this layer outlines Collaborative Economy B2B Service activities.

Figure 1 positions the IMP Interaction Model as within and supported by a Collaborative Economy Platform – not as a firm overall model but inviting discussion on how a Collaborative Economy Platform (assumed to be digital) might align with it.

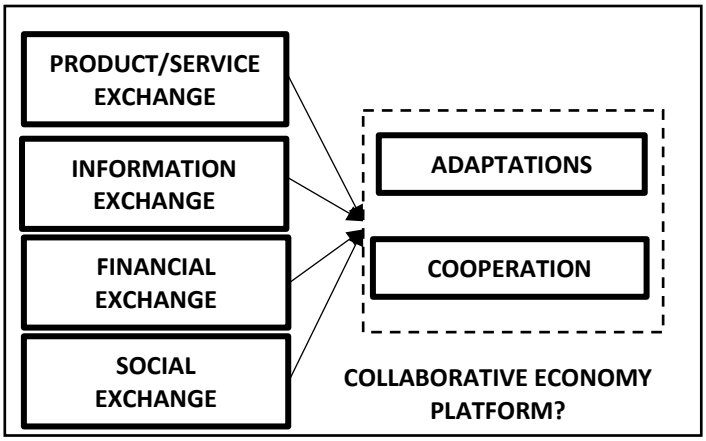

Figure 1: IMP Interaction Model and Collaborative Economy Platform (adapted from Hakansson, 1982; Sood and Pattinson, 2012)

This framework assumes that a Collaborative Economy Platform is not just the equivalent of a pervasive automated digital platform that makes exchange efficient and approaching frictionless. The current platform could be intelligent bit substantially supporting human actors managing physical or digital activities with physical or digital resources i.e. 'Collaborative' will continue to mean managing overall interaction by human actors whether they be individuals, small groups, communities or businesses contributing to shared production and consumption around common objectives.

Digital platform developments are closing on encapsulating the equivalent of digital actors who could manage digital activities with digital resources – close enough to at

least consider this scenario within a future IMP Interaction Model five to ten years from now (2021-2026). More work is required to explore and further define the Collaborative Economy Platform layer of extended B2B business and marketing activities.

THE 'COLLABORATIVE ECONOMY' - B2B, B2WHO, FROM B TO MAKER?

This paper explored definitions, attributes and claims around the 'Collaborative Economy' and attempted to view them from a B2B perspective. A clear definition for the 'Collaborative Economy was proposed. Some key 'Collaborative Economy' themes are addressed within an IMP view of B2B activities – especially a move away from strong centralised control of networks. Transactional efficiency and capacity matching may be addressed through IMP research into logistics, operational, supply chain and transaction systems. The idea of collaborative economy has been around for as long as business and trading has existed. However, the current definition of collaborative economy revolves around digital platforms supporting wider and faster connectivity and interaction between distributed networks of individuals, small groups, communities, businesses and institutions sharing production and consumption around common objectives.

IMP B2B research (and indeed much overall academic marketing research) tended to downplay a role for information technology in B2B interaction and relationships activities up to the mid-noughties. Development of digital technology into platforms, particularly with the advent of Web 2.0 (the Internet as a platform) enabled digital platforms to become critical for supporting collaboration including seeking actors, resources and activities to rapidly design, develop and deliver – to 'make' – new products and services.

Advancing digital platforms are disrupting many existing B2B networks through enabling a different combination of distributed actors to collaborate in theory to produce innovative products and services faster. Collaborative economy platforms may be changing the nature of networks associated with what we understand to be a 'firm'. Many large existing manufacturing businesses are choosing to join the Collaborative Economy, plugging into the Internet of Things (IOT) level to develop new extended open 'maker' systems in their quest to innovate and bring products and services to market as quickly as possible.

At the mid-point mark of the 2010's, the Collaborative Economy is a very small component of much larger regional state or national economies. However, recent highly successful companies are emerging from the Collaborative Economy and appear to pointing toward ongoing rapid growth over the coming five years in this area posing key strategic challenges for businesses and government policy-makers and business strategists.

Currently the Collaborative Economy is still focused on 'makers; seeking and using resources to produce an outcome for themselves and communities with common objectives. To that end, the digital platforms are largely supporting interaction and relationships around human actors managing human and digital resources with human and digital activities. However, within the next five to ten years, advancing and sufficiently intelligent digital platforms may incorporate human and digital actors designing, and managing and human and digital designing, and producing human and

digital resources and activities. This version of a 'Collaborative Economy' will challenge our notions of what or who is 'B2B', 'B2WHO', and if a producing/consuming entity is a 'B' for 'Business' or possibly an 'M' 'Maker'.

B2B Interaction will not be what it used to be.

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