

From Linear to Non-Linear: The Evolution and Practice of Business Innovation

Xiangguang Zhao

University of Bristol, BRISTOL, BS12NR, UK

Abstract: In the fast-paced era of continuous technological advancement, innovation is crucial for firms to enhance productivity, enter new markets, and maintain a competitive edge. Innovation involves a multifaceted process that includes improving production methods, upgrading technology, and modernizing organizational management. Academically, innovation has been studied extensively, from Schumpeter's early 20th-century theories to modern perspectives that view it as a dynamic, non-linear process. The OECD highlights innovation as a comprehensive activity encompassing product, process, and paradigm changes.

A case study of Netflix illustrates disruptive innovation, transitioning from a DVD rental service to a global streaming giant through technological advancements and a consumer-centric approach. Additionally, the emergence of Decentralized Autonomous Organizations (DAOs) in the Web 3.0 era represents a significant shift in organizational models, emphasizing decentralized governance and community-driven decision-making.

Keywords: Innovation; Netflix; DAOs; Technological Advancement; Organizational Management

1. Reflection of Innovation

1.1 Personal Definition of Innovation

In an era of rapid and constant renewal of products and technologies, innovation has become an important tool for firms to increase productivity, exploit new markets and build competitive advantage. Innovation, to me, is a collection of possibilities from multiple perspectives. It is a continuous process that challenges the status quo by enhancing production methods, upgrading technology and renewing organizational management.

1.2 Academic Reflection and Expansion in Culture and Practice

Delving into academic perspectives on innovation, theories and models on innovation have evolved over the last few decades. The concept of innovation was systematically analyzed by Schumpeter at the beginning of the twentieth century. Schumpeter ([1912] 2021) defines innovation as the creation of a new production function, involving the recombination of factors and conditions of production and their introduction into the production system. In the absence of innovation, the economy remains in a state of equilibrium characterized by "circular flow" (ibid). The concept of innovation mechanistically explains the driving forces behind economic development. The OECD (2018) distinguishes between the results and activities of innovation. Innovation can be seen as a process of creating new combinations, encompassing innovations in products/services, processes, positioning, and paradigms. In other words, innovation is not limited to new products or services but involves a comprehensive "process of activities". The activities and processes of innovation are complex and constantly changing. The novelty lies in discovering functionalities that are currently unattainable and predicting the foreseeable demands of these functionalities. The significance of innovation lies in injecting dynamic change into seemingly insurmountable constraints. The assessment of Innovation evolves at the dynamic intersection of "desirability," "feasibility," and "viability." Desirability refers to the attractiveness of and demand for new ideas; feasibility refers to the consideration of the practicality and achievability of such concepts; and viability refers to a careful assessment of the sustainability and longevity of innovative solutions (IDEO, nd). The fundamental driving force behind this dynamic change stems from the regard for the underlying logic of innovation.

Scholars offer multiple perspectives on the life cycle of innovation and the motivations that trigger innovation. One notable model is Rogers's (1962) Diffusion of Innovation, which explains how an innovation develops and diffuses through specific channels, and is finally

adopted by people. He states five adopter categories of basic innovation, including innovators, early adopters, early majority, late majority and laggards. Through these different stages, Rogers argued that the diffusion of innovation follows an S-shaped trajectory over time (ibid). For example, the more obvious the comparative advantage of an innovation, the faster it will be adopted, whereas innovations that are incompatible with the values of a social system will be adopted considerably slowly. However, Roger's model is a top-down approach to dissemination that fails to adequately take into account the episodic and shifting nature of practice. Additionally, Peter Drucker's (2002, p.30) seven sources for innovation include the unexpected, incongruities, process needs, industry and market structures, demographics, changes in perception, and new knowledge. Similarly, Rothwell (1994) explains five models of innovation driven by internal and external factors: technology push, market pull, coupling, interactive, and networking. Other scholars interpret innovation based on different developmental stages. Green (2011) summarizes the phases of innovation into three steps, including discovery, evaluation, and execution. Buggie (2001) outlines four phases of a successful innovation process: strategy development, ideation, evaluation, and implementation. However, these studies tend to treat innovation in a simple linear paradigm. Innovation is confined to an incremental process of technology or knowledge within individual firms.

While innovation is commonly viewed as the outcome of a process, the reality is far from a linear progression. The increasing complexity of innovations is intricately tied to surrounding framework conditions such as feedback loops, uncertainties, and corporate culture (Meissner and Kotsemir, 2016). For example, different products or technologies may spend varying amounts of time in these stages, depending on factors like market demand, characteristics of adopters, and marketing strategies. The complexity of the environment and the varying relationships among different stakeholders have led to an understanding of innovation that has evolved from linear models to a more dynamic, intertwined, and open process.

In the process of business development, innovation and culture are two interdependent factors. The recognition of culture is a fundamental aspect that influences the behaviour and perceptions of stakeholders within and outside an organization. Organizational culture serves as a foundational assumption pattern revolving around shared values, beliefs, and norms (Schein, [1992] 2017). It encompasses not only implicit factors such as assumptions and values but also artefacts, representing the tangible expressions of implicit values. For example, Google, in addition to providing benefits like free food, fitness facilities, and healthcare, also includes respecting employees' traditions and choices of attire as part of its cultural artefacts (Tran, 2017). This series of explicit and implicit assumptions influences the behaviour and thought patterns of individuals within the organization, guiding them in adapting to external environments and internal integration (Schein and Schein, 2019), including the proper methods of perception, thinking, problem-solving, and teamwork. The formation of corporate culture is influenced by various factors, such as leadership style, organizational structure, behaviour patterns, and cognitive models (Burns, 2020). Open corporate cultures exhibit characteristics like dynamism, flexibility, and rapid adaptation to constant changes, with a primary focus on unlocking innovative potential.

However, for many companies, establishing such a culture remains a significant challenge, especially for those reluctant to change their existing culture. This reluctance is often influenced by factors such as management behaviour, cost-effectiveness, and company performance. For instance, Loewe and Dominiquini (2006) identify several factors emphasizing the complex interplay of organizational dynamics in fostering or hindering innovation, including obstacles to innovation, short-term focus, lack of time, resources, or staff, leadership expecting quicker returns and management incentives. Closed organizational cultures are often associated with traditional business models and centralized structural variables. Business management is often based on "rules" and "processes", which can easily lead to a rigid response to risk. Innovative organizational cultures are frequently linked to decentralized and informal organizational structures. Those structures are characterized by traits such as accepting ambiguity, tolerating risk, and reducing control (Robbins and Judge, 2019). Therefore, leaders in organizations aiming to cultivate an innovative culture need to demonstrate roles of encouragement, support, and guidance. The practices might include cultivating inclusivity and open communication, thereby fostering innovation and creativity. Overcoming these challenges often requires a strategic approach, including creating a culture supportive of innovation, providing resources, adjusting incentives, and promoting a long-term vision for the organization. Corporate culture does not solve all problems; it addresses issues related to sustainable operations.

2. Case Study

2.1 The Revolution of the Netflix

The emergence of streaming services has not only eliminated traditional DVDs from the market but has also reshaped customer viewing behaviours and approaches. In 2007, the introduction of Netflix's subscription-based video on-demand (SVOD) streaming service was marked as a disruptive innovation that reshaped home entertainment industry. In 1997, Netflix was co-founded by Mark Randolph and Reed Hastings in California, United States (US). Since then, Netflix demonstrated a high level of innovation by recognizing and adapting to changes in technology and consumer behaviour. Netflix has gradually expanded its footprint into global landscape, currently operating over 190 countries with around 222 million subscribers (Brennan, 2018). The development and adoption of Netflix's streaming service was influenced by a combination of its early business success, technical advancement, customer-centred approach and reinvention in business model. These effort in recognizing both internal and external has made streaming service shifted the landscape of home entertainment industry.

The timeline of subscription-based video on-demand (SVOD) streaming service is:

1997: Netflix was founded by Reed Hastings and Marc Randolph in the US with focus of DVD rental service.

1999: Netflix introduced the subscription-based service. This allowed consumers to rent a certain number of DVDs at a flat rate.

2000: Based on users' viewing history, Netflix implemented the personalized recommendations through algorithm.

2001: Netflix went Initial Public Offering (IPO)

2007: Netflix launched its streaming service, allowing subscriber to watch a section of movies and TV shows on internet. By the end of the year, Netflix reached 7.5 million subscribers (McFadden, 2023).

2008: Netflix started to expand its streaming service from collaboration with gaming consoles, including Xbox 360 and Blu-ray Players, and digital video play Roku. In November, it discontinues the used DVDs sales.

2010: Netflix expanded its first international business in Canada. Netflix established partnership with Amazon Web Services (AWS) to solve problem of content storage.

2011: Netflix separated the DVD rental business from streaming service and started its content production. Netflix's streaming service stepped into Latin America.

2012: Netflix expanded into global (Netflix, 2023).

2.1.1 From Subscription-Based Model and Beyond

The early business of DVD rentals played a pivotal role in establishing Netflix's brand awareness and consumer loyalty. The early business on DVDs rental has made Netflix become a household brand. According to Clayton Christensen (2011), the possibility of disruptive innovation derives on two types of markets that incumbent ignore. The first is low-end market and the second is new market footholds. At its inception, Netflix was centred on DVD rentals as the core of its business. While its competitor Blockbuster was acted as biggest market player, high overdue fees and low consumer experience have made their business challenging. Breaking from traditional rental model, Netflix seized the "low-end" opportunity from launching the DVD-by-mail service in 1998 and subscription model in 1999. These two services provide affordable solutions for customers. Netflix adopted the model of "online ordering + offline mailing + membership subscription" and accumulated the first batch of subscribers through the efficient and convenient service process. The early business on DVD rental gained around 6.3 million subscribers by 2006 (Netflix, 2007). The subscription-based model in 1999 has provide Netflix with both core consumer-based and profit to drive new transformation.

2.1.2 Technological Factors: The Catch of Positive Externalities

The increase in internet penetration and broadband expansion has provide a vital technological foundation for the introduction of streaming service. In the late 1990s, streaming video over the internet was a novel concept, and the infrastructure needed for seamless content delivery was not fully established. Although the Internet has started to reach millions of households, most users still access the Internet through a dial-up connection. One of the key contextual factors that prepared the way for Netflix's streaming transformation was the spread of broadband Internet in the early 2000s. The percentage of the United States population using the Internet jumped from 14 per cent in 1995

to about 75 per cent in 2007 (Figure 1) ((Fox and Rainie, 2014). This marked a substantial expansion in the online audience. Also, the growth in broadband adoption not only provided internet speed but also change in consumer behaviour. By March 2006, 42% of American adults can experienced a high-speed home internet connect, which was a 12% increase from March 2005 (Horrigan, 2006). The increase in internet penetration, par with the improve infrastructure, signified a transformative era in digital content. Also, the launch of YouTube in 2005 has made Netflix recognize the opportunity of online video consumption. Netflix embraced the dynamic of digital transformation and took the first-mover advantages in introducing the streaming service. The initial content library was modest, but the company continuously invested in technology and content licensing. To enhance the streaming experience, Netflix invested in improved video compression technology and partnered with Amazon. The company has developed encoding algorithms that deliver better video quality with less bandwidth. These commitments to technological innovation have resulted in the seamless streaming experience that users enjoy today. Another technological aspect that has played a key role in the success of Netflix’s streaming service is its data-driven approach to content personalisation. The company’s algorithms analyse users’ preferences, viewing habits and ratings to provide personalised recommendations. This not only improves user engagement, but also increases user stickiness.

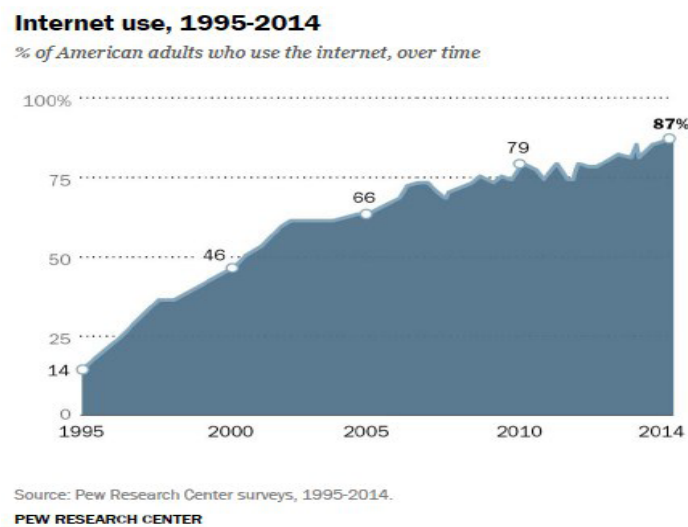


Figure 1. US Adult Internet Usage from 1995 to 2014 (Fox and Rainie, 2014)

2.1.3 Consumer Behaviour and Preference

In terms of technological base, the development of the web base has changed the viewing habits of consumers while driving the media revolution. Due to the cost effect, the production and distribution of films began to gradually move to electronic (Kirsner, 2006). In 2003, the home video market already accounted for over 50 per cent of film distribution revenues (Eliashberg, 2006). The majority of streaming media users in the US are converted from traditional paid TV subscribers and have matured their payment habits. Importantly, the popularity of the internet and the speed of the internet are also gradually affecting the way users watch. As Tryon (2013) mentions, “time-shifting” is affecting the entertainment industry. Both the DVD rental business and online streaming services are a form of time-shifting. The emergence and application of the Internet and big data has not only disrupted consumer behaviour, but has also spawned the birth of e-based businesses. The deeper logic behind these shifts is the emergence of disruptive foundations leading to changes in the pursuit of core values by the masses. The widespread use of DVDs in home theatres has led to most American households getting into the habit of watching movies at home. The reason why users are able to quickly embrace the form of streaming is because of the flexibility and control of consuming the content (ibid). Netflix’s streaming service not only derived from consumer preference and broke down the temporal and spatial constraints of the way in which it can be viewed. Consumers not only gain the flexibility to watch and rewatch films and television at a time of their choosing, but they are also able to watch on desired devices.

2.1.4 Strategic decision: From Subscription-Based model to Streaming Service

Netflix’s business model transformation has been a major factor in driving the growth of the streaming service. Anticipating techno-

logical trends, Netflix recognized the potential of online streaming service. The reinvention of business model and strategy was shown in its move from subscription-based model to streaming service. According to Osterwalder and Pigneur (2010), business model is viewed as the mechanism by which companies create and capture value. Netflix's business model transformation was highlighted by its continuous efforts to tap into the needs of missing markets and users, and redefine the value of business opportunities. Firstly, a business model based on a subscription model has opened up the low-end of the market to Netflix's subscribers. As technological advancements provided alternatives to traditional viewing methods, the subscription-based model has recognized the consumer's desirability on cost-effective and convenience viewing alternative. Streaming service emerged as a response to consumer demand, offering a desirable solution that break the time and space limitation. Second, combining with new technologies to create innovative products was an important factor that differentiates Netflix from its competitors. Staying competitive required differentiation. The company's early adoption of DVD-by-mail business served as a groundwork for its subsequent pivot to streaming service. The development of streaming service into global market exemplifies Netflix strategic vision on understanding the feasibility of digital infrastructure and the viability of their flat-free subscription model. Competing in the market by choosing a business model that is up-to-date is a core strategy that Netflix has been pursuing for a long time. Of the various elements surrounding a business model, an understanding of a company's core business and value proposition is an important step in unlocking the business model.

2.2 Future Innovation: Decentralised Autonomous Organisations

From newspapers to the Internet, the iteration of media technology has led to changes in economic and social structures. With the Internet becoming more and more the infrastructure of social development, the emergence of Web 3.0 means the arrival of a new electronic wave, and Decentralised autonomous organisations (DAOs) are one of the most important products of the Web 3.0 era. Practice theory is an approach to evaluating innovation that focuses on both action and context. It emphasises the procedural, dynamic and temporary nature of knowledge acquisition and innovation within organizations (Nicolini et al., 2003). It provides an understanding of how cognition and action are interwoven with DAOs and contribute to their functioning and development. In this context, the key practices within DAOs can include decision-making processes, government mechanisms, community engagement and token economics. By applying practice theory, this section analyses the contextual elements surrounding DAOs, including the shift toward the Web 3.0 era and ownership economy. DAOs are a new form of blockchain technology application. It is an autonomous organisation formed by a group of people holding virtual currencies. It operates entirely on the basis of code and smart contracts and is characterised by the absence of a centralised management structure, with ownership and decision-making power among token holders (Ruane and Andrew McAfee, 2022). DAO, as a primitive digital organisation, is not a complete disruption of the existing organisational model as it still carries similar characteristics of the existing organisational model. However, it can be observed by benchmarking against the corporatocracy that the organisational qualities of the DAO, a human-machine symbiosis, to a large extent does achieve an improvement of the existing organisational model and the original organisational drawbacks. This new organisational model will establish new relations of production or will be the underlying relations of production for the development of a new social 'metaverse'.

2.2.1 New Organizational Models and Production Relations

Although Web 3.0 originated from the desire to change the super-platform centralised production relations, the thinking behind it is much more ambitious. The idea is to establish a new type of social collaboration model and benefit distribution mechanism based on blockchain technology. Firstly, decentralization implies the absence of a single entity that can control all organizational operations and processes within the organization. Secondly, autonomy refers to the utilization of smart contracts for execution and certain management functions. Therefore, the purpose of DAOs is to reduce top-down operations in decision-making and execution processes, thereby enhancing the efficiency of organizational operations. Thirdly, the significance of the organization lies in being consensus-driven, with collaboration as the objective, forming a community that aggregates. Traditional firms are able to use huge leverage such as labour, capital, technology and publicity, which allows them to magnify their advantages with low inputs. This, in turn, exposes modern firms to multiple dilemmas, such as the owner-worker capital gap and the profit drive leading to a continuous allocation of resources. Similar to traditional organizations, DAOs have

a range of underlying operating systems and infrastructure, such as establishment mechanisms, resource management, and talent recruitment (Glaveski, 2022). Depending on different collaborative purposes and functions, DAO organizational frameworks can be categorized into types such as investment, services, collections, and social, among others. However, in contrast to traditional organizations, the focal point of Web 3.0 and DAOs is the Ownership Economy. DAOs transparently relinquish governance rights and economic returns to the community and individuals in an open manner (Banerjee et al., 2022; Bergendorff, 2022). This represents a shift from a top-down labour employment model to a participatory and creator economy. This means that DAOs have the potential to revolutionise value creation while reducing organisational friction. For example, DAOs often involve the use of cryptocurrencies and tokens for governance and incentivization. Each participant in the community ecosystem is a holder of a Token, and these participants have consistent common interests and can jointly promote the development of the community. This, therefore, introduces new economic practices where individuals may be rewarded based on their contributions to the community.

2.2.2 Governance and Agency

The central of DAOs is the development of decentralized ecosystems and autonomous governance. This ecosystem allows people to co-build peer-to-peer (P2P) communities. DAOs are not only a form of blockchain, but also an extension of traditional Organizational Behaviour and Organizational Governance theories. DAOs can be divided into Share-Based and Governance Based. The difference between the former and the latter is that the former has its own pool of funds to facilitate the exchange of tokens among the holders, while the latter's tokens can only be used as governance tokens (Banerjee et al., 2022). Traditional organizational practices, characterized by hierarchical structures, may be challenged by DAOs, which promote a flatter distribution of power. Over the last few decades, users, consumers and participants have been adding value to organisations without getting their share of the value. Meanwhile, power dynamics are part of the organisation and influence the way in which its members collaborate. It is a common phenomenon in business today that, despite progressive decentralisation, planning and decision-making still occur at the top of the organisation. DAOs operate more like open economies than closed organisations. Participants may experience a shift in their roles and identities within organizations, influencing how they perceive authority and contribute to collective goals. For example, the participants of DAOs may come from diverse fields and backgrounds. It rewards each individual contribution based on the value provided by the participants. The promotion of community decision-making empowers individuals through open voices, open sources and advocacy of interest (Lumineau et al., 2021). Each participant can be involved in the decision-making process. Users and creators often rely on smart contracts and decentralised technologies, where members propose and vote for specific decisions and solutions. The way in which smart contracts run decentralised decision-making inherently reduces governance coordination costs significantly compared to traditional centralised organisations. DAO can achieve autonomy in core management and benefit distribution, avoiding rent-seeking space and conflict of interest caused by human operation. This also enables more transparent and efficient execution of decisions without the need for traditional top-down organizational processes. This, in turn, would encourage innovation and collaboration with the support of initiative, and open feedback loops.

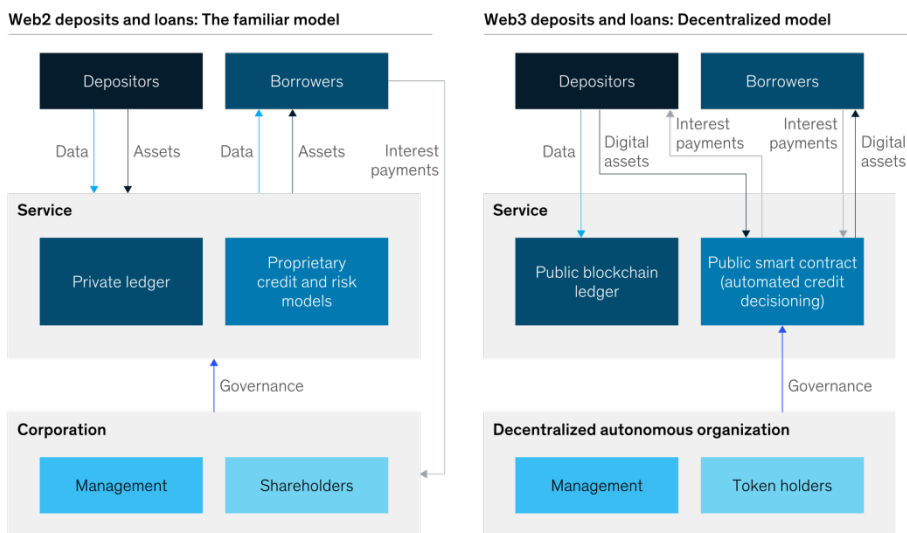
2.2.3 Decentralized Financial Sector

The integration of Web 3.0 technologies, particularly in the context of DAOs, will have the potential to bring significant changes to financial services. Facilitating smart contracts, DAOs would disrupt traditional financial services by automating processes. Smart contracts enable self-executing agreements, reducing the need for intermediaries and streamlining transaction processes. The need for traditional financial institutions or platforms would be eliminated as lending and borrowing can be fully processed through blockchain. The financial services provided would change from private ledger and proprietary credit and risk models to public blockchain ledger and public smart contract; the governance body would change from shareholders to token holders (Figure 2) (Banerjee et al., 2022). Moreover, under traditional financial services, depositor rely on banks to safeguard their fund. Under DAOs, assets become fully digital, and depositors use non-custodial wallets to secure their cryptocurrencies or tokens. Also, the activities of traditional banks and financial institutions are often non-transparent. Centralised corporate forms are often subject to corruption, fraud and mismanagement. Morning Consult's survey shows that trust in financial institutions is often closely linked to data privacy and security (Principato, 2022). DAO can help rebuild customer trust in banks, especially in an increasingly digital age where customer expectations are changing. The blockchain is encrypted with a key, and all sorted data is recorded

in the blockchain such that any information can be accessed at any time and cannot be altered. Applying DAO governance models in banks could be just what the industry needs to bridge the gap between FinTechs and established financial institutions.

Web3 could represent a paradigm shift in business models for digital applications.

Illustrative and nonexhaustive



McKinsey & Company

Figure 2. The comparison between Web 2.0 and Web 3.0: deposits and loans

2.2.4 Concern on DAOs

Currently, DAOs are still in the development stage. Liu’s (2023) survey of 4963 voting activities suggests that as an innovative trend, DAOs remain as a “probationary business entity”. The unique structure of the DAO requires a new set of software tools to facilitate effective community engagement and efficiently manage processes such as payments, token formation and governance, funds management, security and system integrity. There are still problems ranging from the technical foundation to the construction of the upper system. Firstly, in terms of decision-making, DAOs are democratic through voting. This can lead to several problems, such as inexperienced voters, differences in opinions/interests and how the priorities of different proposals are differentiated. From there, these issues relate to the direction of development on how to produce fair, efficient and professional solutions in the future. Augustin et al.’s (2023) investigation of the internal mechanisms of existing DAOs suggests that, despite the existence of the “one token, one vote” approach, a portion of the community’s DAOs may not be able to escape the same problems of decision-making mechanisms in a democratic society. Second, the legitimacy of DAOs as legal entities has not yet been fully confirmed by legal regulators, creating regulatory uncertainty. The existing regulatory system is designed for centralised and hierarchical organisations. This diverges from the meaning of decentralisation and self-regulation of DAOs. Legislative developments may not be immediately responsive to new issues arising from technological developments. Finally, issues of equality and morality remain for the development of DAOs over the next 30 to 50 years. The idea of DAOs lies in the pursuit of a model of self-control for fair decision-making, and thus more equal social labour outcomes. However, both the resourcing, construction, and participation of DAOs require potential participating individuals to have economic, technical and intellectual capital. By focusing on the distribution of processes without taking responsibility for outcomes, DAOs will continue to be a form of social regulation of certain technologies/knowledge by digital elites through technological power, thus exacerbating social inequality.

3. Conclusion

The conceptualisation and definition of linear and non-linear innovation is characterised by multidirectional and multifaceted research.

Early studies focused on the evolution of the innovation process along a certain paradigm with the special name of continuity. In contrast, later scholars argue that innovation is characterised by non-linearity. The process of innovation may be embodied in a life cycle of transfer from one technology or knowledge to another, or it may be a change from one sub-cycle to another. Although scholars have not formed a unified view, the basic consensus is that the evolutionary process of innovation is manifested in different forms at different stages. Linear innovation processes can also have discrete nodes, while non-linear innovation practices may also have continuous phases. Innovation is not a static state, but rather the subject of innovation in different stages of innovation around the innovation control and resources to carry out the corresponding interactive game. Innovation is not only related to the internal structure of the organisation but also to the external environment and culture. Thus, the examination of innovation practices and the establishment of individual innovation consciousness needs to be approached from a broader perspective. For me, this includes learning about innovation theory and practice, the relationship between innovation and socio-cultural needs, and coping with uncertainty and ambiguity, among other perspectives.

I plan to continue to refine my understanding of new line trends and needs to further improve my innovation skills. Firstly, this will require me to be learning about evolving theories and practices. In addition to classroom knowledge, I will create my research programme to understand the meaning and practical possibilities of innovation today by finding more research materials and real-life examples. Innovation and demand are inextricably linked. Whether it is product, service, or knowledge innovation, it requires an examination of desirability, feasibility, and viability. I will use these three directions as a basis for developing my innovation awareness. In addition, I will improve my leadership skills. I will develop my sense of innovation and creativity by participating in team activities both on and off campus. These skills cannot be separated from an examination of culture and context. Both in group activities and in organisations the development of the impact of culture and context on creative practice needs to be examined and researched. I will learn about the cultures and contexts of different organisations, regions and countries to understand the possibilities for the development of innovative practices under different mechanisms. This will diffuse my innovative and strategic thinking so that I can develop my leadership in different mechanisms. At the same time, and more importantly, uncertainty and ambiguity always arise around innovation. Sustainable innovation requires good perception and anticipation of changes in the external environment and potential risks. This also means that I need to be feasible and adaptable. An open mind enables me to develop positive adaptability to uncertainty in the face of challenges. This mindset can be achieved by engaging in teamwork. For example, by participating in innovation-related forums and partnerships, and interacting or collaborating with peers across disciplines, I am able to gain different skill sets and perspectives. Based on feedback, I am also able to assess my knowledge and information and find ways to adapt. Finally, it is important to recognize the ethic dilemma surrounding by innovation. Today, innovation is starting to creep into the web 3.0 dimension and issues around data, algorithmic bias, privacy and the environment are becoming more prominent. Focusing on social and ethical issues is an important dimension of responsible innovation. To build innovative mindset and involve in innovation activities, it is needed for me to encompasses a focus on the UN Sustainable Development Goals, as well as learning from new features in different industries.

References

- [1]Augustin, N., Eckhardt, A. and De Jong, A.W. (2023) 'Understanding decentralized autonomous organizations from the inside', *Electronic Markets*, 33(1), p. 38. Available at: <https://doi.org/10.1007/s12525-023-00659-y>.
- [2]Banerjee, A. et al. (2022) Potential of Web3 | McKinsey, McKinsey. Available at: <https://www.mckinsey.com/industries/financial-services/our-insights/web3-beyond-the-hype> (Accessed: 2 December 2023).
- [3]Bergendorff, C.L. (2022) Participatory Capitalism: The Ownership Economy And The Macro Trend Of Micro Organizations, *Forbes*. Available at: <https://www.forbes.com/sites/claralindhbergendorff/2022/03/07/participatory-capitalism--the-ownership-economy-and-the-macro-trend-of-micro-organizations/> (Accessed: 1 December 2023).
- [4]Brennan, L. (2018) 'How Netflix Expanded to 190 Countries in 7 Years', *Harvard Business Review*. Available at: <https://hbr.org/2018/10/how-netflix-expanded-to-190-countries-in-7-years>.
- [5]Buggie, F.D. (2001) 'THE FOUR PHASES OF INNOVATION', *Journal of Business Strategy*, 22(5), pp. 36–42. Available at: <https://doi.org/10.1108/eb040197>.

- [6]Burns, P. (2020) *Corporate entrepreneurship and innovation*. Fourth edition. London: macmillan international, RED GLOBE PRESS.
- [7]Christensen, C.M. (2011) *The innovator's dilemma: the revolutionary book that will change the way you do business* ; [with a new preface]. 1. Harper Business paperback publ. New York, NY: Harper Business.
- [8]Drucker, P.F. (2002) *Innovation and entrepreneurship: practice and principles*. Place of publication not identified: PerfectBound.
- [9]Eliashberg, J. (2006) 'The Home-video Market: Who Rents, Who Buys and Why', *Knowledge at Wharton*. Available at: <https://knowledge.wharton.upenn.edu/podcast/knowledge-at-wharton-podcast/the-home-video-market-who-rents-who-buys-and-why/> (Accessed: 9 December 2023).
- [10]Fox, S. and Rainie, L. (2014) 'Part 1: How the internet has woven itself into American life', *Pew Research Center: Internet, Science & Tech*, 27 February. Available at: <https://www.pewresearch.org/internet/2014/02/27/part-1-how-the-internet-has-woven-itself-into-american-life/> (Accessed: 9 December 2023).
- [11]Glaveski, S. (2022) 'How DAOs Could Change the Way We Work', *Harvard Business Review*, 7 April. Available at: <https://hbr.org/2022/04/how-daos-could-change-the-way-we-work> (Accessed: 1 December 2023).
- [12]Green, H. (2011) *Phases of Innovation*, *Forbes*. Available at: <https://www.forbes.com/sites/work-in-progress/2011/12/14/phases-of-innovation/>.
- [13]Horrigan, J.B. (2006) 'Home Broadband Adoption 2006', *Pew Research Center: Internet, Science & Tech*, 28 May. Available at: <https://www.pewresearch.org/internet/2006/05/28/home-broadband-adoption-2006/> (Accessed: 9 December 2023).
- [14]IDEO (no date) *Design Thinking Defined*, IDEO | Design Thinking. Available at: <https://designthinking.ideo.com> (Accessed: 1 December 2023).
- [15]Kirsner, S. (2006) *Studios Shift to Digital Movies, but Not Without Resistance - The New York Times*. Available at: <https://www.nytimes.com/2006/07/24/technology/24digital.html> (Accessed: 9 December 2023).
- [16]Liu, X. (2023) 'The Illusion of Democracy? An Empirical Study of DAO Governance and Voting Behavior', *SSRN Electronic Journal [Preprint]*. Available at: <https://doi.org/10.2139/ssrn.4441178>.
- [17]Lumineau, F., Wang, W. and Schilke, O. (2021) 'Blockchain Governance—A New Way of Organizing Collaborations?', *Organization Science*, 32(2), pp. 500–521. Available at: <https://doi.org/10.1287/orsc.2020.1379>.
- [18]McFadden, C. (2020) *From DVDs to streaming, here's the incredible history of Netflix*. Available at: <https://interestingengineering.com/culture/the-fascinating-history-of-netflix> (Accessed: 8 December 2023).
- [19]Meissner, D. and Kotsemir, M. (2016) 'Conceptualizing the innovation process towards the "active innovation paradigm"—trends and outlook', *Journal of Innovation and Entrepreneurship*, 5(1), p. 14. Available at: <https://doi.org/10.1186/s13731-016-0042-z>.
- [20]Netflix (2007) *Netflix Announces Q1 2007 Financial Results*. Available at: chrome-extension://efaidnbmninnibpcjpcglclefindmkaj/https://s22.q4cdn.com/959853165/files/doc_news/archive/c2ff80aa-7ec9-43ad-9394-06f11e45516f.pdf.
- [21]Netflix (2023) *About Netflix*. Available at: <https://about.netflix.com/en>.
- [22]Nicolini, D., Gherardi, S. and Yanow, D. (2003) 'Introduction: Toward a Practice-Based View of Knowing and Learning in Organizations', in *Knowing in Organizations: A Practice-Based Approach*. 1st edn, p. 29.
- [23]OECD (2018) *Oslo Manual 2018: Guidelines for collecting, reporting and using data on innovation*. Available at: <chrome-extension://efaidnbmninnibpcjpcglclefindmkaj/https://www.oecd.org/sti/inno/oslo-manual-2018-info.pdf>.
- [24]Osterwalder, A. and Pigneur, Y. (2010) *Business model generation: a handbook for visionaries, game changers, and challengers*. New York: Wiley&Sons.
- [25]Principato, C. (no date) *In Financial Services, Trust Is a Must, but Data Privacy Is the Differentiator*, *Morning Consult Pro*. Available at: <https://pro.morningconsult.com/analysis/federal-services-trust-data-privacy> (Accessed: 2 December 2023).
- [26]Robbins, S.P. and Judge, T. (2019) *Organizational behavior*. 18th edition. New York, NY: Pearson.
- [27]Rothwell, R. (1994) 'Towards the Fifth-generation Innovation Process', *International Marketing Review*, 11(1), pp. 7–31. Available

at: <https://doi.org/10.1108/02651339410057491>.

[28]Ruane, J. and McAfee, A. (2033) What a DAO Can — and Can't — Do. Available at: <https://hbr.org/2022/05/what-a-dao-can-and-cant-do> (Accessed: 1 December 2023).

[29]Schein, E.H. (1992) *Organizational culture and leadership*. 5th Edition. Hoboken, New Jersey: Wiley.

[30]Schein, E.H. and Schein, P.A. (2019) *The corporate culture survival guide: Culture + change + leadership*. 3rd edition. Hoboken, New Jersey: John Wiley & Sons, Inc.

[31]Schumpeter, J.A. (2021) *The theory of economic development*. Translated by R. Opie. Abingdon, Oxon: Routledge.

[32]Tran, S.K. (2017) 'GOOGLE: a reflection of culture, leader, and management', *International Journal of Corporate Social Responsibility*, 2(1), p. 10. Available at: <https://doi.org/10.1186/s40991-017-0021-0>.

[33]Tryon, C. (2013) *On-demand culture: digital delivery and the future of movies*. New Brunswick, N.J: Rutgers Univ. Press.

[34]West, J. and Mace, M. (2007) ENTERING A MATURE INDUSTRY THROUGH INNOVATION: APPLE S IPHONE STRATEGY. DRUID Summer Conference 2007.