Building an Agile Brand Adapting in the 4.0 Era

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Abstract

The study explores at how consumers perceive agility when making purchases from a digitallyenabled premium organization. It demonstrates that improving agility-a component apart from customer service—by satisfying customer expectations and instantly adapting to digitalization improves interaction with customers. This emphasizes the importance for managers and practitioners of highend businesses to optimize customer experiences while adapting to evolving service interactions. By merging conceptual and theoretical frameworks with practical application, this study attempts to present an overall understanding of Industry 4.0 and agile businesses. It focuses on the relationship between past and contemporary globalization and outlines the history and current state of affairs in terms of digitalization, globalization, technological and economic aspects, and the most recent theoretical framework for flexible organizational structure and management. As the initial in-depth examination of the literature, this study establishes an association between Industry 4.0 and agile and lean manufacturing. Establishing a conceptual framework for their interactions, it demonstrates how Industry 4.0 encourages and promotes the implementation of both systems. While agile manufacturing increases flexibility, integrating Industry 4.0 with lean manufacturing promotes cost-competitiveness. With an emphasis on businesses introducing technological advances and a new wave of evolution, the study looks at the implications and difficulties of Industry 4.0 from a business perspective. It makes the point that Industry 4.0 is the most complex and advanced revolutionary era at this point radically altering established business practices with its cutting-edge features and modifications.

Keywords

Agility, Agile Supply Chain Management, Brand Equity, Branding 4.0, Marketing 4.0, Agile Business Model Innovation

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I. Introduction

Rapid worldwide technological, financial, governmental, social, and cultural breakthroughs during the 1980s have had a substantial influence on industries involving informatics, interactive communication, production, data generation, consumption, and perception. As a result, prominent topics in social sciences include globalization, Industry 4.0 (I4.0), digitalization, new economy, a global stability, and the digital transformation age [1]. I4.0, known as the Fourth Industrial Revolution, attempts to establish intelligent products, procedures, and processes that could enhance people's lives. It improves the adaptability, resilience, and quality standards of engineering, planning, production, and operational and logistical processes. This results in dynamic, self-organizing values that can be optimized according to cost, availability, and utilization of resources [2]. I4.0 demands rapid adaptation and acceptance of change, especially in the retail business. Being agile is essential for improving sustainability and responding to sudden events. To be ready for the future, one must be aware of strategies that can help industries address current issues, guaranteeing growth and sustainability in a setting that is changing quickly [3]. In the Era personalization and customization are critical components of organizational existence. Concerns regarding data privacy, the complexity of data administration, implementation expenses and personnel shortages need to be addressed nevertheless. Regulation compliance, ethical issues and consumer preferences must all be balanced when it comes to personalization. In order for enterprises to effectively leverage these competencies, they must plan, invest and follow legal and ethical requirement [4]. Manufacturing companies must deal with the difficult task of implementing flexibility, a subjective concept. Although several studies have been conducted, each focusing on a different issue, 4.0's digitization has made matters worse because there is no structured, step by step process in place for firms to use ambidextrous skills [5]. With its combination of digital, biological and tactile technology, industry 4.0 is transforming sectors and providing a competitive advantage. It has culminated in the establishment of the collaborative economy, peer-to-peer economy, flex economy, and Big Data for planning. Uber, Airbnb, Skype, Alibaba, Facebook, and Netflix have distinctive business strategies that cannot be accommodated by standard macro and microeconomic models. The global economy is undergoing transformations and disruptive advancements [6]. The worldwide trading economy is gradually fostering competitiveness and excellence among Supply Chain Management (SCM) firms. Companies are emphasizing supply chain operations above manufacturing, retailing, and marketing activities, leading to the adoption of innovative approaches for efficiency and performance. Agile Supply Chain Management (ASCM) and I4.0 methods are essential for providing flexibility and maintaining survival in this era, since they offer cost savings and enhanced business efficiency [7]. Economic developments have driven businesses to reconsider their value assertions, augmenting traditional product offers with supplemental services including the Product-Service System (PSS). I4.0 technologies are widespread, but their potential for creating novel advantages has not been thoroughly investigated. Based on a focus category, demonstrates the key trajectories driving a future scenario in which PSS and Industry 4.0 blend [8]. A new business creates a well-planned operational framework that includes operations, organizational design, manufacturing practices, profit maximization approaches, and identification of fraud. The approach concentrates on providing value to customers, attracting them to purchase services, and transitioning them into profits. Management's profit or loss intention demonstrates their awareness of customer demands and aspirations, which is critical to a company's success [9].

2. Brand Adapting in the 4.0 Era

Brand equity is a vital component in a brand's success as it influences consumer perceptions and relationships, leading to superior outcomes and performance. However, our understanding of brand

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equity's dynamic character and engagement with external competitors is limited in both beneficial and adverse ways. Understanding this dynamic nature is critical for brands to effectively achieve their objectives and increase market value [10]. Brands struggle to fulfill the Branding 4.0 criteria, which necessitate extremely customized experiences. With the literature on Branding 4.0 still in its early phases, concerns persist regarding how firms may keep their identity while providing a hyper-personalized client experience. Machine learning, AI modularity, and supply chain integration are key organizational competencies and resources that might assist businesses in transitioning to and maintaining a Branding 4.0 mindset by efficiently customizing their product offers [11]. Luxury brands must demonstrate perceived agility by offering accurate and responsive information regarding the customer changes. Customers of the Millennial and Z generations prefer immediate engagement and one-of-a-kind services, making it impossible for a digitalized luxury business to sustain customer satisfaction by merely selling products and services [12]. Marketers have to promote customer satisfaction, comprehend identity resolution, and implement retention metrics. They must adapt to the new standard, create innovative solutions throughout economic recovery, and forecast the future. Marketers have to consider individuals as assets, utilize lessons learnt, and reinvent themselves to integrate into the "next-generation" area. They must be innovative, proactive, and prepare for the future, assuring customers' dependence on valued brands and establishing guiding values [13]. Lean and agile manufacturing are approaches that attempt to eradicate waste and reduce expenses. 14.0 is converting outdated production systems into intelligent ones, pushing organizations to enhance cost efficiency and adaptability for the purpose to keep themselves competitive [14].

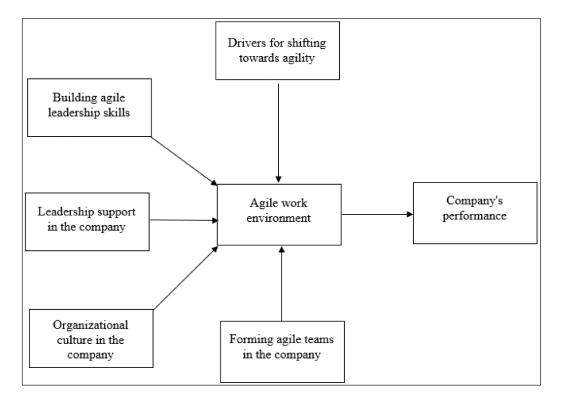


Fig 1: A conceptual model of developing an Agile work environment

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The Figure illustrates that essential elements that make up an agile workplace which eventually improves an organization output. Agility shifting drivers promote the change while developing agile leadership abilities and organizational leadership support create the required framework. Additionally establishing agile teams and a strong corporate culture foster flexibility. Lean standards have become crucial in a variety of sectors, especially manufacturing, as businesses adapt to advancements in technology and the rise of the internet. The lean technique focuses on satisfying customer requirements, eliminating waste, and recognizing consumer value. Companies have to create and provide products and services effectively according to market opinions [15].

The The Enabler approach optimizes communication and customer experiences by combining agile fundamentals with creative processes. Forming cross-functional agile teams with professionals from both brands and agencies leads to a more regulate, concentrated, and engaged approach. A stringent marketing strategy substitutes the flexible brand backlog; user narratives replaces briefings; and iteration cycles supersede linear project schedules. This strategy streamlines communication development and results in a more consumer-centric approach, but it necessitates a shift in mentality and time [16]. Agile business model innovation (BMI) approaches have been gaining prominence in recent years, with a focus on customer feedback, continuous validation, and iteration. These techniques attempt to deal with uncertainty, however businesses, particularly those facing reputational concerns, may face major challenges towards applying these tactics, since the risk of failure might endanger their reputation [17]. Marketing attempts to strengthen a company's worth by attracting people and encouraging them to become customers. Marketing has grown with technology progress, which is essential for a company to succeed. Technology's fast development and increased accessibility have made it popular among marketers and consumers [18]. The integration of AI throughout Marketing 4.0 is crucial for realizing its full potential in transforming relationships with customers. AI systems forecast customer preferences, customize experiences, and foster loyalty, giving firms a strategic advantage. This integration also has important social implications, benefitting consumers and regulators from both perspectives [19].

3. Methodology

In the 4.0 Era applies an approach that emphasizes constant innovation, customer centricity and adaptability to develop an agile brand. To fully comprehend changing consumer demands and market trends, start with design thinking. Brand strategies can be developed and tested iteratively using Agile development frameworks to ensure rapid response to changes [20]. Apply data driven decision making to obtain actionable insights by utilizing AI and real time analytics tools. Encourage teams to collaborate which will facilitate quick information transfer and cross functional involvement. Lastly to match brand identity, strategy and vision with changing market conditions hold brand sprint workshops on a regular basis. An adaptable resilient brand that prospers in a fast paced, digitally first environment is guaranteed by this strategy [21].

4. Recommendations

Future academic research can successfully influence dynamic strategic brand management decisions in turbulent situations, as highlighted below.

 Future research should look at market buyers heterogeneity, ultimately leads to distinctive customer categories. Brands can serve these categories by providing customized access, Shah and Igbal

distinction, and engagement. However, preference fragmentation may necessitate the adoption of many brands as well as unique brand management skills.

- A commercial enterprise must constantly reinvent itself and its operations while maintaining the
 basic premise of the whole framework, considering workers, clients, and partners must have a
 strong belief in order to work with and for it.
- The research emphasizes the relevance of agility in productivity, product development, and client retention, as well as the incorporation of technology in risk-reduction methods. Future studies might benefit from larger numbers of participants.
- To refine the results, future study should involve a survey and a systematic literature review.
 Participants' academic backgrounds may have influenced general concerns, prompting a larger discourse involving more practitioners and managers to attempt to address the challenge and ensure greater understanding.
- Rapid market developments have culminated in diversified business models and platforms, strengthening brand asset value through vertical integration, accessibility, distinction, and involvement with other stakeholders. Consumer preferences fluctuate faster rendering new brand characteristics and facets including wealth disparity and social justice increasingly substantial and prominent.
- Industry 4.0 prioritizes customization and personalization for corporate success, necessitating
 investment, planning, and ethical standards for ensuring a customer-centric, sustainable future in
 manufacturing.
- The article encourages for further research and innovation to employ AI in customer interactions
 to establish meaningful, customized relationships between businesses and customers, moving
 beyond transactional advertising.

Table 1: Core areas for building an Agile brand in the 4.0 Era.

Key factor	Description	Action steps
Customer Centric approach [14]	Focusing on delivering value to customers	Conduct regular feedback loops.
Agile Leadership [15]	Leaders who foster adaptability and innovation	Build leadership agility skills.
Cross Functional collaboration [16]	Breaking silos and encouraging teamwork's.	Implement cross functional teams.
Technology Integration [17]	Incorporating advanced digital tech to enhance brand operations.	Adopt IoT, AI, Cloud to improve agility
Resilient Brand Identity [17]	Maintaining a consistent yet flexible brand image	Regularly revisit brand guidelines.
Employee Engagement [18]	Ensuring employees are aligned with the brand agile goals.	Provide training, promote a shared vision.

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Conclusion

Customization and personalization have undergone a revolution owing to Industry 4.0, which witnessed a transition from individualized design to mass manufacturing and, more recently, data-driven personalization. This change gives businesses a competitive edge, increases revenue, improves operational efficiency, and improves customer experience. Moreover, it supports sustainability objectives by helping companies reach a wider audience and cut down on waste and overproduction. Customization and personalization have several advantages, which makes them an essential part of today's production environment. Driven by industry 4.0 technologies, business are launching new services to satisfy consumer expectations. These developments make information more accessible and intense, facilitating data collecting and product connectivity to the cloud. This result in the current product supply chains being increasingly digital and interconnected. Industry 4.0 makes it possible to enhance current PSS in many ways, increasing their efficacy and efficiency. Business 4.0 is a revolution that is altering how firms operate through the use of automation, robots, AI and cloud computing. Technologies driven by ML will soon mimic human brain functions and intelligent robots will enhance human abilities. These technologies will increase human machine collaboration which will increase Business 4.0's sustainability and efficiency. With a focus on how AI will impact consumer relationships, ethical quandaries and data protection concerns, the essay explores how AI is revolutionizing marketing 4.0. It highlights AI's increased efficiency and customization while also addressing the moral concerns surrounding data privacy. This study highlights the unrealized marketing possibilities of AI.

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References

- Şen E., İrge N. T. (2020). Industry 4.0 and agile firms. In Agile Business Leadership Methods for Industry. 4.0 (pp. 209–231). Emerald Publishing Limited
- 2. Đorić Ž., Roganović M. (2021). Industry 4.0: Exploring the concept and implications for business. *International Journal of Economic Practice and Policy*, 18(1), 95–123.
- Agarwal V., Hameed A. Z., Malhotra S., Mathiyazhagan K., Alathur S., Appolloni A. (2023). Role of Industry 4.0 in agile manufacturing to achieve sustainable development. *Business Strategy and the Environment*, 32(6), 3671–3688.
- 4. Wolniak R., Grebski W. (2023). The customization and personalization of product in Industry 4.0. *Scientific Papers of Silesian University of Technology Organization and Management Series*, 180.
- 5. Princes E. (2020). Integrating ambidexterity into the modern manufacturing era of industry 4.0. *International Journal of Supply Chain Management*, 9(4), 58–64.
- Balog K. (2020). The concept and competitiveness of agile organization in the fourth industrial revolution's drift. Strategic Management-International Journal of Strategic Management and Decision Support Systems in Strategic Management, 25(3).
- 7. Korucuk S., Tirkolaee E. B., Aytekin A., Karabasevic D., & Karamaşa, Ç. (2023). *Operations Management Research*, 16(4), 1698–1719. Agile supply chain management based on critical success factors and most ideal risk reduction strategy in the era of industry 4.0: application to plastic industry
- 8. Gaiardelli P., Pezzotta G., Rondini A., Romero D., Jarrahi F., Bertoni M., ... Cavalieri S. (2021). Product-service systems evolution in the era of Industry 4.0. *Service Business*, 15, 177–207.

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 Alam M., Khan I. R. (2020). Business 4.0-A New Revolution. Information technology for management. KD Publications, Delhi, India, 41–57.

- Rego L., Brady M., Leone R., Roberts J., Srivastava C., Srivastava R. (2022). Brand response to environmental turbulence: A framework and propositions for resistance, recovery and reinvention. *International Journal of Research in Marketing*, 39(2), 583–602.
- 11. Yan Y., Gupta S., Licsandru T. C., Schoefer K. (2022). Integrating machine learning, modularity and supply chain integration for Branding 4.0. *Industrial Marketing Management*, 104, 136–149.
- 12. Son S. C., Bae J., Kim K. H. (2023). An exploratory study on the perceived agility by consumers in luxury brand omni-channel. *Journal of Global Scholars of Marketing Science*, 33(1), 154–166.
- 13. Purcarea T. V. (2020). Putting Radical Marketing Into Practice Immediately, Keeping Agile and Adaptable. *Holistic Marketing Management Journal*, 10(2), 32–43.
- Ding B., Ferras Hernandez X., Agell Jane N. (2023). Combining lean and agile manufacturing competitive advantages through Industry 4.0 technologies: an integrative approach. *Production planning & control*, 34(5), 442–458.
- Malviya R. (2021). Agile manufacturing. In Lean Tools in Apparel Manufacturing (pp.. 399-421). Woodhead Publishing
- Jentschke M. (2022). The Enabler Model: Towards an Integrated, Agile Way of Collaboration Between Brands and External Agency Partners. In *Brand Evolution: Moderne Markenführung im digitalen Zeitalter* (pp. 847– 865). Wiesbaden: Springer Fachmedien Wiesbaden.
- 17. Sanasi S., Manotti J., Ghezzi A. (2021). Achieving agility in high-reputation firms: Agile experimentation revisited. *IEEE Transactions on Engineering Management*, 69(6), 3529–3545.
- 18. Sima E. (2021). Managing a brand with a vision to marketing 5.0. In *MATEC Web of Conferences* (Vol. 343, p. 07015). EDP Sciences
- 19. Ahmed A. (2022). Marketing 4.0: The unseen potential of AI in consumer relations. *Marketing*, 9(1).