

An Agile Branding Framework for Educational Startups in Volatile E-Learning Markets

Saeed. Abbasi Zahandeh^{1*} 

¹ M.Sc. in Business Management, Faculty of Management and Accounting, Allameh Tabataba'i University, Tehran, Iran

* Corresponding author email address: saeed_abbasi@alumni.mail.atu.ac.ir

Article Info

Article type:

Original Research

How to cite this article:

Abbasi Zahandeh, S. (2026). An Agile Branding Framework for Educational Startups in Volatile E-Learning Markets. *AI and Tech in Behavioral and Social Sciences*, 4(4), 1-8.

<https://doi.org/10.61838/kman.aitech.5839>



© 2026 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

The e-learning market is a rapidly changing business ecosystem shaped by technological innovation, shifting educational policies, and evolving learner expectations. Static and linear branding approaches may therefore be inadequate for educational startups that must build trust while adapting quickly to market change. This study developed and tested an agile branding framework for educational startups. A quantitative, applied, descriptive-correlational design was used. The target population comprised founders and senior managers of 300 educational startups operating in Districts 2, 8, and 17 of Tehran, Iran. A proportionate stratified random sample of 169 individuals was invited to participate, and 158 valid questionnaires were analyzed (response rate = 93.5%). Data were collected using a researcher-developed instrument and analyzed with partial least squares structural equation modeling. Agile branding was operationalized through rapid responsiveness, value co-creation, and strategic iteration. The findings indicated significant positive effects of agile branding on business performance ($\beta = 0.456$, $p < 0.001$) and brand equity ($\beta = 0.512$, $p < 0.001$). Brand equity positively predicted business performance ($\beta = 0.483$, $p < 0.001$) and significantly mediated the relationship between agile branding and business performance (indirect $\beta = 0.289$, $p < 0.001$). Dynamic capabilities significantly strengthened the association between brand equity and business performance ($\beta = 0.198$, $p = 0.004$). The model explained 56.7% of the variance in brand equity and 54.7% of the variance in business performance; predictive relevance was supported for both endogenous constructs ($Q^2 = 0.384$ and 0.361 , respectively). These results position agile branding as a strategic organizational capability that can help educational startups strengthen brand equity and improve performance in volatile digital education markets.

Keywords: agile branding; brand equity; dynamic capabilities; business performance; educational startups; e-learning market

1. Introduction

The global e-learning sector has moved from a supplementary delivery channel to a central component of the digital economy and contemporary education. The COVID-19 pandemic accelerated adoption, but the sector's continuing transformation is now driven by broader forces, including generative artificial intelligence,

platform-based delivery, changing learner expectations, international competition, and rapid shifts in the skills demanded by employers. The distinction between emergency remote teaching and deliberately designed online learning also underscores that sustainable digital education requires organizational, technological, and pedagogical capabilities rather than the temporary migration of conventional instruction to online platforms

(Hodges et al., 2020). More broadly, the World Economic Forum (2023) identifies digitalization, artificial intelligence, and changing skill requirements as major forces reshaping organizations and labor markets (World Economic, 2023).

Educational technology startups operate under more uncertainty than established educational institutions. They typically have fewer financial and reputational resources, limited historical data, and weaker institutional legitimacy, yet they must establish credibility, acquire learners, and revise their offerings quickly. Their performance therefore depends not only on educational quality but also on their ability to learn from the market, test assumptions, and reconfigure products and processes. Agile management and lean-startup approaches emphasize short learning cycles, experimentation, feedback, and iterative adaptation as mechanisms for operating under uncertainty (Denning, 2018). Business-model research likewise emphasizes continuous renewal rather than reliance on a single fixed configuration (Osterwalder et al., 2020).

Conventional branding theory emphasizes the development of a coherent identity, stable associations, perceived quality, and customer loyalty. These principles remain essential because brands reduce uncertainty and organize customer expectations (Aaker, 1991; Keller & Swaminathan, 2020). However, consistency should not be confused with rigidity. In volatile digital markets, organizations may need to revise messages, interfaces, service bundles, and channels while preserving their core identity. Marketing strategy therefore requires a balance between recognizable positioning and responsiveness to changing customer and competitive conditions (Kotler & Keller, 2022).

Agile branding describes a branding process based on rapid responsiveness, continuous stakeholder involvement, and iterative strategic refinement. Rather than treating brand strategy as a periodic planning exercise, the agile approach frames it as a continuous learning system. Customer feedback, market signals, experimentation, and performance data are used to refine the value proposition and communication strategy. This logic is consistent with agile management and lean experimentation, in which small, testable changes generate information before large-scale commitments are made (Denning, 2018; Ries, 2011). For educational startups, this approach is particularly relevant because trust and perceived quality must be built while technologies, learner needs, and competitive offerings continue to change.

The dynamic capabilities perspective provides a theoretical explanation for why some firms can benefit more from agile branding than others. Dynamic capabilities refer to the organizational capacity to integrate, build, and reconfigure resources in response to changing environments (Teece et al., 1997). Later work conceptualized these capabilities through the processes of sensing opportunities and threats, seizing opportunities, and transforming or reconfiguring the organization (Teece, 2007). Dynamic capabilities are not substitutes for operational resources; rather, they determine how effectively those resources are renewed and deployed under uncertainty (Eisenhardt & Martin, 2000; Teece, 2018).

Brand equity represents the principal marketing asset through which branding activities may improve organizational outcomes. Customer-based brand equity includes awareness, brand associations, perceived quality, and loyalty (Aaker, 1991; Keller & Swaminathan, 2020). In digital education, prospective learners often assess service quality before direct experience using indirect signals such as reputation, peer recommendations, communication quality, and the coherence of the learner experience. Strong brand equity can therefore reduce perceived risk, support acquisition and retention, and create a more favorable basis for organizational performance.

Despite the relevance of agility, brand equity, and dynamic capabilities to digital ventures, these concepts are often examined separately. Research has not adequately clarified how agile branding translates into business performance in educational startups, whether brand equity functions as the principal transmission mechanism, and whether dynamic capabilities strengthen the conversion of brand equity into performance. The present study addresses this gap by developing and empirically testing an integrated framework for educational startups operating in volatile e-learning markets.

2. Conceptual Framework and Hypotheses

2.1. Agile Branding and Business Performance

Agile branding may improve business performance by shortening the time between market change, organizational interpretation, and strategic response. Rapid responsiveness allows a startup to adjust communication and service design when learner needs or technologies change. Value co-creation incorporates users and other stakeholders into the development of the brand promise, while strategic iteration replaces infrequent large-scale repositioning with

smaller evidence-based adjustments. Together, these practices can improve market relevance, customer acquisition, internal learning, and resource allocation. This reasoning is consistent with agile and lean approaches that link iterative learning with performance under uncertainty (Denning, 2018).

H1. Agile branding has a positive effect on business performance.

2.2. Brand Equity as a Mediating Mechanism

Agile branding should also strengthen brand equity. Continuous engagement and rapid response can increase brand awareness, produce clearer and more favorable associations, demonstrate responsiveness as a signal of quality, and reinforce loyalty through repeated positive interactions. These dimensions are central to customer-based brand equity (Aaker, 1991; Keller & Swaminathan, 2020). Brand equity, in turn, can improve organizational performance by lowering perceived risk, increasing preference and retention, and supporting more efficient customer acquisition. Accordingly, brand equity is expected to transmit part of the effect of agile branding to business performance.

H2. Agile branding has a positive effect on brand equity.

H3. Brand equity has a positive effect on business performance.

H4. Brand equity mediates the relationship between agile branding and business performance.

2.3. The Moderating Role of Dynamic Capabilities

Brand equity is a valuable intangible resource, but its performance value depends on the organization's capacity to use and renew it. Firms with stronger sensing capabilities can identify changes in learner needs and competitor behavior; stronger seizing capabilities support the conversion of those insights into offerings and market actions; and transformational capabilities allow structures and processes to be reconfigured when existing routines become inadequate (Teece, 2007, 2018). Dynamic capabilities should therefore strengthen the extent to which brand equity contributes to business performance.

H5. Dynamic capabilities positively moderate the relationship between brand equity and business performance.

3. Methods and Materials

3.1. Research Design and Participants

This applied study used a quantitative, descriptive-correlational survey design to develop and test an agile branding framework for educational startups operating in volatile e-learning markets. The target population consisted of founders and senior managers of 300 active educational startups located in Districts 2, 8, and 17 of Tehran, Iran. The required sample size was estimated using Cochran's formula for a finite population (Cochran, 1977), resulting in a minimum target of 169 participants. Proportionate stratified random sampling was used to preserve representation across the three districts. Of the 169 distributed questionnaires, 158 valid responses were returned and included in the analysis, yielding a response rate of 93.5%.

3.2. Instrument Development

Data were collected using a researcher-developed questionnaire based on the branding, strategic management, and organizational capability literature. The instrument contained four latent constructs. Agile branding was measured with 12 items representing rapid responsiveness, value co-creation, and strategic iteration. Brand equity was measured with 10 items covering brand awareness, brand associations, perceived quality, and brand loyalty. Business performance was assessed with eight items reflecting financial performance, customer performance, and internal-process performance. Dynamic capabilities were represented by nine items measuring environmental sensing, opportunity seizing, and organizational transformation. All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3. Validity and Reliability Assessment

Content validity was evaluated by a panel of 10 specialists in branding, entrepreneurship, and educational management. The content validity ratio was 0.78, exceeding the critical value for a 10-member panel, and the content validity index was 0.85, indicating satisfactory expert agreement (Lawshe, 1975; Polit & Beck, 2006).

Construct validity was evaluated using a partial least squares measurement-model assessment. Sampling adequacy was supported by a Kaiser-Meyer-Olkin value of 0.873, and Bartlett's test of sphericity was significant,

$\chi^2(465) = 2456.78$, $p < 0.001$. Average variance extracted values ranged from 0.536 to 0.654 and therefore exceeded the 0.50 benchmark for convergent validity. Discriminant validity was assessed with the Fornell–Larcker criterion; the square root of each construct’s average variance extracted exceeded its correlations with the other constructs (Fornell & Larcker, 1981).

Internal consistency was assessed using Cronbach’s alpha and composite reliability. Alpha coefficients ranged from 0.842 to 0.895, while composite reliability values ranged from 0.867 to 0.913. All values exceeded the commonly applied 0.70 benchmark, supporting the reliability of the measurement model (Hair et al., 2022).

3.4. Data Analysis

The conceptual model was analyzed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS 3. PLS-SEM was selected because the study was prediction-oriented, included mediation and moderation paths, and used a moderate sample size. Analysis followed the two-stage procedure recommended for PLS-SEM (Hair et al., 2022). First, the measurement model was evaluated using indicator reliability, internal consistency, convergent validity, and discriminant validity. Second, the structural model was evaluated using path coefficients, coefficients of

determination (R^2), predictive relevance (Q^2), and bootstrapping with 5,000 resamples. Indirect effects were used to evaluate mediation, and the product-indicator approach was used to assess moderation. The standardized root mean square residual (SRMR) and normed fit index (NFI) were also reported as approximate model-fit indicators. The PLS Goodness-of-Fit index was retained as a descriptive statistic but was not treated as the primary basis for model acceptance, consistent with current PLS-SEM guidance.

4. Findings and Results

4.1. Respondent Characteristics and Descriptive Statistics

The final sample comprised 158 respondents. Of these, 68% were male and 32% were female. Regarding education, 45% held a master’s degree, 30% a bachelor’s degree, 20% a doctoral degree, and 5% an associate degree. Respondents reported an average of 4.7 years of experience in educational startups ($SD = 2.3$). As shown in Table 1, dynamic capabilities had the highest mean score, followed by agile branding, brand equity, and business performance. All construct means were above the midpoint of the five-point response scale.

Table 1

Descriptive Statistics for the Study Constructs

Construct	Mean	SD
Agile branding	3.85	0.72
Brand equity	3.72	0.68
Business performance	3.58	0.81
Dynamic capabilities	3.91	0.65

Note. SD = standard deviation.

4.2. Measurement Model Assessment

The measurement model showed satisfactory reliability and validity. Cronbach’s alpha values ranged from 0.842 to 0.895, composite reliability values ranged from 0.867 to 0.913, and average variance extracted values ranged from 0.536 to 0.654. The Fornell–Larcker assessment supported discriminant validity. The model’s SRMR was 0.068, below the 0.08 benchmark, while the NFI was 0.89, close to the commonly cited 0.90 reference value. Taken together with the reliability and validity evidence, these results supported proceeding to structural-model assessment.

4.3. Structural Relationships and Hypothesis Tests

The structural model was evaluated using 5,000 bootstrap resamples. Agile branding had a significant positive effect on business performance ($\beta = 0.456$, $t = 5.234$, $p < 0.001$), supporting H1. Agile branding also had a significant positive effect on brand equity ($\beta = 0.512$, $t = 6.145$, $p < 0.001$), supporting H2. Brand equity positively predicted business performance ($\beta = 0.483$, $t = 5.872$, $p < 0.001$), supporting H3.

The indirect effect of agile branding on business performance through brand equity was positive and

significant ($\beta = 0.289$, $t = 4.123$, $p < 0.001$), supporting H4. Dynamic capabilities also significantly moderated the relationship between brand equity and business

performance ($\beta = 0.198$, $t = 2.876$, $p = 0.004$), supporting H5. Table 2 summarizes the hypothesis tests.

Table 2

Results of Hypothesis Testing

Hypothesis	Structural path	β	t	p	Decision
H1	Agile Branding $\rightarrow$ Business Performance	0.456	5.234	< 0.001	Supported
H2	Agile Branding $\rightarrow$ Brand Equity	0.512	6.145	< 0.001	Supported
H3	Brand Equity $\rightarrow$ Business Performance	0.483	5.872	< 0.001	Supported
H4	Agile Branding $\rightarrow$ Brand Equity $\rightarrow$ Business Performance	0.289	4.123	< 0.001	Supported
H5	Dynamic Capabilities $\times$ Brand Equity $\rightarrow$ Business Performance	0.198	2.876	0.004	Supported

Note. β = standardized path coefficient. p values are two-tailed.

4.4. Explanatory Power and Predictive Relevance

The model explained 56.7% of the variance in brand equity ($R^2 = 0.567$) and 54.7% of the variance in business performance ($R^2 = 0.547$), indicating moderate explanatory power. Stone–Geisser Q^2 values were 0.384 for brand equity and 0.361 for business performance; both values

were greater than zero and therefore supported out-of-sample predictive relevance. The reported global GoF index was 0.475. As noted above, this index was interpreted descriptively, while the principal assessment relied on SRMR, R^2 , Q^2 , measurement quality, and the significance of the structural paths.

Figure 1

Final structural model of agile branding, brand equity, dynamic capabilities, and business performance.

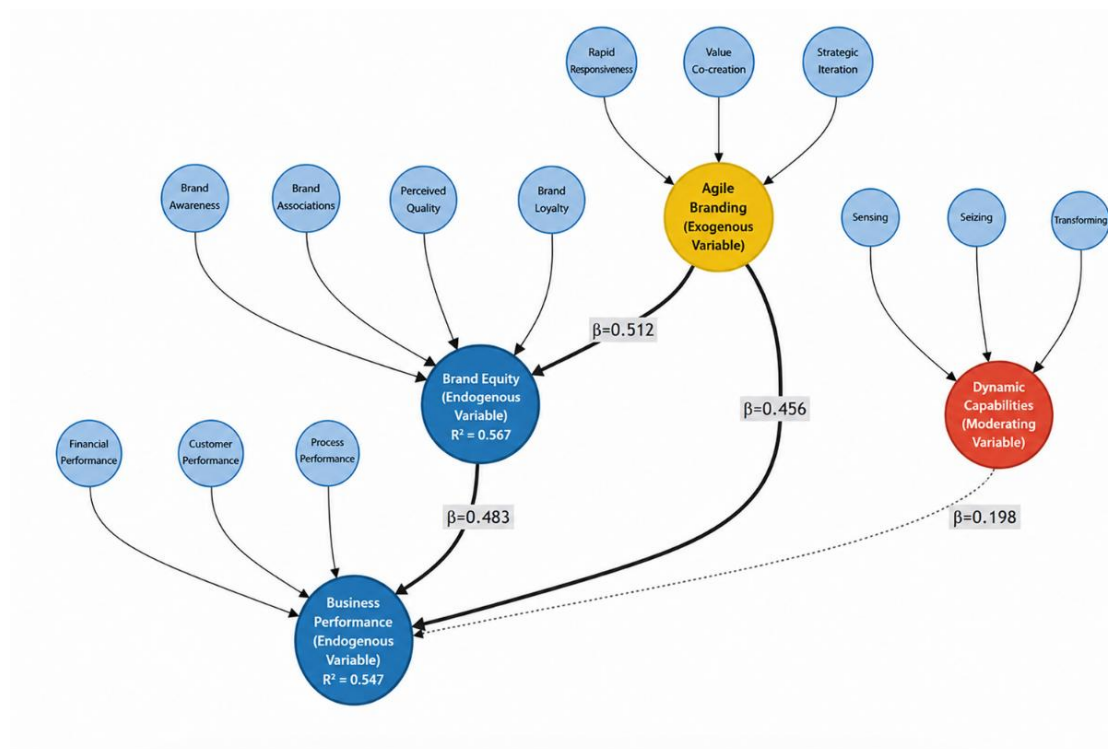


Table 3

Structural Model Evaluation

Construct	Index	Value	Interpretation
Brand equity	R ²	0.567	Moderate explanatory power
Business performance	R ²	0.547	Moderate explanatory power
Brand equity	Q ²	0.384	Predictive relevance supported
Business performance	Q ²	0.361	Predictive relevance supported
Overall model	GoF	0.475	Descriptive global index

Note. GoF is reported descriptively and is not used as a standalone criterion for PLS-SEM model acceptance.

5. Discussion

This study developed and tested an agile branding framework for educational startups operating in volatile e-learning markets. The findings supported all five proposed hypotheses. Agile branding positively predicted business performance and brand equity; brand equity positively predicted business performance and mediated the agile branding–performance relationship; and dynamic capabilities strengthened the relationship between brand equity and business performance. Collectively, the results indicate that agile branding is more than a set of promotional techniques. It functions as an organizational capability through which startups can learn from stakeholders, revise market actions, and preserve brand relevance under changing conditions.

The positive direct effect of agile branding on business performance is consistent with the strategic logic of agile and lean management. Rapid experimentation and short feedback cycles reduce the delay between environmental change and managerial response (Denning, 2018; Ries, 2011). In educational startups, this capability can affect performance through several routes: faster adjustment of the value proposition, improved alignment between communication and learner needs, more efficient testing of acquisition channels, and earlier identification of weak service features. The result therefore supports the view that a startup's branding process should be integrated with organizational learning rather than treated as a fixed identity exercise.

The substantial effect of agile branding on brand equity shows that adaptability need not undermine brand consistency. When responsiveness is anchored in a coherent core promise, repeated interaction and evidence-based revision can strengthen awareness, associations, perceived quality, and loyalty. This interpretation is consistent with customer-based brand equity theory, which treats brand value as a pattern of customer knowledge and response rather than merely a visual identity (Aaker, 1991; Keller & Swaminathan, 2020). In volatile markets, consistency may be achieved at the level of purpose and

values while tactics, channels, interfaces, and service bundles remain adaptable.

Brand equity also had a significant positive effect on business performance and carried a significant indirect effect from agile branding to performance. The mediation result suggests that part of the performance value of agile branding is realized because responsive and participatory branding changes how customers perceive the organization. For educational services, where quality is difficult to evaluate before purchase, brand awareness, credible associations, perceived quality, and loyalty can reduce uncertainty and support acquisition, recommendation, and retention. The continued significance of the direct agile branding path indicates that other mechanisms may also be involved, including operational learning, faster product-market adjustment, and improved internal coordination.

The moderating effect of dynamic capabilities is theoretically important. Brand equity is valuable, but the ability to convert that value into performance depends on whether the organization can sense changes, seize opportunities, and transform its resource base (Teece, 2007, 2018). Educational startups with weak adaptive capabilities may recognize the value of their brand but fail to update services, channels, or internal processes in time. By contrast, firms with stronger dynamic capabilities can use brand knowledge as an input to strategic reconfiguration. This finding aligns with the broader dynamic-capabilities argument that competitive advantage depends on the renewal and deployment of resources, not only their possession (Eisenhardt & Martin, 2000; Teece et al., 1997).

The results also refine the relationship between brand stability and strategic flexibility. Educational startups face a dual requirement: they must signal trustworthiness and quality while remaining responsive to new technologies, changing skill demands, and evolving learner preferences. The proposed framework suggests that these requirements are not necessarily contradictory. Rapid responsiveness, value co-creation, and strategic iteration can operate within a stable system of core values and brand meaning. This distinction is important because unstructured change can

fragment identity, whereas disciplined iteration can improve relevance without eliminating coherence.

From a managerial perspective, founders should organize branding as a continuous cross-functional process. Customer feedback systems, learner analytics, rapid message testing, and regular review of the value proposition can improve responsiveness. Value co-creation can be operationalized through user advisory groups, structured post-course feedback, pilot cohorts, and collaboration with instructors and employers. Strategic iteration should involve predefined learning questions and decision criteria so that changes are evidence-based rather than reactive. These practices are consistent with the broader logic of iterative business-model renewal (Osterwalder et al., 2020).

Managers should also invest in dynamic capabilities rather than focusing exclusively on external communication. Environmental sensing requires systematic monitoring of educational technologies, learner behavior, policy changes, and competitor offerings. Seizing requires clear decision rights and the capacity to allocate resources quickly. Transformation requires flexible processes, staff development, and the willingness to revise outdated routines. The significant interaction effect in this study indicates that the performance contribution of brand equity is larger when these organizational capabilities are stronger.

6. Conclusion

The study provides empirical support for an integrated agile branding framework in educational startups. Agile branding was associated with stronger business performance both directly and indirectly through brand equity, and dynamic capabilities increased the performance value of brand equity. The framework therefore connects branding theory with organizational adaptation: rapid responsiveness, value co-creation, and strategic iteration strengthen customer-based brand assets, while sensing, seizing, and transformation capabilities help convert those assets into organizational outcomes. For educational startups in volatile e-learning markets, sustainable branding appears to require both a coherent core identity and a disciplined capacity for continuous adaptation.

7. Limitations and Future Research

Several limitations should guide interpretation. First, the cross-sectional design does not establish temporal or causal ordering. Longitudinal or panel studies are needed to

determine how agile branding and brand equity evolve over time. Second, the sample was restricted to educational startups in three districts of Tehran, which limits generalizability to other regions, countries, and institutional environments. Third, the study relied on self-reported questionnaire data, creating a potential risk of common-method bias despite satisfactory measurement properties. Future research should combine survey measures with objective performance indicators, customer-level data, and longitudinal designs. Cross-cultural studies could also examine whether the dimensions of agile branding operate similarly across educational systems. Finally, future models may investigate how generative artificial intelligence, learning analytics, platform governance, and regulatory change influence the relationship among agile branding, dynamic capabilities, brand equity, and performance.

Authors' Contributions

All authors equally contribute to this study.

Declaration

Generative AI-assisted tools were used during manuscript preparation solely for English-language editing, structural refinement, consistency checking, and bibliographic-formatting support. These tools were not used to collect data or conduct the statistical analyses. All AI-assisted content, numerical results, in-text citations, and reference entries were independently reviewed and verified by the authors, who take full responsibility for the accuracy, integrity, and originality of the final manuscript.

Transparency Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request. Interview transcripts are not publicly available because they may contain potentially identifiable or sensitive professional information.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethics Considerations

The study involved an anonymous, non-interventional questionnaire administered to adult founders and senior managers of educational startups. Participation was voluntary, and participants were informed about the purpose of the research, the confidentiality of their responses, and their right to discontinue participation before providing informed consent. No directly identifying information was collected, and the findings were analyzed and reported only in aggregate form. The research was conducted in accordance with the ethical principles of the Declaration of Helsinki and applicable institutional requirements.

References

- Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. Free Press.
<https://www.scirp.org/reference/referencespapers?referenceid=2474691>
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). Wiley.
[https://books.google.com/books?hl=en&lr=&id=xbNn41DUrNwC&oi=fnd&pg=PA1&dq=Cochran,+W.+G.+\(1977\).+Sampling+techniques,+Wiley.+%09&ots=TYyVdFuknY&sig=F0T_sEXzA4Ag1x0Nz_3WGHwCsRM](https://books.google.com/books?hl=en&lr=&id=xbNn41DUrNwC&oi=fnd&pg=PA1&dq=Cochran,+W.+G.+(1977).+Sampling+techniques,+Wiley.+%09&ots=TYyVdFuknY&sig=F0T_sEXzA4Ag1x0Nz_3WGHwCsRM)
- Denning, S. (2018). *The Age of Agile: How Smart Companies Are Transforming the Way Work Gets Done*. AMACOM.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10-11), 1105-1121.
[https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
<https://doi.org/10.1177/002224378101800104>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE.
<https://doi.org/10.1007/978-3-030-80519-7>
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The difference between emergency remote teaching and online learning*.
<https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Keller, K. L., & Swaminathan, V. (2020). *Strategic brand management: Building, measuring, and managing brand equity* (5th ed.). Pearson.
https://www.pearson.com/nl/en_NL/higher-education/subject-catalogue/marketing/keller-strategic-brandmanagement-5e.html
- Kotler, P., & Keller, K. L. (2022). *Marketing management* (16th ed.). Pearson.
<https://books.google.com/books?hl=en&lr=&id=X2cAAwAAQBAJ&oi=fnd&pg=PP1&dq=Kotler,+P.+and+K.+L.+Kell>
- er+(2022).+Marketing+management,+Pearson.+%09&ots=r53GiPkO-1&sig=sS5JhjB9Cd2HKspBc67nL6Fw
- Lawsh, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563-575.
<https://doi.org/10.1111/j.1744-6570.1975.tb01393.x>
- Osterwalder, A., Pigneur, Y., Smith, A., & Etienne, F. (2020). *The invincible company: How to constantly reinvent your organization with inspiration from the world's best business models*. Wiley.
[https://books.google.com/books?hl=en&lr=&id=vtHSDwAAQBAJ&oi=fnd&pg=PP21&dq=Osterwalder,+A.,+et+al.+\(2020\).+The+invincible+company:+How+to+constantly+reinvent+your+organization+with+inspiration+from+the+world%27s+best+business+models,+Wiley.+%09&ots=JOBR2iUKjr&sig=RwvZjsFfdonHrhNJTF33koF88lY](https://books.google.com/books?hl=en&lr=&id=vtHSDwAAQBAJ&oi=fnd&pg=PP21&dq=Osterwalder,+A.,+et+al.+(2020).+The+invincible+company:+How+to+constantly+reinvent+your+organization+with+inspiration+from+the+world%27s+best+business+models,+Wiley.+%09&ots=JOBR2iUKjr&sig=RwvZjsFfdonHrhNJTF33koF88lY)
- Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, 29(5), 489-497.
<https://doi.org/10.1002/nur.20147>
- Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Crown Business.
[https://books.google.com/books?hl=en&lr=&id=r9x-OXdzpPcC&oi=fnd&pg=PR9&dq=Ries,+E.+\(2011\).+The+lean+startup:+How+today%27s+entrepreneurs+use+continuous+innovation+to+create+radically+successful+businesses,+Crown+Business.++&ots=0u18EfuCdU&sig=C1veUsGnY15twGeQNcw9vFs9AMA](https://books.google.com/books?hl=en&lr=&id=r9x-OXdzpPcC&oi=fnd&pg=PR9&dq=Ries,+E.+(2011).+The+lean+startup:+How+today%27s+entrepreneurs+use+continuous+innovation+to+create+radically+successful+businesses,+Crown+Business.++&ots=0u18EfuCdU&sig=C1veUsGnY15twGeQNcw9vFs9AMA)
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
<https://doi.org/10.1002/smj.640>
- Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organization*, 24(3), 359-368.
<https://doi.org/10.1017/jmo.2017.75>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
[https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- World Economic, F. (2023). *The future of jobs report 2023*. World Economic Forum.
<https://www.weforum.org/reports/the-future-of-jobs-report-2023/>