HITA: Portfolio Management Applications

Term Project

UNLV MIS 764

Written By:

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Introduction

Introduce HITA, Harmonious Information Technology Affordances

Current Measurement Techniques

Find paper where HITA is first Introduced   
  
Find paper where HITA or Organizational HITA is measured.

Probably the U-shaped non-liner paper in the title

Explain measurement techniques used in paper

Develop an alternative way to measure HITA using a companies publicly available financial statements

Clean up the references list

Motivation

Develop a way to integrate HITA into investment decisions as an additional variable for portfolio management applications

Literature

Importance

Theory

Conceptualization

Selection Used Random number generator 8 companies from sp 500

395 Packaging Corp of America PKG

9 Eli Lilly & Co. LLY

443 The J.M. Smucker Company SJM

335 Coterra Energy Inc. CTRA

156 Air Products & Chemicals, Inc. APD

13 Exxon Mobil Corporation XOM

49 Pfizer Inc. PFE

40 Abbott Laboratories ABT

Look at financial statements to develop a HITA index

Probably revenue per employee or earnings per employee

Try to find R& D Spending IT Spending Exiting IT spending. Or IT infrastructure on the balance sheet.

References

Chatterjee, S., Moody, G. D., Lowry, P. B., Chakraborty, S., & Hardin, A. (2021). The nonlinear influence of harmonious information technology affordance on organisational innovation. Information Systems Journal, 31(3), 294–322. https://doi.org/10.1111/isj.12311

Chatterjee, S., Moody, G., Lowry, P. B., Chakraborty, S., & Hardin, A. (2015). Strategic relevance of organizational virtues enabled by information technology in organizational innovation. Journal of Management Information Systems, 32(3), 158–196. https://doi.org/10.1080/07421222.2015.1099180

Chatterjee, S., Moody, G., Lowry, P. B., Chakraborty, S., & Hardin, A. (2020). Information technology and organizational innovation: Harmonious information technology affordance and courage-based actualization. Journal of Strategic Information Systems, 29, 101596. https://doi.org/10.1016/j.jsis.2020.101596

Li, Y., and T. Chi. 2013. Venture capitalists’ decision to withdraw: The role of portfolio configuration from a real options lens. Strategic Management Journal 34: 1351-1366.

Li, Y. & J. Mahoney. 2011. When Are Venture Capital Projects Initiated? Journal of Business Venturing. 26(2): 239-254.

Tong, T. & Y. Li. 2011. Real Options and Investment Mode Decision: Evidence from Corporate Venture Capital and Acquisition. Organization Science. 22(3): 659-674

Courtney, C., Dutta, S., and Li, Y. 2017. Resolving information asymmetry: Signaling and crowdfunding success. Entrepreneurship Theory and Practice 41(2): 265-290.

Liu, Y., Y. Li, X. Hao, and Y. Zhang. 2019. Narcissism and entrepreneurial learning from Failure. Journal of Business Venturing. 34 (3), 496-512

Li, Y., S. Zahra and S. Lan. 2017. Heterogeneity in New Venture Formation Rates across Nations: The Schumpeterian and Institutional Economics Views. Entrepreneurial Finance: Managerial and Policy Implications. 1-35. Lead article

Li, Y., and E. Yao. 2019. All ties are not created equal: Institutional equity ties, IPO performance, and market growth of new ventures. In D. Cumming & S. Johan (ed.). Oxford Handbook of IPO

Wang, E. T. G., Hu, H.-f., & Hu, P. J.-H. (2013). Examining the role of information technology in cultivating firms’ dynamic marketing capabilities. Information & Management, 50(6), 336-343. https://doi.org/10.1016/j.im.2013.04.007

Randolph, R. V., Hu, H.-f., & Silvernail, K. D. (2020). Better the devil you know: Inter-organizational information technology and network social capital in coopetition networks. Information & Management. Advance online publication. https://doi.org/10.1016/j.im.2020.103344

Randolph, R. V., Hu, H., Silvernail, K. (2018). Knowledge Networking and Coopetition: The Role of Shared Technology in Promoting Goal Convergence. 2018 Western Academy of Management Conference, 59 9.

Hu, H.-F., Moore, W. L., & Hu, P. J. (2024). Incorporating user perceptions and product attributes in software product design and evaluation. Journal of Information Technology, 36(2), 123-137.

Chatterjee, S., Chakraborty, S., Fulk, K., & Lowry, P. B. (2024). The role of dissonant relational multiplexity in information system implementation failures. Journal of the Association for Information Systems (JAIS). Advance online publication. https://aisel.aisnet.org/jais/vol25/iss2/1/

Chatterjee, S., Sarker, S., Lee, M. J., Xiao, X., & Elbanna, A. (2021). A possible conceptualization of the information systems (IS) artifact: A general systems theory perspective. Information Systems Journal, 31(4), 550-578. https://doi.org/10.1111/isj.12292

Oberlander, A. M., Roglinger, M., & Rosemann, M. (2021). Digital opportunities for incumbents – A resource-centric perspective. Journal of Strategic Information Systems. https://doi.org/10.1016/j.jsis.2021.101670

Capurro, R. (2017). Digitization as an ethical challenge. AI & Soc, 32(3), 277–283. https://doi.org/10.1007/s00146-016-0686-z

Wessel, L., Baiyere, A., Ologeanu-Taddei, R., Cha, J., & Jensen, T. B. (2021). Unpacking the Difference Between Digital Transformation and IT-Enabled Organizational Transformation. Journal of the Association for Information Systems, 22(1), 102-129. https://doi.org/10.17705/1jais.00655

Bertoni, S. (2015, April 15). Twinkie's Miracle Comeback: The Untold, Inside Story of a $2 Billion Feast. Forbes. https://www.forbes.com/sites/stevenbertoni/2015/04/15/twinkie-billion-dollar-comeback-hostess-metropoulos-apollo-jhawar/?sh=159db56e7235

Saab, V., Miller, K., Yamat, K. L. (2024, April 28). 4.3. Digitalization: Advances and Challenges [PowerPoint slides & Oral presentation]. MIS 764, University of Nevada, Las Vegas, Las Vegas, Nevada.

Saab, V., Miller, K., & Yamat, K. L. (2024). Module Paper 1: Business Value Of IT [Student Paper] MIS 764, University of Nevada, Las Vegas, Las Vegas, Nevada.

Saab, V., Miller, K., & Yamat, K. L. (2024). Module Paper 2: IT-Business Partnership [Student Paper] MIS 764, University of Nevada, Las Vegas, Las Vegas, Nevada.

Saab, V., Miller, K., & Yamat, K. L. (2024). Module Paper 3: IT-Enabled Innovation [Student Paper] MIS 764, University of Nevada, Las Vegas, Las Vegas, Nevada.

Saab, V., Miller, K., & Yamat, K. L. (2024). Module Paper 4: Contemporary Issues in IT and Innovation [Student Paper] MIS 764. University of Nevada, Las Vegas, Las Vegas, Nevada.

Dyvik, E. H. (2023, November 22). Companies with the highest spending on research and development 2022. Statista. https://www.statista.com/statistics/265645/ranking-of-the-20-companies-with-the-highest-spending-on-research-and-development/

Chatterjee, S., & Sarker, S. (2024). Toward a better digital future: Balancing the utopic and dystopic ramifications of digitalization. The Journal of Strategic Information Systems, 33(2), 101834. <https://doi.org/10.1016/j.jsis.2024.101834>

Mamonov, S., & Peterson, R. (2021). The role of IT in organizational innovation – A  
systematic literature review. Journal of Strategic Information Systems, 30,   
101696. <https://doi.org/10.1016/j.jsis.2021.101696>

Chatterjee, S., Moody, G. D., Lowry, P. B., Chakraborty, S., & Hardin, A. (2021). The   
nonlinear influence of harmonious information technology affordance on   
organisational innovation. Information Systems Journal, 31(3), 294–322.

<https://doi.org/10.1111/isj.12311>

Chatterjee, S., Moody, G., Lowry, P. B., Chakraborty, S., & Hardin, A. (2015). Strategic   
relevance of organizational virtues enabled by information technology in   
organizational innovation. Journal of Management Information Systems, 32(3),   
158–196. <https://doi.org/10.1080/07421222.2015.1099180>

Chatterjee, S., Moody, G., Lowry, P. B., Chakraborty, S., & Hardin, A. (2020).   
Information technology and organizational innovation: Harmonious information   
technology affordance and courage-based actualization. Journal of Strategic   
Information Systems, 29, 101596. <https://doi.org/10.1016/j.jsis.2020.101596>

Hopp, C., Antons, D., Kaminski, J., & Salge, T. O. (2018). Disruptive Innovation:   
Conceptual Foundations, Empirical Evidence, and Research Opportunities in the   
Digital Age. Journal of Product Innovation Management, 35(3), 446–457.   
<https://doi.org/10.1111/jpim.12448>

Chan, C. M. L., Teoh, S. Y., Yeow, A., & Pan, G. (2018). Agility in responding to   
disruptive digital innovation: Case study of an SME. Information Systems   
Journal, 29(2), 436–455. <https://doi.org/10.1111/isj.12215>

Carlo, J. L., Gaskin, J., Lyytinen, K., & Rose, G. M. (2014). Early vs. late adoption of   
radical information technology innovations across software development   
organizations: an extension of the disruptive information technology innovation   
model. Information Systems Journal, 24(6), 537–569.   
<https://doi.org/10.1111/isj.12039>

Lyytinen, K., & Rose, G. M. (2003). The disruptive nature of information technology   
innovations: The case of internet computing in systems development   
organizations. MIS Quarterly, 27(4), 557-595. <https://doi.org/10.2307/30036549>

Benbya, H., Pachidi, S., & Jarvenpaa, S. (2021). Special Issue Editorial: Artificial   
Intelligence in Organizations: Implications for Information Systems Research.   
Journal of the Association for Information Systems, 22(2), 281-303.   
<https://doi.org/10.17705/1jais.00662>

Paschen, U., Pitt, C., & Kietzmann, J. (2020). Artificial intelligence: Building blocks and   
an innovation typology. Business Horizons, 63, 147-155.   
<https://doi.org/10.1016/j.bushor.2019.10.004>

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... Williams,   
33M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on   
emerging challenges, opportunities, and agenda for research, practice and   
policy. International Journal of Information Management, 57, 101994.   
<https://doi.org/10.1016/j.ijinfomgt.2019.08.002>

Borges, A. F. S., Laurindo, F. J. B., Spínola, M. M., Gonçalves, R. F., & Mattos, C. A.   
(2021). The strategic use of artificial intelligence in the digital era: Systematic   
literature review and future research directions. International Journal of   
Information Management, 57, 102225.   
<https://doi.org/10.1016/j.ijinfomgt.2020.102225>

Anderson, C., & Robey, D. (2017). Affordance potency: Explaining the actualization of   
technology affordances. Information and Organization, 27(2), 100-115.   
<https://doi.org/10.1016/j.infoandorg.2017.03.002>

Jablonka, K. M., Schwaller, P., Ortega-Guerrero, A., & Smit, B. (2024). Leveraging large   
language models for predictive chemistry. Nature Machine Intelligence.   
<https://doi.org/10.1038/s42256-023-00788-1>  
  
Norfolk Southern Corporation. (2024). Form 10-K Annual Report. U.S. Securities  
and Exchange Commission. <https://www.sec.gov/ixviewer/ix.html?doc=/>  
[Archives/edgar/ data/702165/000070216524000005/nsc-20231231.htm](https://www.sec.gov/ixviewer/ix.html?doc=/Archives/edgar/data/702165/000070216524000005/nsc-20231231.htm)

Bensinger, G. (2024, March 8). Google's newest office has AI designers toiling in a   
Wi-Fi desert. Reuters. [https://www.reuters.com/technology/googles-newest](https://www.reuters.com/technology/googles-newest-office-has-ai-designers-toiling-wi-fi-desert-2024-03-08/)

[-office-has-ai-designers-toiling-wi-fi-desert-2024-03-08/](https://www.reuters.com/technology/googles-newest-office-has-ai-designers-toiling-wi-fi-desert-2024-03-08/)

Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the Fintech

Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services. Journal of Management Information Systems, 35(1), 220-265. <https://doi.org/10.1080/07421222.2018.1440766>