



Using Modeling and Simulation Techniques to Improve the Accountability and the Performance of Human Resource Management

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Abstract

The analysis of human resources function and its contribution to obtain performance dates back to the 1920s. Now, the HR is an equal partner on the board of the companies, having a strategic role in obtaining performance, thus we try to show that compensating appropriately, the human capital it will be motivated to obtain performance. This paper examines the two different visions of different managers in which the human capital is perceived as a major cost for organization and the others which perceive it as an investment on long run. In this article, we analyse the impact could have the direct costs of human capital on individual and organizational performance using samples of some variables from European level, data between 2005-2016. Data used for the different years were analysed using simulation methods. Findings of this study show consistency with the theory in the field, bringing a value in motivation and accountability of human capital and performance obtained through human capital.

References

Akay, V. (2006). *Business is the people and people are the business: Humanizing the corporation*. iUniverse.

[Follow Reference](#)

Altioik T. Melamed B. (2000). Simulation modeling and analysis with ARENA. Elsevier.

[Follow Reference](#)

Anderson P. H. Beveridge D. A. Scott T. W. (2000). Threshold Entrepreneur. A New Business Simulation. Upper Saddle River, NJ: Prentice-Hall Inc.

[Follow Reference](#)

Anton J. (1999). Call center performance enhancement. Using simulation and modeling. Purdue University Press.

[Follow Reference](#)

Armstrong M. Baron A. (2003). Strategic HRM the key to improve business performance. CIPD.

[Follow Reference](#)

Baker M. J. (2001). Marketing. Critical perspectives on business and management. Routledge.

[Follow Reference](#)

Banks J. (1996). Discrete-Event System Simulation. Englewood Cliffs, NJ: Prentice-Hall.

Barjis J. Pergl R. (2014). Enterprise and organizational modeling and simulation. 10th In. Workshop, EOMAS 2014.

[Follow Reference](#)

Barney J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120. 10.1177/014920639101700108

[Follow Reference](#)

Baron A. Armstrong M. (2007). Human capital management. Kogan Page Pub.

[Follow Reference](#)

Bashner D. B. (2014). Employee benefits design and compensation. FT Press.

[Follow Reference](#)

Bohlander G. Snell S. (2010). Managing human resources. Cengage Learning.

[Follow Reference](#)

Boxall P. F. Purcell J. (2007). The Oxford handbook of HRM. Oxford University Press.

[Follow Reference](#)

Brewster C. Larsen H. H. (2007). Human resources management in Northern Europe. Trends, dilemmas and strategies. Blackwell Business.

[Follow Reference](#)

Bridgeland D. M. Zahavi R. (2008). Business modeling: a practical guide to realizing business value. Morgan Kaufmann.

[Follow Reference](#)

Chang M. (2011). Monte Carlo Simulation for the Pharmaceutical industry. Concepts, algorithms and case studies. CRC Press.

[Follow Reference](#)

Coleman Selden S. (2008). Human capital. CQ Press.

[Follow Reference](#)

Davis G. Pecar B. (2013). Quantitative methods for decision making using Excel. Oxford University Press.

[Follow Reference](#)

DeCenzo D. A. (1988). Personnel/Human resource management. Englewood Cliffs, NJ: Prentice-Hall.

[Follow Reference](#)

Duica A. (2016). Using simulation and six sigma to analyze and improve motivation process of teachers from undergraduate institutions. VJES, 0(0), 94–103.

- [Follow Reference](#) Faulkner D. (2002). *Strategy: critical perspectives on business and management*. Routledge.
- [Follow Reference](#) Fishman G. S. (2001). *Discrete-event simulation: modeling, programming, and analysis*. Springer Science&Business Media. 10.1007/978-1-4757-3552-9
- [Follow Reference](#) Fishman G. S. (2013). *Discrete-Event Simulation: Modeling, Programming, and Analysis*. Springer Science&Business Media.
- [Follow Reference](#) Florea N. V. (2015). *Improving employees and organization performance using business simulation and modeling*. In *Management & Marketing* (pp. 367–381). University of Craiova.
- [Follow Reference](#) Florea N. V. (2017). *Simulare si modelare in afaceri*. Studii de caz. Bucuresti: Editura Mustang.
- [Follow Reference](#) Florea N. V. Mihai D. C. (2015). Improving organization performance through human capital development using a regression function and MATLAB. *JOSA*, 3(32), 229–238.
- [Follow Reference](#) Florea N. V. Mihai D. C. (2017). Predicting employees evaluation performance using simulation and mathematical modeling. *JOSA*, 1(38), 81–94.
- [Follow Reference](#) Harris M. M. (2012). *Handbook of research of international HRM*. Psychology Press.
- [Follow Reference](#) Holbeche L. Mayo A. (2012). *Motivating people in Lean organizations*. Butterworth-Heineman.
- [Follow Reference](#) Janssen M. (2015). *Policy Practice and Digital Science: Integrating Complex Systems, Social Simulation and Public Administration in Policy Research*. Springer. 10.1007/978-3-319-12784-2
- [Follow Reference](#) Laguna M. Marklund J. (2011). *Business process modeling, simulation and design*. Pearson Edu.
- [Follow Reference](#) Lakhdar S. (2001). *Gestion de ressources humaines*. Universite de Boeck.
- [Follow Reference](#) Law A. M. Kelton D. W. (1991). *Simulation modeling and analysis*. McGraw-Hill.
- [Follow Reference](#) Lawal B. (2014). *Applied Statistical Methods in Agriculture, Health and Life Sciences*. Springer.
- [Follow Reference](#) Manea M. D. (2012). *Contabilitatea institutiilor publice*. Bucuresti: Academic Press.
- [Follow Reference](#) Manolescu A. (2006). *Managementul resurselor umane*. Bucuresti: Ed. Economica.
- [Follow Reference](#) Mathis R. Jackson J. Valentine S. Meglich P. (2016). *Human resources management*. Cengage Learning.
- [Follow Reference](#) McHaney R. (2009). *Understanding computer simulation*. Ventus Pub., ApS.
- [Follow Reference](#) Millmore M. (2007). *Strategic HRM: contemporary issues*. Pearson Education.
- [Follow Reference](#) Mittal S. (2017). *Guide to Simulation-Based Disciplines: Advancing Our Computational Future*. Springer. 10.1007/978-3-319-61264-5
- [Follow Reference](#) Moore J. H. Weatherford L. R. (2001). *Decision Modeling with Microsoft Excel*. Prentice-Hall.
- [Follow Reference](#) Moynihan D. P. Pandey S. K. (2007). The role of organizations in fostering public service motivation. *Public Administration Review*, 67(1), 40–53. 10.1111/j.1540-6210.2006.00695.x
- [Follow Reference](#) Palmer S. (2012). *People an self management*. Butterworth-Heineman.
- [Follow Reference](#) Phillips J. Pullian Phillips P. (2015). *High impact human capital startegy*. AMACOM.
- [Follow Reference](#) Powell G. R. (2008). *Marketing calculator. Measuring and managing return on marketing investment*. Singapore: John Wiley & Sons.
- [Follow Reference](#) Prasad A. (2011). *Future Internet Services and Service Architectures*. River Pub.
- [Follow Reference](#) Reece B. L. (2011). *Effective human relations. Interpersonal and organizational applications*. South-Western Cengage Learning.
- [Follow Reference](#) Reed A. (2001). *Innovation in HRM: tooling up for the talent wars*. London: CIPD House.
- [Follow Reference](#) Robinson S. (2004). *Simulation. The practice of model development and use*. John Wiley & Sons.
- [Follow Reference](#) Rodriguez J. (2012). *Trends in Practical Applications of Agents and Multiagent Systems*. Springer. 10.1007/978-3-642-28795-4
- Sa Silva, P. (2011). *Ch. Simulation, Games and challenges from schools to enterprises*. In *Enterprise and organizational modelling and simulation, 7th International Workshop, EOMAS 2011*. Springer.
- [Follow Reference](#) Sabuncuoglu I. (2015). *Industrial engineering applications in emerging countries*. CRC Press.
- [Follow Reference](#) Seddighi H. (2000). *Econometrics: A Practical Approach*. Psychology Press.
- [Follow Reference](#) Seddighi H. (2013). *Introductory Econometrics: A Practical Approach*. Routledge.
- [Follow Reference](#) Sims R. R. (2002). *Organizational success through effective human resources management*. Greenwood Pub.
- [Follow Reference](#) Sokolowski J. A. Banks C. M. (2011). *Principles of modeling and simulation. A multidisciplinary approach*. John Wiley & Sons.
- [Follow Reference](#) Squazzoni F. (2009). *Epistemological Aspects of Computer Simulation in the Social Sciences*. Springer. 10.1007/978-3-642-01109-2
- [Follow Reference](#) Storey J. (2009). *The Routledge companion to SHRM*. Taylor&Francis.
- [Follow Reference](#) Tanasescu D. A. (2014). *E-Communication and E-development, efficient response for customer expectations into an E-economy environment*. ECR.
- [Follow Reference](#) Tapamoy D. (2009). *Compensation management*. Excel Books.

Follow Reference

Taylor S. (2014). Agent-based Modeling and Simulation. Springer. 10.1057/9781137453648

Follow Reference

Wainer G. Mosterman P. (2016). Discrete-Event Modeling and Simulation: Theory and Applications. CRC Press.

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