

Improving productivity in the business of construction

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Abstract: Productivity has a direct impact on profitability and is essential for the success and sustainability of any construction organisation. Consequently, productivity must be effectively managed at top and middle management levels, and not solely at the operational level. The objective of the study was to determine construction organisations' perceptions and practices relative to the productivity of their organisations, as opposed to the productivity of construction activities. The study was conducted among general contracting organisations in the Nelson Mandela Bay metropole in South Africa. Findings include, inter alia, that construction organisations are not fully productive due to the fact that there is a lack of strategic thinking, new technology and construction methods are not being fully utilised, and there is a lack of innovation and efficiency. Construction organisations can optimise their profits by increasing their profit and overhead mark-up on projects, ensuring a positive cash flow at all times, and utilising their resources in the most efficient and cost-effective way possible. Recommendations include, *inter alia*, that construction organisations should: review the manner in which they conduct business; opt for more advanced methods of construction and utilise new technology, and regularly prepare budgets, use financial indicators to review productivity, monitor cash flow, and review the skills of their employees.

Keywords: business; capital; construction; productivity; profitability.

References

- [1] AbouRizk SM, Leonard EB. *Managing performance in construction*. New Jersey: John Wiley & Sons, Inc.; 2010.
- [2] Myers D. *Construction economics: a new approach*. 3rd ed. London and New York: Routledge; 2013.
- [3] Zandin KB. *Maynards industrial engineering handbook*. 5th ed. New York: The McGraw-Hill Companies, Inc.; 2001.
- [4] Baiden BK, Edum-Fotwe FT, Ofori-Kurangu JK. Benchmarking UK construction firms value added and productivity performance. In: Proceedings The Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors. Paris: Dauphine University; 2–3 September 2010, United Kingdom: RICS; 2010, p. 1–17.
- [5] Hammad MS, Omran A, Pakir AHK. Identifying ways to improve productivity in the construction industry. *Acta Technica Corviniensis – Bulletin Of Engineering* 2011;4:47–49.
- [6] Peterson SJ. *Construction accounting and financial management*. 2nd ed. New Jersey: Pearson; 2009.
- [7] Netscher P. *Building a successful construction company: the practical guide*. Subiaco: Panet Publications; 2014.
- [8] Chatterjee B. *Improving business strategy and construction management in developing countries*. Bloomington: iUniverse, Inc.; 2013.
- [9] Stevens M. *Managing a construction firm on just 24 hours a day*. New York: McGraw-Hill; 2007.
- [10] Akintoye A, Goulding J, Zawdie G. *Construction innovation and process improvement*. West Sussex: Blackwell Publishing Ltd.; 2012.
- [11] Bennett J, Radosavljevic M. *Construction management strategies: a theory of construction management*. West Sussex: John Wiley & Sons, Ltd.; 2012.
- [12] Lavingia NJ. Improve profitability through effective project management and TCM. AACE International Transactions, ChevronTexaco Corp., San Ramon, CA, 2003.
- [13] Nazarko J, Chodakowska E. Measuring productivity of construction industry in Europe with Data Envelopment Analysis. *Procedia Engineering* 2015;122:204–212.
- [14] Liu Y, Zayed T. Cash flow modelling for construction projects. *Engineering, Construction and Architectural Management* 2014;21(2):170–189.
- [15] Al-Aomar R, Al-Joburi KI, Bahri ME. Analyzing the impact of negative cash flow on construction performance in the Dubai area. *American Society of Civil Engineers* 2012;28(4):382–390.