

Fuelling a performance leap with digitized quality assurance

“Innovation is an inexhaustible engine for economic development”

Li Keqiang, Premier, People's Republic of China, World Economic Forum

With technology driving increased sales and profits globally, a digital quality assurance/quality control (QA/QC) system for food fortification in Nigeria will open THREE paths to greater efficiency and enhanced financial performance for fortified food producers.

‘Quality’ Marketing = More Profits

The new system will generate data that can be used to achieve consumer trust in the quality of food fortified with nutrients essential to health.

A study¹ of 3,000 companies found that for every 2% improvement in the rating of an organization's quality by its customers, there is a corresponding 1% increase in its return on investment.

A survey² of 160 food and beverage companies in Nigeria found that food producers using quantitative quality data for competitive marketing were 7x more likely to have higher profits than companies using soft marketing through personal contacts.

The companies that used data based marketing were judged by consumers as having a corporate image that was, on average, 79.5% better than those who did not.

The companies with a better corporate image were nearly three times more likely to report superior financial performance than the companies with a poorer reputation.

Reputation Proof Loyalty
Data Quality Guaranteed Success Growth Image
Profits ROI Sales

‘Proof of Social ‘Good’ = Lower Costs and Higher Sales

High quality, trusted fortified foods are a social good, transforming the nation's future. This status provides a proven dividend to fortified food producers. Nigeria's population has acute health issues due to vitamin and mineral deficiencies. These are killing, disabling, and damaging the potential of Nigeria's men, women and children, with:

Fortifying staple foods is proven to prevent and alleviate these problems⁷:



some of the world's highest rates of anemia, maternal deaths, and infant deaths³;



impaired brain⁴, intellectual and physical⁵ development; and



compromised immunity⁶.

Delivering a product that is a social good:

- Makes companies more attractive to prospective employees⁸
- Leads to higher employee satisfaction and productivity⁹
- Leads to reduced financing costs¹⁰
- Delivers better financial performance¹¹ and consequently higher appeal for investors
- Increases customer product satisfaction¹²
- Increases customer loyalty¹³

Inventory Control = Increased Profitability

A company's inventory comprises raw materials, work in progress, and completed goods. It typically represents 33% of an organisation's total assets, as much as 90% of working capital¹⁴, and 40% of all capital¹⁵.

The new system will make it easier to efficiently track inventory, measure production flows, and tune stock levels so that producers can satisfy all sales orders, while avoiding over-stocking.

A study¹⁶ of digitized inventory control and tracking at staple food producer UNGA Group in Kenya found:



Reduced
Obsolescence
and Surplus



Increased Sales



Improved
Product Quality



Increased
Customer
Satisfaction



Reduced
Inventories



Shorter
Production
Cycle Times



Increased
Profitability

REFERENCES

1. (Buzzell and Gale, 2007). Cited in The Effect of Quality Management Systems on the Performance of Food Processing Firms in Kenya. www.iosrjournals.org 68
2. Impact Of Competitive Marketing On Performance Of Multinational And Indigenous Food And Beverage Manufacturing Companies In Nigeria By Ibidunni, Olanrewaju Samson <https://core.ac.uk/download/pdf/79125564.pdf>
3. <https://ourworldindata.org/micronutrient-deficiency>
4. Agaoglu L, Torun O, Unuvar E, Sefil Y, Demir D. Effects of iron deficiency anemia on cognitive function in children. *Arzneimittelforschung*. 2007;57(6A):426-30. doi: 10.1055/s-0031-1296691. PMID: 17691592.
5. Wells, J.C.K., Devakumar, D., Manandhar, D.S. et al. Associations of stunting at 2 years with body composition and blood pressure at 8 years of age: longitudinal cohort analysis from lowland Nepal. *Eur J Clin Nutr* 73, 302–310 (2019). <https://doi.org/10.1038/s41430-018-0291-y>
6. Huang Z, Liu Y, Qi G, Brand D, Zheng SG. Role of Vitamin A in the Immune System. *J Clin Med*. 2018;7(9):258. Published 2018 Sep 6. doi:10.3390/jcm7090258
7. Keats EC, Neufeld LM, Garrett GS, Mbuya MNN, Bhutta ZA. Improved micronutrient status and health outcomes in low- and middle-income countries following large-scale fortification: evidence from a systematic review and meta-analysis. *Am J Clin Nutr*. 2019 Jun 1;109(6):1696-1708. doi: 10.1093/ajcn/nqz023. PMID: 30997493; PMCID: PMC6537942
8. Donia M.B., Ronen S., Sirsly C.A.T., Bonaccio S. CSR by any other name? The differential impact of substantive and symbolic CSR attributions on employee outcomes. *J. Bus. Ethics*. 2019;157:503–523. doi: 10.1007/s10551-017-3673-5
9. Sarfraz M., Qun W., Abdullah M.I., Alvi A.T. Employees' perception of corporate social responsibility impact on employee outcomes: Mediating role of organizational justice for small and medium enterprises (SMEs) Sustainability. 2018;10:2429. doi: 10.3390/su10072429
10. Bhuiyan M.B.U., Nguyen T.H.N. Impact of CSR on cost of debt and cost of capital: Australian evidence. *Int. J. Corp. Soc. Responsib.* 2019;16:419–430. doi: 10.1108/SRJ-08-2018-0208
11. Cho S.J., Chung C.Y., Young J. Study on the Relationship between CSR and Financial Performance. *Sustainability*. 2019;11:343. doi: 10.3390/su11020343
12. Kim S. The process model of corporate social responsibility (CSR) communication: CSR communication and its relationship with consumers' CSR knowledge, trust, and corporate reputation perception. *J. Bus. Ethics*. 2019;154:1143–1159. doi: 10.1007/s10551-017-3433-6
13. Pérez A., Del Bosque I.R. An integrative framework to understand how CSR affects customer loyalty through identification, emotions and satisfaction. *J. Bus. Ethics*. 2015;129:571–584. doi: 10.1007/s10551-014-2177-9
14. Sawaya Jr. and Giauque (2006), *Production and Operations Management* Orlando FL: Harcourt Brace Jovanovich Inc
15. Moore L.J., Lee S. M. and Taylor, III B.W. (2003), *Management Science*, 4th Ed, Allyn and Bacon, Needham
16. Naliaka V.W. & Prof. G.S. Namusonge. Role of Inventory Management on Competitive Advantage among Manufacturing Firms in Kenya: A Case Study of Unga Group Limited. *International Journal of Academic Research in Business and Social Sciences* May 2015, Vol. 5, No. 5 ISSN: 2222-6990 DOI: 10.6007/IJARBS/v5-i5/1595 URL: <http://dx.doi.org/10.6007/IJARBS/v5-i5/1595>
17. Kuku-Shittu, Oluyemisi, et al. Child malnutrition in Nigeria: evidence from Kwara State. Vol. 33. *Intl Food Policy Res Inst*, 2016. https://nssp.ifpri.info/files/2016/08/NSSP-WP-33-Child-Malnutrition-in-Nigeria_July-2016.pdf
18. (2010), "Executive summary and implications for managers and executives", *Journal of Business & Industrial Marketing*, Vol. 25 No. 8. <https://doi.org/10.1108/jbim.2010.08025haa.002>
19. Gruen, T., & Corsten, D. S. (2007). A comprehensive guide to retail out-of-stock reduction in the fastmoving consumer goods industry. The University of Colorado and the IE Business School Madrid. Retrieved January 10, 2007, from http://www.fmi.org/forms/uploadFiles/31E8E0000006D.toc.TOC_out_of_stock.pdf
20. Luis Henrique Rigato Vasconcellos Mauro Sampaio The stockouts study: an examination of the extent and the causes in the São Paulo supermarket sector BAR, Braz. *Adm. Rev.* 6 (3) • Sept 2009 • <https://doi.org/10.1590/S1807-76922009000300007> <https://www.scielo.br/j/bar/a/jtjrkgbncB949n5BvBPtJgd/?lang=en#>