Chapter 2


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ABSTRACT

In Chapter 1, The CAM framework focused on the development of innovative social business models through the usage of frontier data envelopment analysis to measure shared value for a sustainable growth of an organization. Chapter 2 first discusses the causes and effects of societal challenges and how shared value models can alleviate them. Second, successful technology and non-technology innovations for shared-value models are reviewed. Third, guidelines to develop key performance smart indicators, pitfalls traps, and phases of budgeting steps for the design of performance management and measurement systems are discussed. Fourth, big data and business analytics challenges, potentials, models, and tools are presented. Fifth, the essential components for designing a corporate big data strategy are suggested. Finally, new ideas are explained to democratize shared-value knowledge through electronic services to transform loyalty of people from parties, clergies, and dictatorships to society’s loyalty to achieve smarter communities in the 21st century.

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A Cognitive Analytics Management Framework (CAM-Part 2)

Data is the new Oil [Gerd Leonhard]

Data is the Abundant Oil, Cognitive Analytics is its Refinery, & Shared Value is its Power. [Ibrahim H. Osman]

INTRODUCTION

The cognitive analytics management (CAM) framework was based on the combination of the relevant management and professional practices, the rigorous analytical and scientific models for improving the efficiency productivity of organizations. It is inspired by the natural marriage of living pairs for sustainable growth and development. Nature has distinct but complementary pairs: male and female, day and night, machine and people. Cognitive people use insights to set directions, similar to using light to illuminate darkness; a pianist uses piano, lyrics, and instruments to generate shared value music. The quality of shared value music can be positioned anywhere between two extremes - too poor and outstanding - based on the maestro’s skills, and coordination of these components. Similarly, the framework would not realize its vision with the highest quality of shared values unless it has well understood components, synchronized information and coordinated support from a good management of leadership and teams at an organization. The framework implementation success depends heavily on the availability of data and powerful computing to analyze models that underpin our businesses, economy, and life.

Since CAM framework is a mission driven approach, it requires the identification of societal need. The first section will investigate the cause and effect of societal challenges, and discuss the potential of performance growth in reducing poverty in the presence of shared value models. In the second section, the essential components for innovating shared values are presented starting from innovation concept, culture, process, measurement to management. In the third section, shared value concept, impact, principle, shared value framework for strategic positioning of an organization, differences between shared value models and classical business and corporate social responsibility models are discussed. In the fourth section, successful implementation of shared value models in all sectors which affect society are reviewed and categorized by sectors to provide a better understanding of shared value positive impacts on societal challenges.

In the fifth section, guidelines to develop key performance indicators for mission driven smart objectives are provided, a list of associated traps to avoid when implementing performance management and measurement systems is presented and finally the basic phases to develop a budget performance systems are highlighted. In the sixth section, the new concept of big data and business analytics, their current challenges, potentials, best practices, models and tools are discussed. The essential components for the development of cognitive-analytics capability strategy are presented. These components include: i) Commitment of senior executive leaders to develop a cognitive smart organization, for which an evidence-based cognitive decision making process is adopted; ii) Deployment of data strategy and associated technology infrastructure to capture data and link various datasets sources, and an enterprise integrated system composed of data network, storage management, business modeling analytics and software tools in order to build collaborative partnerships among the eco-system of an organization, the network infrastructure and enterprise systems require investment from committed leaders; iii); Secur-
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