Strategic Project Management

Contemporary Issues and Strategies for Developing Economies

Edited by
Corlane Barclay
Kweku-Muata Osei-Bryson

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To my parents, Hermina Barclay and Caswell Barclay, who continue to be my inspiration and motivation.

Corlane Barclay

To Joy Elizabeth Bryson (my youngest sister) and Michael Bryson (my youngest brother), who have through their lives taught me about project management, kindness, and courage.

Kweku-Muata Osei-Bryson

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Preface

The majority of the countries of the world are considered to be within the "developing" economies category, and these countries account for the majority of the population of the world. In recent decades, developing nations have been increasing their utilization of projects as vehicles to drive economic and social development through formal application of project management principles. Anecdotal and some empirical evidence suggest that practitioners may not be effectively applying best principles and practices of project management, with the result that organizations, including government organizations, in too many cases do not successfully manage important projects. This phenomenon presents a deep challenge for economies that are already faced with severe financial and other resource constraints. For example, the media continuously report on incidences of persistent overspending in government projects and problems of delayed work as a result of improper planning and risk management, which exacerbate the draining of the already overburdened coffers of these countries. This, in turn, slows national development. Contributing factors to this seemingly endless cycle are the ineffective application of project management standards and techniques, the lack of suitably qualified and experienced project managers, and the paucity of resources that are relevant to their context.

An analysis of the academic discourse (i.e., books and articles) revealed that the experiences, lessons, and innovations of developing economies, particularly in the Caribbean and some regions in Africa and Asia, are underreported. Even though experiences from other regions are beneficial, it is even more imperative to share and provide insights that have strong contextual relevance to regional experiences. Thus, practitioners and researchers can rely on techniques and experiences from shared experiences which enhance significance within cultural, economic, or political dimensions.

In this book, *Strategic Project Management: Contemporary Issues and Strategies for Developing Economies*, we seek to provide answers to the following questions: What are some of the principal contemporary issues and challenges experienced in "developing" countries, and how can effective project management help to address them? Note that important lessons, opportunities, and innovations can be fostered, too; therefore, we also seek to examine some of the opportunities and lessons that can be harnessed and applied to areas of similar and different contexts. Creating a

resource that fairly and realistically articulates some of the challenges and experiences, while presenting strategies and sustainable solutions to stem some of the key relatable issues, was in our view a simple, yet effective contribution.

This book is aimed at addressing current limitations in the literature through the provision of, and sharing of, shared experiences, insights, and best practices that are specific to the context of these economies to improve applicability (relatedness) and chance of adoption. The book will share ideas, insights, and experiences in all forms of business projects that may include a core information and communications technology (ICT) artifact or is supported by ICT to deliver the specific artifact, product, service, or result. Its benefits include

- Providing diverse perspectives and experiences in the effective management of projects from the developing economies
- Highlighting the importance of project maturity through the adoption of sound strategic project management principles
- Showcasing the application of project management standards and practices in specific domains
- Showcasing emerging tools and techniques that can enhance the management of different types of projects
- Highlighting opportunities for future research and collaborations

The intended audience of this book includes project management practitioners, academic researchers including experienced researchers, and graduate and undergraduate students engaged in understanding or creating unique product, process service, or results, particularly in less-developed and emerging economies. We expect that this book will be of particular interest to persons in industry and government across various sectors and functions, including ICT development, environment, law, government and capacity building, education, banking and finance, health, and other areas.

The book consists of 17 chapters from various contributors representing various parts of the world, including Brazil, Jamaica, Malaysia, Pakistan, Thailand, the United Kingdom, and the United States. These chapters are categorized into four sections. The discourse highlights the range of perspectives, experiences, and issues in managing different types of projects across different domains and countries and emphasizes the similarities and nuances in managing projects where the strategies can resonate in an area that is relatively underrepresented.

The first section, Considerations in Managing Successful Projects, provides an overview of foundational issues pertinent to managing successful projects. These issues include the role of projects, diversity of the perspectives of project success, decision styles of project managers and possible implications on project success, development and prioritization of project objectives, and the impact of project and program management practices on benefits realization and the organization's satisfaction, key indicators of success.

The second section, Challenges and Constraints in Temporary Organizations, covers a range of issues relating to the management of constraints in managing the projects. The challenges encountered in managing small software shops in Pakistan, project escalation, the implications for risks in effectively managing projects and programs, and the quality considerations in managing business and technology projects are presented.

The third section, Observations and Cases from Industry, provides case studies and experience in managing diverse projects, to include the implications of knowledge movements in building design projects; knowledge management practices in projects situated in Caribbean organizations; implications of project leadership a national e-learning project in Jamaica; and contextualization of the process of law-making in the Caribbean in a formal project management outlook.

The final section, Evaluating Project Success and Performance, discusses the evaluation of project performance and success through the lens of an alternative measurement system, the Project Performance Scorecard. An overview of the evaluation technique is provided, followed by a demonstration of it in evaluating and identifying project success criteria for data mining projects. The section ends with an examination of multiple evaluation techniques in the context of a government information technology (IT) project.

We express our profound appreciation to the contributors for their willingness to participate in this project and the reviewers for their efforts toward improving the quality of each chapter. We are grateful to the publishing editor and staff for their support in helping to deliver this project. We would also like to express our gratitude to our family and friends who provided us with kind support and assistance, in particular Beverly-Jean Cambridge and Nicolia Barclay. Finally we extend praise and gratitude to the Creator in sustaining us this project life, from conceptualization to publication, and beyond.

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Editors

Corlane Barclay is a business consultant and a full-time lecturer at the University of Technology, Jamaica (since 2009), where, in 2011, she designed and successfully implemented the first and only wholly-owned graduate program in information systems management, with five specializations, of the School of Computing and Information Technology. She also served as a coordinator for this program between 2011 and 2012. She is a certified project manager, with Project Management Professional certification, with over 10 years of industry and government experience. She also holds a doctorate degree in information systems from the University of the West Indies, Mona campus, a master's degree in information systems, and bachelor's degrees in management and accounting and law from the same university. She is currently in the final year at the Norman Manley Law School, Mona, Kingston, Jamaica, completing the certificate of legal education, which prepares for admission to practice in the Commonwealth Caribbean territories.

Her current research interests include cyber security and cybercrime, project performance and project success, technology and telecommunications law, information and communication technologies for development, and knowledge discovery and data mining models. She has coedited one book, *Knowledge Discovery Processes and Methods to Enhance Organizational Performance* (2015), published by CRC Press. She has also published several chapters and papers in several top-rated journals, including *Information Systems Frontiers, Project Management Journal, the International Journal of Production Economics, and Information for Technology Development*; and papers for academic conferences such as the Americas' Conference on Information Systems and the Hawaii International Conference on System Sciences. She currently serves as part of the program committee for the Special Interest Group on Information and Communication Technology and Global Development (SIG GlobDev).

Kweku-Muata Osei-Bryson is a professor of information systems at Virginia Commonwealth University, Richmond, Virginia, where he also served as the coordinator of the information systems doctorate program from 2001 to 2003. He is a visiting professor of computing at the University of the West Indies at Mona. Previously, he was professor of information systems and decision sciences

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His research areas include data mining, decision support systems, knowledge management, information systems security, e-commerce, information technology for development, database management, information system outsourcing, and multicriteria decision making. He has published in various leading journals including *Decision Support Systems*, *Information Systems Journal*, *Expert Systems with Applications*, *European Journal of Information Systems*, *Journal of Information Technology for Development*, *Information Systems Frontiers*, *Omega*, *Knowledge Management Research and Practice*, *Information Sciences*, *Information and Management*, *Journal of the Association for Information Systems*, *Journal of Database Management*, *Computers and Operations Research*, *Journal of the Operational Research Society*, and the *European Journal of Operational Research*. He serves as an associate editor of the *INFORMS Journal on Computing* and the *Journal of Information Technology for Development*; as a member of the editorial board of the *Computers and Operations Research* journal; and as a member of the international advisory board of the *Journal of the Operational Research Society*. His edited books include *Advances in Research Methods for Information Systems Research: Data Mining, Data Envelopment Analysis, Value Focused Thinking* (2014), Springer; *Knowledge Management for Development: Domains, Strategies and Technologies for Developing Countries* (2014), Springer; and *Knowledge Discovery Processes and Methods to Enhance Organizational Performance* (2015), CRC Press.

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Chapter 1

The Role of Projects in Society

Corlane Barclay and Kweku-Muata Osei-Bryson

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Abstract: It is hard to imagine an organization that is not engaged in some kind of project activity. Over the past decade, organizations have been turning from operations to project management as part of their competitive advantage strategy (PWC, 2004). This is also true for other types of structures such as government, charities, and nonprofits and agencies that are looking to promote improvements in their operations. Alternatively stated, projects play an important role in all sectors of society as projects impact operations and operations impact new projects. Unfortunately, despite the opportunities that projects present, they are often riddled with challenges and are at times abandoned or simply fail to meet their goals. These circumstances may be due to project management factors, human factors, technical factors, and legal and regulatory factors. Sound project management and governance practices are

strategies that can help mitigate against some struggles experienced by the project-initiating body.

This introductory chapter forms the basis for the discussion of projects and the diverse implications of not only using projects as drivers of change but adopting sound project management principles as a means to promote development in a sustainable manner.

Keywords: project; project management; project governance

1.1 Projects in Society

1.1.1 Nature of Projects

Projects are change agents. Reports and anecdotal evidence suggest that billions of dollars have been invested in these ventures at the national and organizational levels to help effect some change, transformation, or development. Projects have played and continue to play an important role in societies, groups, and organizations from the premodern era to what is considered modern civilization in the twenty-first century. The construction of the pyramids and travel to the New World are examples of how history has revealed to us numerous unique, complex undertakings limited in time and scope (Packendorff, 1995). Similarly, the modern world has seen multiple ventures ranging in size, funding, and complexity such as the design of National Aeronautics and Space Administration (NASA) spaceships, expeditions to the Moon and Mars, the creation of the first computer, the development of the first set of vaccines for polio, the development of school curricula based on industry and global demands, and the delivery of a new bank product to market. All these important projects have defined and influenced our lives in one way or another. The common theme among the development of these monuments or artifacts is the creation of a unique outcome in terms of product, process, services, and results, and this involves some level of innovation in the actual outcome or process to produce the outcome.

Against this background, a project can be described as an initiative undertaken by an organization with its main purpose to provide value or beneficial change to diverse stakeholders through the introduction of new or modified service, process, product, or result (Barclay, 2009).

Other types of project forms include portfolios and programs and indicate differences in terms of scope, impact, and objectives. According to the Project Management Institute (PMI, 2013), portfolios are a collection of any project forms that are managed as a group to achieve strategic objectives, and programs are managed in a coordinated manner in support of the portfolio. Regardless of the dichotomy, they all seek to achieve some beneficial change because according to the Association of Project Management (APM, 2012), the concepts are fluid and

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