## EVENTS MANAGEMENT THEORY AND METHODS SER

# EVENT PROJECT MANAGEMENT Principles, technology and innovation



MOHAMED SALAMA



# **Event Project Management:** Principles, technology and innovation

**Mohamed Salama** 



### Published by Goodfellow Publishers Limited, (G) 26 Home Close, Wolvercote, Oxford OX2 8PS http://www.goodfellowpublishers.com

British Library Cataloguing in Publication Data: a catalogue record for this title is available from the British Library.

Library of Congress Catalog Card Number: on file.

ISBN: 978-1-911635-75-8

DOI: 10.23912/9781911635734-4390

The Events Management Theory and Methods Series

Copyright © Mohamed Salama, 2021

All rights reserved. The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without prior permission of the publisher or under licence from the Copyright Licensing Agency Limited. Further details of such licences (for reprographic reproduction) may be obtained from the Copyright Licensing Agency Limited, of Saffron House, 6–10 Kirby Street, London EC1N 8TS.

Design and typesetting by P.K. McBride, www.macbride.org.uk Cover design by Cylinder

# Contents

	Introduction to the Events Management Theory and Methods Serie Preface	s v vii	
1	Event Management: A sustainable project management perspective 1		
	Introduction to event management from a sustainable project		
	management perspective	2	
	The challenges facing event management A Sustainable Project Management Model - SPMM	8 12	
2	Sustainability in the Context of Event Management	19	
_	Sustainability for event management	20	
	Defining the sustainable event	21	
	The impact of sustainable events	25	
	Managing sustainable events	28	
_	Sustainable events: the ISO 20121 perspective	33	
3	Traditional Project Events Management	38	
	The event project plan (EPP)	39	
	Charter and scope statement Event Organisation Breakdown Structure (OBS)	39 44	
	Event time schedule	49	
	Resource management	63	
	Earned Value Analysis	64	
	Quality management system	66	
	Stakeholder engagement plan Integration management	68 70	
4	Risk Management and Agile Project Management	73	
	Event risk management systems	74	
	Agile Project Management (APM)	83	
	Lean vs Agile	89	
	Can Agile event management eliminate risk?	91	
5	Sustainable Financial Planning for Event Management	93	
	Sustainable finance planning	94	
	Sustainable development principles in event management Event finance planning	95 96	
	Selling the event	90 97	
	Financing the event	100	
	The event budget: Predicting the financial outcome of an event	104	
6	Financial Planning and Budgeting of Events	107	
	Financial planning and management of events	108	
	The financial planning process	112	
	Costs and revenues of an event	113	
	Event budget development	116	

	Reporting and management of events Setting up financial controls and processes	122 124
7	Virtual Team Performance and Wellbeing for Event Management	130
	How virtual teams differ from traditional teams	131
	Virtual team performance	134
	Challenges facing virtual teams	140
	Conceptualisation of well-being in psychological literature	144
	The psychology of the emerging culture-creation industry	147
8	Adaptive and Sustainable Leadership for Event Management	152
	Why event project management / leadership is needed	155
	The way to sustainable and adaptive events leadership	158
	Conclusion and empirical evidence	161
	Future trends in events management	164
9	Sustainable Events Management Model	171
	Background	172
	Theoretical frameworks	174
	How to use the SEMM?	175 175
	Model implementation process	
10	Sustainable Business Model Innovation for Event Management	219
	What is a business model?	220
	The Business Model Canvas Eco-innovation of business models	221 225
	Eco-innovation of business model strategies	225
11	Advanced Technology for Event Management	235
	Data science	236
	Data types	230
	Machine learning	241
	Cross Industry Standard Process for Data Mining	244
	Business intelligence	246
	Artificial Intelligence	246
	Cyber security	247
12	Digital Transformation in the Event Industry	252
	Digital transformation background	252
	Digital transformation roadmap	254
	Digital technologies	256
	Digital transformation mastery SMAC (social, mobile, analytics, cloud) technologies	257 259
	SMAC (social, mobile, analytics, cloud) technologies SMAC technologies for the event industry	259
	Case study: Event registration using smart contract blockchain	267
	Index	271

## Introduction to the Events Management Theory and Methods Series

Event management as a field of study and professional practice has its textbooks with plenty of models and advice, a body of knowledge (EMBOK), competency standards (MBECS) and professional associations with their codes of conduct. But to what extent is it truly an applied management field? In other words, where is the management theory in event management, how is it being used, and what are the practical applications?

Event tourism is a related field, one that is defined by the roles events play in tourism and economic development. The primary consideration has always been economic, although increasingly events and managed event portfolios meet more diverse goals for cities and countries. While the economic aspects have been well developed, especially economic impact assessment and forecasting, the application of management theory to event tourism has not received adequate attention.

In this book series we launch a process of examining the extent to which mainstream theory is being employed to develop event-specific theory, and to influence the practice of event management and event tourism. This is a very big task, as there are numerous possible theories, models and concepts, and virtually unlimited advice available on the management of firms, small and family businesses, government agencies and not-for-profits. Inevitably, we will have to be selective.

The starting point is theory. Scientific theory must both explain a phenomenon, and be able to predict what will happen. Experiments are the dominant form of classical theory development. But for management, predictive capabilities are usually lacking; it might be wiser to speak of theory in development, or theory fragments. It is often the process of theory development that marks research in management, including the testing of hypotheses and the formulation of propositions. Models, frameworks, concepts and sets of propositions are all part of this development.



The diagram illustrates this approach. All knowledge creation has potential application to management, as does theory from any discipline or field. The critical factor for this series is how the theory and related methods can be applied. In the core of this diagram are management and business theories which are the most directly pertinent, and they are often derived from foundation disciplines.

All the books in this series will be relatively short, and similarly structured. They are designed to be used by teachers who need theoretical foundations and case studies for their classes, by students in need of reference works, by professionals wanting increased understanding alongside practical methods, and by agencies or associations that want their members and stakeholders to have access to a library of valuable resources. The nature of the series is that as it grows, components can be assembled by request. That is, users can order a book or collection of chapters to exactly suit their needs.

All the books will introduce the theory, show how it is being used in the events sector through a literature review, incorporate examples and case studies written by researchers and/or practitioners, and contain methods that can be used effectively in the real world.

## Preface

In the era of digital transformation while the new map of the world is being defined by the United Nations Sustainable Development Goals, it imperative that the project managers review current systems and processes that were set out decades ago. Events are typically contemporary, thus should reflect the new trends in the global orientation and harness the vibrant development in technology. In this book, a new model for event project management is introduced to update current practice, based on three pillars: embracing the sustainable development goals; adopting the latest technology; and managing innovation. The Sustainable Event Management Model is rooted in the concept of sustainable project management and grounded in the Sustainable Project Management Model (Salama, 2018).

The first seven chapters cover in depth the core theories, knowledge areas and key models that the event manager needs to master for the efficient and effective delivery of events. Chapter 1 provides a holistic background about the event industry and event management theory. The discussion starts and ends by reference to the project management context, with emphasis on the sustainable project management school of thought. The following sections cascade from the general introduction to the event industry and the event management theory to the detail explication of the Sustainable Project management Model (SPMM); highlighting the challenges the sector needs to address transitioning towards sustainability. The chapter concludes with a brief introduction to the Sustainable Event Management Model that is the crown jewel of this book which is presented and discussed in depth in Chapter 9.

Chapter 2 looks at the sustainability in the context of event management, starting from scratch with the basic definitions then explaining the concepts of sustainability, sustainable events and sustainable event management and measurement. The chapter discusses the ISO International Standard, ISO 20121:2012, event sustainability management systems and provides an early critique that justifies the need for the Sustainable Event Management Model (SEMM).

Chapter 3 reviews the traditional project management (TPM) methodology, providing a detailed explanation of the tools and techniques, guided by the PMI methodology, while using examples to illustrate how the concepts can be applied in a practical context. Such tools and techniques include: scope management, stakeholder management, organisational breakdown structure (OBS), work breakdown structure (WBS), task responsibility matrix (TRM), project scheduling, Gantt charts and networks, cost planning and control, earned value analysis (eva), quality management systems and project integration management. The chapter guides event managers towards developing an event project plan according to the TPM processes, tools and techniques.

Agile Project Management (APM) is discussed in Chapter 4 after a detailed presentation of how to develop a risk management system for events. The chapter compares the concepts of Agile versus Lean in the context of projects and attempts to answer the question whether Agile and Lean can reduce the probability and impact of risk in events.

Financial planning and control activities are crucial for the successful delivery of any event. Chapters 5 and 6 cover, in depth, the core concepts and essential tools that the event manager should understand and be able to apply in a practical context. Chapter 4 provides a holistic introduction then Chapter 5 explicates in depth the key concepts. Numerical examples are provided to illustrate the application of the presented tools and techniques.

Chapters 7 and 8 discuss soft skills with emphasis on people issues and leadership in the digital transformation era, while taking into consideration the impact of the COVID-19 pandemic that hit the event industry amongst other sectors. Chapter 7 looks at virtual teams' dynamics and challenges and wraps up with a dedicated section on wellbeing, social psychology of event culture and meaningful memories in the context of event management. Chapter 8 focuses on the event manager as leader; the digital leader as it should be, in the era of digital transformation. The chapter explains the concept of adaptive leadership, supported by the understanding of cultural intelligence in the context of event management.

Now after the aforementioned wide range of concepts, models and examples, get ready for the great leap! Buckle up....

The second half od the book starts at Chapter 9, which presents the Sustainable Event Management Model (SEMM). The model is rooted in the theoretical frameworks explicated in the first half, but takes the event manager a big step forward by providing an implementation process model that is explained in detail. The model comprises 14 dimensions that are applied to the three phases of the event: pre-event, during and post event. The process model provides event managers with step-by-step guidelines with clear inputs, tools and techniques on how to implement the 14 dimensions across the three phases of the event. The model embraces the principles of sustainability and the sustainable development goals, while maintaining the digital transformation perspective that is guided by inseparable twins of sustainable business model innovation and advanced technology. Chapters 10, 11 and 12 aim to explicate the core concepts about the sustainable business models innovation, advance technology and digital transformation, respectively. In Chapter 10 the discussion is started by an introduction to the concept of sustainable business models following a brief presentation of the Business Model Canvas, in the context of managing innovation. Chapter 11 aims to introduce the event manager to an array of advanced technology applications that can be utilised when planning for and executing events. In Chapter 12, the concept of digital transformations is explained with some useful examples and a case study on how to use smart contracts on a blockchain platform for event. Event managers need to develop a clear understanding of those concepts in order to be able to implement the SEMM effectively. Thus, Chapters 10, 11 and 12 should be read using the SEMM lens.

Finally, the book is associated with a rich portfolio of online resources that include and are not limited to teaching slides, MCQ questions with answers, templates and figures for project management tools, solved numerical examples and a further detailed bibliography with an extended list of suggested readings.

#### **Editor and lead author**

#### Dr Mohamed Salama, PhD, MBA, BSc., PGCAP, FHEA

Dr. Salama is Director of Corporate Executive Relations at Edinburgh Business School and former Associate Head of the School of Management and Languages at Heriot-Watt University, Dubai. In addition, he has been the Academic Head of Strategy, Operations and Projects, the programme director for MSc programmes including the MSc in Managing Innovation, MSc in Business Strategy Leadership and Changes and MSc Strategic Project Management since 2006, and has supervised over 300 masters and PhD theses and authored or co-authored over 50 publications. His textbook on project management released in 2016 is the teaching textbook at Heriot-Watt, and his latest textbook *Principles of Sustainable Project Management*, released in October 2018, presents a new model for managing sustainable projects in the digital transformation era, with emphasis on the role of technology and particularly blockchain, as the most popular platform so far.

He is the academic chair of the Middle East Summit for Lean and Agile Project Management, an annual international conference that has been taking place in Dubai since 2016. Dr Salama is currently in his second term on the academic council and the quality and standards committee at Heriot-Watt. He has been a member of the Scientific Committee of the Association of Researchers in Construction Management in the UK since 2010. In addition, he is a visiting professor at Skema University, France and AAU, Amman, Jordan, and is a regular speaker in key events in the UK and UAE.

Dr Salama has over 30 years of academic and industrial experience in project management, marketing, strategy and mergers and acquisitions. He took senior management posts in these fields in the Middle East, Italy and the UK between 1990 and 2002. Since 2002, Dr Salama has been delivering training workshops for executives in the UK, the Middle East and Denmark. He is a fellow of the Higher Education Academy (HE) in Scotland and a member of the Project Management Institute PMI (USA), The Chartered Management Institute (CMI-UK), and The Association of Researchers in Construction Management (ARCOM) in the UK.

#### Co-authors

#### **Professor Adel Ahmed**

Prof. Ahmed is currently the Academic President, Birmingham City University, UAE Campus. Adel was the Founder of the Academic Professional Development and Dean of College of Business at Al Ain University, UAE (2015-2020) and was Founder Head of the Accounting and Finance division as part of Liverpool Hope Business School UK (2009-2015). He has MSc in

Accounting from the University of Alexandria, Egypt, and PhD from Liverpool Business School (1999). He taught accounting, finance courses and career planning at various higher education institutions, including Alexandria University and Leeds Metropolitan University, University of Liverpool, Liverpool Business School and Liverpool Hope Business School. His teaching/research specialisms and interests are Accounting Education Curriculum Development including integrating Socially Responsible Investment and Ethical Finance into Accounting Education, Embedding Employability Skills across Accounting Curriculum and Career Professional Planning, Adel has published in academic journals in the Accounting and Finance area and has been a speaker in several conferences mainly in the areas of ethical investment and accounting education. He is recognised internationally being an external examiner for four UK universities, the Association of Business Executives (ABE) and Association of Business Practitioners (ABP). He is a Member of the British Accounting Association (BAA) and UK Sustainable Investment and Finance Association (UKSIF). He is a Fellow member of the Higher Education Academy, UK (FHEA)

#### Mohammad Almomani

Mohammad is a strategy advisor and a venture builder with over 14 years of international experience in the fields of project management, strategy development, event management and innovation. He has worked with high profile government and private sector units, helping them design, plan and deliver multi-tier enterprise projects with a proven track record of quality and excellence. Mohammad holds multiple accreditations in management and innovation and is currently developing guiding models in strategy and management. He is also writing his final thesis towards MSc in Managing Innovation with the focus on event project management innovation.

#### Dr. Cakil Angew

Dr Agnew is assistant professor of Psychology at Heriot-Watt University, Dubai. Dr Agnew received her PhD from the University of Aberdeen in 2010, then worked as a postdoctoral research fellow in the Industrial Psychology Research Centre at the University of Aberdeen and joined Heriot-Watt in 2014. Her research focuses on the impact of safety culture and leadership on performance at work, in high-risk industries. Dr Agnew has published and presented her work in international journals and conferences.

#### Gregory Fantham

Greg is an assistant professor in Psychology at Heriot Watt University, Dubai Campus, teaching on MSc Business Psychology and MSc Business Psychology with Coaching and the Global Course Co-ordinator for Organisational Culture. He has written articles on psychology-related current affairs topics in most of the UAE's national newspapers, and presents workshops in Dubai on innovation, AI, leadership and coaching. His previous research, at King's College London, examined popular images of nuclear war. Formerly a secondary school history teacher for over 30 years, he now conducts a range of community outreach programmes for pupils and teachers in secondary schools in Dubai.

#### Brenda Ingram, MSc

Brenda's passion and extensive experience lies in successfully supporting and project managing various prestigious events in the UAE with a proactive and hands-on approach. Having previously worked with Police Scotland, Brenda adapted her project and training delivery background to project managing events as a driven and highly organised professional with strong moral values, integrity and ethics. Brenda has an MSc from Heriot Watt University, Dubai Campus majoring in Strategic Project Management with skills in strategic thinking, innovation, leadership, business models, best practices and project management.

#### Dr. Jelena Janjusevic

Jelena is an associate professor at Heriot Watt University, Dubai Campus. Previously she taught at Montenegro Business School. Dr. Janjusevic has strong managerial and research experience. For over 16 years she worked with many partners at national and international levels (government of Montenegro officials, municipalities, social partners, foreign government officials, international institution representatives – World Bank, IFC, EBRD, USAID, UNDP, CHF, EC, etc., domestic and foreign private companies) that included managing Centre for Sustainable Development, national research Centre, with a mission to support sustainable development policy implementation Jelena was engaged with different projects dealing with macroeconomic, sustainable development, public administration capacity building. She is author and co-author of more than 30 papers and reports published in national and international publications and journals.

#### Ljubomir Janjusevic

Ljubomir is a senior professional with a significant experience in driving dynamic product sales, managing client relationships, and substantially increasing revenues. He has more than 16 years of professional experience in the sales and business development, out of which more than 13 years on senior management positions. Worked in different sectors, both in retail and wholesale from FMCG, tourism and advertising. Currently, he works as Marketing and External Relation Associate at Heriot Watt University, Dubai Campus. He is the owner and CEO of JSM Company, ltd in Montenegro, with operations in wholesale and tourism sector in Montenegro and Europe. He holds an MSc with specialization in international trade and finance, and dissertation topic from the sustainable tourism field.

#### Ioannis Karamitsos, B.Sc., M.Sc., Ph.D.

Ioannis has vast research academic and industry experience over 30 years within the private and public sectors. He is currently an assistant professor of Data Analytics at Rochester Institute of Technology-Dubai Campus where he joined Department of Electrical Engineering in 2016 as adjunct faculty. From 2010 to 2020, Ioannis was a Digital Transformation Technologist at Orange Business Services, working with clients to develop and deliver their strategies and transform their organisations into Smart and Digital Cities. Ioannis is member of DSOA-Dubai Innovation Advisory Board. He is particularly interested in applying blockchain, cryptography, AI, machine learning, IIoT, and data mining techniques. Ioannis received his PhD in Computer Science from University of Sunderland, UK, a Master Degree in Telematics Management from University of Danube Krems, Austria, and Bachelor Degree in Electronic Engineering from University of Rome, Italy. He also has executive certificates from Oxford University (Blockchain Strategy), MIT (Tackling the challenge of Big Data) and from Columbia Business School (Driving Strategic Impact Program).

#### Dr Sunita Mathur M.Com, MBA, PhD, FHEA, CPA

Sunita is an assistant professor in Accounting and Finance in Edinburgh Business School at Heriot-Watt University Dubai Campus. She teaches undergraduate (UG) and postgraduate (PG) courses and supervises UG and PG dissertations. Dr Sunita is a member of Fellow of the Higher Education Academy (FHEA) and has a CPA membership from Australia. She has presented papers at local and international conferences. She has a broad range of experience of more than 25 years in the field of higher education teaching in Canada and the UAE. Sunita's primary research interest lies in the International Financial Resources Standards and its harmonization and convergence in emerging economies, which inspired her PhD thesis. Her other research interests are in the field of IFRS in SMEs, microfinance, corporate governance.

#### **Dr Alberto Peralta**

Alberto is currently a lecturer of Strategy and Business Innovation at EAE Business School (Madrid, Spain) and a visiting professor at Heriot Watt University, Dubai campus. His main research interests are business innovation and new business strategies. Dr. Peralta's recent publications relate Business Model Innovation to European and Spanish investors, and the impact of Business Model Innovation in the Circular Economy. He translates the work of Steve Blank, and collaborates with relevant academics and practitioners from USA, Latin-America and Europe, to build a network that helps improve the chances of success of new businesses.

#### Yulia Raffaelli

Yulia is a project manager in the commercial trade fair events and hospitality industry and has 8 years of international experience in the British Virgin Islands, Dubai, and Italy. Yulia worked across a wide portfolio of projects including private and public sectors. She worked in the Italian Consulate and the Italian Trade Agency (ITA) in Dubai where she was responsible for managing big multiple cross-cultural projects and establishing business relationships between Italy and the United Arab Emirates. Yulia has an MSc. in Strategic Project Management from Heriot-Watt University, and she is currently studying an International Executive MBA in Digital Transformation at Bologna Business School with expected graduation in April 2021.

#### Dr. Hani Ragab

Hani is an associate professor at Heriot-Watt University's School of Mathematical and Computer Sciences (MACS) where he heads the institute of Applied Information Security and is the Director of Msc in Network Security. In this role, he coordinates research activities in the field of information security, particularly on AI applications, at Heriot-Watt Dubai. Prior to this, he worked in several security-related roles, including as a security architect, before joining University of Kent, UK as a lecturer in Information Security in 2007. Hani obtained his Ph.D. with distinction in Network Security from the prestigious Université de Technologie de Compiègne, France in 2007. He holds several industrial certificates in Security, AI, and computer networks.

#### Dr. Ahmed Salih

Dr Salih is a Senior Director of Strategy, Knowledge Management and Operational Excellence at Khatib and Alami PTE, Singapore. He is also a lecturer of Leadership for MBA and MSc at Edinburgh Business School, Heriot Watt University. He has a background of research in leadership, cultural intelligence, entrepreneurship and Aikido in large scale business. He has published widely in these areas and has published a textbook on cross cultural leadership in the era of digital transformation. He is a knowledge and innovation management executive employing theory and practice for best business outcomes, a cultural transformation architect who has led many transformation programs company wide to achieve direct results on efficiency and profitability, and a proven leader of organizational transformation including digital business transformation harnessing strong internal and external networking capabilities. Dr Salih is a Steering Committee member of the ERP system evaluation and implementation, and a Leadership Panel member for SAP design and implementation.