

# **Crowd Management: Risk, Security and Health**

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**The Events Management Theory and Methods Series**

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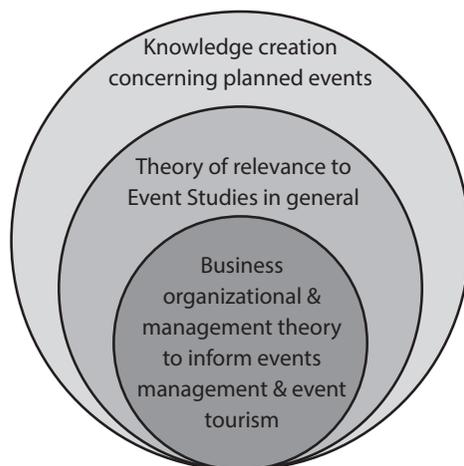
## **Introduction to the Events Management Theory and Methods Series**

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.

## Preamble

When I began organising events, we would simply book a hall, book a band and sell tickets. It was that simple. Not any more. As the events sector has grown, there have been mighty phase changes. From the simple 'gig', the concerts started to attract people from outside the town. Tourist spending made a change to the local economy. As it grew, governments realised that the tax revenues, social and economic activity were vote winners. Concerts became five day festivals. Then they toured the world. Small groups of people watching their favourite band became tens of thousands and then hundreds of thousands of people. In the sports events, the local match became part of the global competition that culminated in the Rugby World Cups and the Olympics. Conferences and exhibitions went from local trade fairs to enormous Abu Dhabi IDEX or Hanover CeBit-like gatherings.

From all this emerged the science of event management. No longer 'ad hoc' and just responding to the issues as they arose, event management is now a plethora of plans submitted to the stakeholders for prior approval. The famed work breakdown structure of the event planning produced highly specialized areas that require specific expertise and experience. It was the dialectic of quantitative growth producing qualitative change. As the crowds grew and the events became more visible and economically important, the spin-off was the formation of new companies and experts specialising in just one aspect of event management. It is hard to comprehend how quickly this has occurred. Over the last ten years, one website in Dubai (SourceME) grew to host 3,500 companies that service the events sector. In 2019 with billions of dollars, Saudi Arabia created 11 major festivals spread over the whole year around the country ([www.saudiseasons.sa](http://www.saudiseasons.sa)).

The result of this rapid growth is a significant lag in information from the practitioners to researchers, academia and students. They are just too busy 'doing it'. Fortunately, working with the Australian Institute of Disaster Resilience allowed me the time to discover the common systems used in each of these areas. The reader must understand that the information contained in each of the chapters is from these people. I merely recognized the common pattern and issues.

I am privileged to know many of the experts working in the events sector. I have asked four of these experts to write the sections of our book. They are people who, on a daily basis, live their areas of expertise. They, as Nassim Taleb writes, have 'skin in the game'. Their words have consequence.

I would like to thank the staff of the Australia Institute for Disaster Resilience and their excellent series of handbooks that are quoted many times around the world.

I would also like to thank all those who work on events so that we, the audience, may be able to enjoy the pleasure of attending with our friends, colleagues and family.

## Introduction

There are crowds at the beach, while I am waiting for a train, there are lunch crowds, crowds at concerts, you may walk down the street turn a corner into a protest crowd, there may be a new phone launched and suddenly there is a crowd. You can't escape it in a city. After the city you then go to a concert in the country, a festival, a big BBQ or a football match. Crowds mean proximity, queues or lines, they mean delay, frustrations, they also mean celebration, socialisation and fun.

They can also mean disaster.

In a crowd you can lose the freedom of choice and movement, your risk of catching infectious diseases increases and you can be a target for theft or a hostile act.

The aim of the book is to present the different perspectives on crowds. Although we will focus on events, such as public festivals, sports and concerts, this information and the system is applicable to mass gatherings anywhere in the world. It is to help the reader understand the different aspects of predicting, managing and evaluating a crowd. We have chosen four aspects of crowds. We call them *domains* as they have their own history, terminology, knowledge, experience, competency and processes.

The first two chapters describe the framework common to the four domains.



The perspective we take on crowds is from the Complexity theory. A crowd is complex as each individual is a free agent and, in a crowd, responds to the people near them. Instantaneously, their attitudes and behaviours affect that individual. Hence it is the relationships between the people that create crowd behaviour. This is beyond complicated, because the causes and effects are immersed in multiple behaviours and attitudes that are moving and developing. One aspect of the complexity is called *emergent behaviour*. It is behaviour that cannot be predicted from each individual. It is as though the crowd itself has its own life. In a complex situation it is impossible to predict exactly what will happen all the time as a very small change in a crowd may be amplified throughout the whole crowd. Take for example a car backfiring near a crowd. This could be ignored by some crowds or at other times may cause a panic and the people to rush away from the origin of the sound. The rush could then cause other people to panic and, like the famous experiment with mouse traps and ping pong balls, produce a calamity.

*“About 1,500 people were injured in the Italian city of Turin after a firecracker provoked a stampede on Saturday night, police say. Thousands of football fans were watching a live relay of Juventus’ Champions League final against Real Madrid in Cardiff when a bang was heard and rumours of an explosion spread”*

<https://www.bbc.com/news/world-europe-40147813>, 2017

*“A rush-hour stampede at a railway station in Mumbai has left at least 22 people dead and dozens more injured. Indian police said it was triggered by a rumour that a pedestrian bridge was collapsing, sparking chaos as passengers surged forwards to flee”*

<https://www.telegraph.co.uk/news/2017/09/29/mumbai-station-stampede-kills-least-15-amid-rumour-bridge-collapsing/>, Sept 2017

*“If you take anything organic and you try to control its variability, you’ll end up with less variability than you started with but the system would become more fragile”* Nassim Taleb (2012)

In event management theory we now stand at the junction between rigid planning and flexibility. This is obvious when it comes to crowd management. Planning is vital and there are many articles and books on this. But it is not enough. Because so many plans are now required by governments, it can easily be a ‘tick box’ operation. Last year’s plan

is used with the dates changed. After many disasters we now realise that the plan is only part of the story. The plan must be implemented, changed, adapted to changing circumstance and even ignored if that is required.

### **Who is this book for?**

- ◆ Event professionals who need an overview of crowd management.
- ◆ Students of event management who need to prepare the way for a career.
- ◆ Government departments involved in crowds, such as Tourism and Transport.
- ◆ Trainers and teachers in the field of events, to develop the curriculum.
- ◆ Academics who need the information and theory from those at the front line of crowd management and events.
- ◆ Readers interested in the application of complexity theory to their everyday world.