

Alexandra Becker

Network Analysis and the organisation of events

Master's Thesis

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ABSTRACT

Within the framework of this thesis, a questionnaire-based survey was carried out among British conference organisers to find out the extent to which the use of project network techniques as a planning and monitoring tool has become widespread, which advantages or disadvantages it has when used in conference management and on which factors the use of PNT depends. In conference-related literature, little attention is paid to these techniques, their existence is only mentioned in a brief sentence, if at all. However, conference management is project management and therefore a systematic, formalised planning approach should be imperative.

The survey revealed that PNT's are not a commonly used planning tool among conference organisers. Only one of the 63 respondents indicated that they use network analysis software. Reasons for not using network analysis include the costs, and above all the ignorance about its benefits. Popular techniques to plan and monitor events are hand-written or computer-stored tasklists. For particular requirements, such as registration, badging, invoicing etc., meeting planning software is used. However, it is not used very often for scheduling and budgeting, which are the two main areas of application of network analysis. The survey and a closer look at commercial meeting planning software reveal that network analysis features are not incorporated. Cross-tabulations between the variable 'Use of meeting planning software', and demographic and company-specific factors (age, sex, position – nature of organisation, number of employees, number of events organised each year) revealed that there is a general tendency to not use meeting planning software. However, generalisations cannot be made because the number of respondents within the different response categories is generally too low to allow for valid statistical statements.

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1 INTRODUCTION

“In effect, arranging a conference is like drawing together to a single point a large number of threads of different lengths and from different places. People and suppliers of goods and services have to be briefed, informed, bullied and persuaded. Lead times are interdependent and variable. It is the perfect task for network analysis, but few would wish to adopt this method — perhaps justifiably, for it is not the plan but the result which counts in the end.”

(SEEKINGS 1996, p. 363)

To cope with the task of planning and organising events, which includes the co-ordination of a multitude of different and interdependent activities, SEEKINGS suggests using network analysis, or Project Network Techniques (PNT). These techniques, which are project management techniques and usually computer-based, have been applied, since their development, “with notable success [highlighted by the author] to research and development programs, all types of construction work, equipment and plant maintenance and installation, introduction of new products or services or changeovers to new models, development of major transportation and energy related systems, strategic long-term planning, emergency planning etc.”¹. Meeting planners, however, might be reluctant to make use of this highly developed planning and monitoring technique. It is undoubtedly due to this reluctance that conference management software does not provide network features. Only one supplier

was found on the Internet who has integrated network analysis in its meeting planning product — in the itinerary planning module. Obviously, project network techniques are not the conference organiser's favourite methods. Yet, there are no statistics to support this hypothesis. To fill this gap, a questionnaire survey among British conference organisers was carried out within the framework of this thesis. The overall research questions the author tries to answer are how widespread the use of PNT is in conference management, on which internal and external factors the use of these techniques depends and which features are perceived as most useful. These general questions can then be split up as follows:

- Does the use of network techniques depend on:
 - The conference organisation:
 - nature: corporate, association, government, hotel, independent PCO;
 - size: number of employees, number of events/year;
 - The event:
 - type: conference, incentive event, product launch, staff training, exhibition, etc.;
 - size: delegate number, length, number of involved organisations/suppliers;
 - regular or 'one-off';
 - lead times/deadlines
 - The individual in charge of the project:
 - demographic factors: age, gender, position;
 - specialist skills: IT, project management;
 - The client who requires the conference organiser to work with a formal, standardised project management system?

¹ MODER *et al.* 1983, p. 4

- Are PNT's used during the whole organisation process, including planning AND monitoring, or only during the initial planning phase?
- Which features are used, only the basic ones such as scheduling, or also the more complex ones such as cost and budget control?

One possible outcome of the research might be that meeting planners find it inappropriate to use a sophisticated planning tool like PNT for small-scale or regular events the organisation of which they perceive to be routine work. They possibly prefer, especially if they lack the appropriate IT skills, a simple hand-written or typed administrative schedule which constitutes a timetable of what has to be done week by week and by whom.

The main body of this thesis consists of three parts:

① Research Methodology

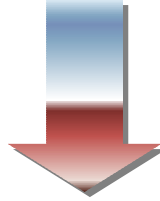
This methodological chapter is dedicated to the detailed description of the research approach and techniques which have been used to answer the research questions.

② Literature Review: Conference Management and Project Network Techniques

This theoretical part is designed to give an overview of existing literature in the field, aiming to put the research topic into context.

③ Research Report

The report of the research study tells the story as it unfolded. It contains an analysis of the data gathered and includes accounts of problems that occurred during the implementation of the research project.



The main body is followed by the conclusion, or overall evaluation, which links the results of the survey to the research topics.

2 RESEARCH METHODOLOGY

2.1 Introduction

This chapter defines the methods chosen for the research project and identifies strengths and weaknesses. It also discusses an alternative approach which was used by the author in the early stages of the research project, but later abandoned due to implementation problems. Some consideration will be given to the issues relating to sampling and selection, and to the limitations of the study. The concepts of reliability and validity of research data will equally be explained and applied to the specific research approach.

The research style to be used largely depends on the nature of the research project and of the questions being asked. Usually, the research questions and the rationale immediately suggest particular methods. This chapter will therefore deal with those methods which, for this specific research project, best promised to match the problem and proved to be the most suitable amongst the wide variety of styles available for designing, carrying out and analysing the results of research.

The structure of the following chapter is based upon the research process model proposed by BLAXTER *et al.* (1996, p. 59). This model includes three dimensions called *research families*, or general strategies for performing research (quantitative, qualitative), *research approaches* (action research, case studies, experiments, surveys) and *research techniques* (documentary analysis, interviews, observation, questionnaires). To study the particular research question, the author focused, as the highlighted words demonstrate, on a quantitative research strategy. It should be noted that there will be overlaps in the description of the three dimensions because the alternatives chosen for

the research project in hand are all from the ‘quantitative stable’ and therefore have a close affinity with each other.

As no one method can answer all questions and provide insights on all issues, a multi-method approach, referred to as triangulation, has been adopted in this thesis. To verify the validity and reliability of the information collected during the research process, the main method – that is the questionnaire survey, has been complemented by the exploration of existing literature on the research topics.

The following diagram is designed to show how the different parts of this chapter relate to each other. At the same time, the diagram illustrates which decisions were taken before the implementation of the final research action plan.

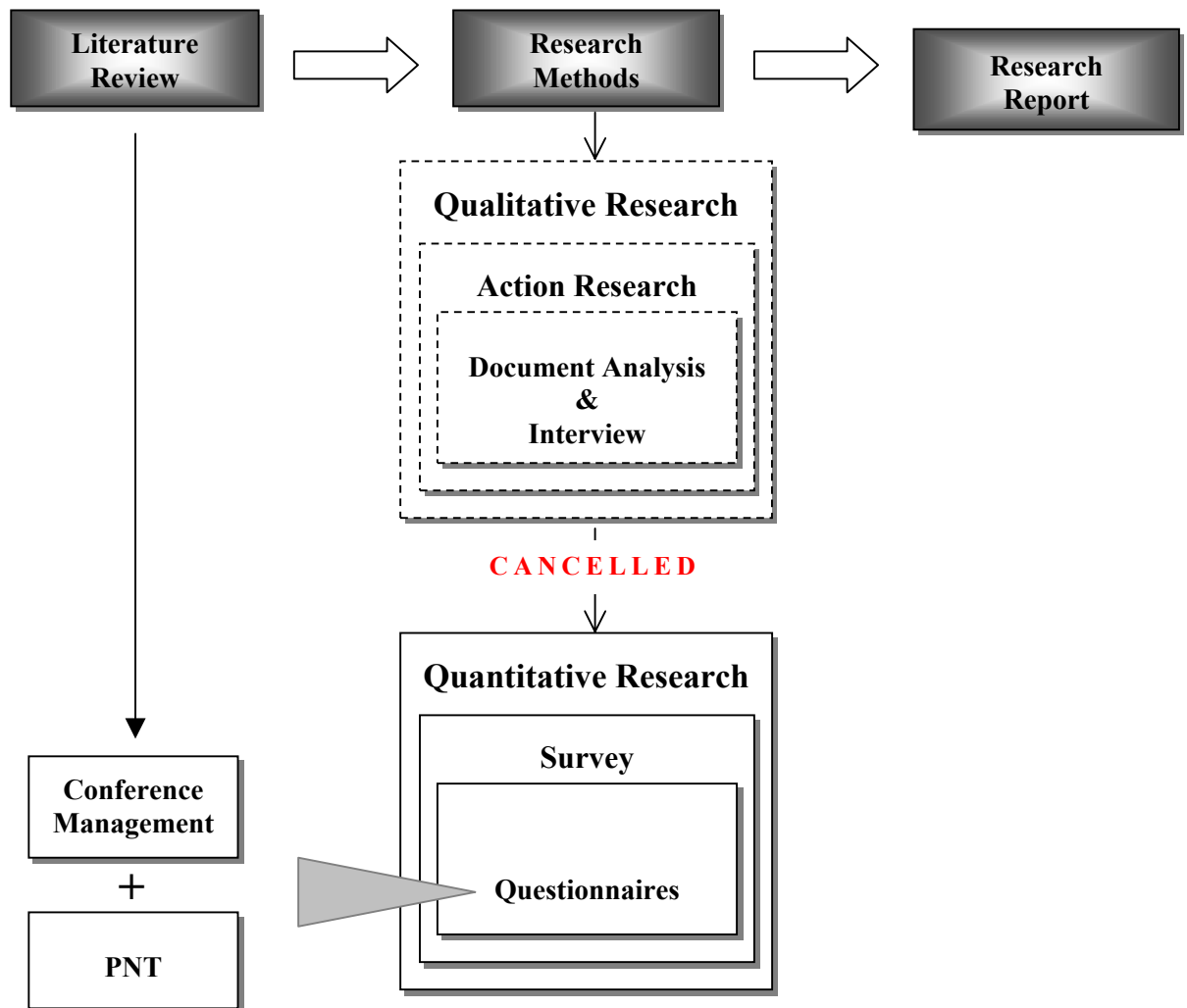


Figure 2-1: Research Methods

2.2 Literature Review

The research project started with the exploration of existing literature, including monographs, journal articles and websites, in order to get a more detailed perspective of the chosen topics – ‘Conference Management’ and ‘Project Network Techniques’. The author restricted herself to using sources from 1990 to the present day make sure that the information they contain is recent. The background reading equally enabled the author to ask the ‘right’, or relevant, questions in the survey questionnaire.

Literature about network techniques was primarily reviewed to find out what technical features they provide and which weaknesses and strengths they have. There do not seem to be any limits to their applicability, on the contrary: all the authors believe that network techniques can be successfully used for all sorts of different projects, irrespective of their size or nature. If that is really so, the survey results will tell. At least ROGERS believes that the size of the event to be organised dictates appropriate planning tools:

“The more complex the event and the numbers involved in organising it, the more the need for some form of critical path analysis, mapping out the sequence of events in a logical order and within a realistic time-frame.”

(ROGERS 1998, p. 137)

At any rate, there is one thing that all projects have in common: the need for project management, and PNT is one technique which may help to make the project management job easier. LOCKYER (1996): *Project Management and Project Network Techniques* gives, as the title suggests, valuable insights in the inter-relationship between project management and project network techniques.

The conference business has not attracted significant attention from researchers and writers until comparatively recently; the availability of

literature related to this topic is therefore limited. It was only in the last century that several text books were written and webpages created which provide up-to-date information, including statistics, about the meetings industry and that predict trends for the 21st century; an example is the comprehensive description of the conference business in the UK and Ireland found in Rogers (1998): *Conferences - A twenty-first century industry*. When reviewing the literature, the author found out that no logical link is made between conference management and project management, although conference management is actually project management. Texts about the organisation of events, such as SEEKINGS (1997): *How to Organise Effective Conferences and Meetings*, only describe, in more or less detail, which activities are involved in the planning. These texts, which include the most diverse online planning checklists, do not give any information about how to reconcile and monitor all the different tasks involved in a project. True, it is commonly recognised that the conference management requires “common sense, forethought, meticulous planning and attention to detail, team work and sometimes crisis management”², and that much of the administration can be enhanced by the use of conference management software packages, which are designed to reduce the routine work-load on the meeting planner: delegate registrations and correspondence, itinerary planning, invoicing, report production, and other aspects. However, the organisation of a conference does not seem to be considered a project that requires systematic project management. Such an approach includes not only operational planning, but also STRATEGIC planning (→ chapter 3.3.1) and monitoring/evaluation procedures. Some authors, like ROGERS, refer at least implicitly to a project management process:

“The organisation of a conference requires a similar strategic approach to that needed for planning and managing most other events. Clear objectives should be set from the beginning, a budget has to be prepared and the conference managed for its

² CAREY 1997, quoted in Rogers 1998, p. 155