

# A new model for high value meetings

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## Abstract

The purpose of this research is to consider how organisations can increase competitiveness by maximising the value of meetings whilst minimising their cost. This involves the development of a model which considers both the scheduling and management of meetings, whilst taking into account importance, value and cost where previously there has been no measure of these elements. This work will provide not only academic research within this under-represented area, but through a case study, a practical application. As time lost through unproductive meetings is estimated to cost billions, the potential saving through the application of this research is significant.

**Keywords:** meetings, resource optimisation and value

## Purpose

The purpose of this research is to consider how organisations can increase competitiveness by maximising the value of meetings whilst minimising their cost. In order to be of high value, meetings must have clearly defined purposes *a priori*, which are fulfilled whilst coordinating the appropriate resources in a timely and effective manner.

It is estimated that there are around “73 million meetings held around the world every day” (Hawkins, 1999) with 17 million daily in the USA alone (Tyler, 2007). In addition, around half of all office work hours are spent in meetings (Kuwana et al., 1996, Chaney and Green, 2004). Meetings benefit organisations in a number of ways including bringing synergy, increased teamwork, improved social interaction and through creating a specific time and place for focused working. They provide two-way communication with immediate interaction, stimulation and an environment for

learning. Due to these benefits and changes in organisational culture, meetings are on the increase.

However they are reported to be unproductive (Hoxmeier and Kozar, 2000, Green and Lazarus, 1991, Moss, 2000) and drawbacks include free-riding, groupthink, production blocking, evaluation apprehension, information overload and domination by individuals (Apostolides, 2010). In addition there are issues with scheduling meetings which are presented later in this paper. Despite utilising significant valuable resources, organisations tend to be unaware of the exact cost of their meetings (Rogelberg et al., 2012).

In spite of their frequency and the resources dedicated to them, Schwartzman, as cited in Leach et al, reflected that the topic of meetings is a “neglected form in organisational studies” (Leach et al., 2009).

The topic of meetings is therefore an important research area due to the use of organisations’ scarce resources; a meeting can deliver numerous benefits however if not managed properly can have a number of drawbacks. As meetings are commonplace the complexity of this research may be underestimated, however the solution needs to address a constrained and uncertain situation and rely on diverse information whilst considering cultural issues.

The paper will begin with the methodology of the research, before giving a definition of a meeting and highlighting a new categorisation of meeting purpose. It will then present the E<sup>2</sup> model, for both meeting management and organising the meeting. The E<sup>2</sup> model has been developed to include the measures of importance, value and cost. There is further work on the organisation’s need to focus on increasing the value and decreasing the cost of meetings. The paper finishes by discussing scheduling, the need for a scheduling tool and highlighting the research’s contribution.

## **Methodology**

A systematic literature review was undertaken of peer reviewed journals, conference literature, theses, and books, with no date restriction, to investigate themes and current practice. As searching on the word ‘meeting’ returns a number of irrelevant results, considerable effort was required to hone the literature searches and ascertain the keywords and search criteria. ProQuest was utilised due to the subject category facility which tailored the search to the subject of ‘meetings’. It also has a wide coverage of subjects and lent itself to the multi-disciplinary nature of this topic. The advantage of the systematic review is that it is transparent and provides an audit trail of what has been completed, allowing for the search to be reproduced (Tranfield et al., 2003).

To capture organisational requirements and the ‘as is’ position in terms of information, scheduling process and technology a case study is ongoing within a large Scottish utility company. Informal interviews have been conducted to gather information. The organisation has a number of offices throughout the country with a variety of staff members who are required to travel in order to have face to face meetings.

This case study provides a novel approach as none of the reviewed meeting literature on scheduling meetings utilised this method. There was no prior research collected and presented on the current picture within a specific organisation and the tools discussed had not been trialled within actual systems or with users.

As the research aims to understand the position within industry it is based on a subjective ontology. By aiming to make practical improvements through the development of frameworks from data it will have an interpretivism and pragmatic epistemology along with an inductive approach (Saunders et al., 2012).

### **Meeting Definition and Purpose**

It is beneficial to provide a definition of a meeting as it assists with clarity, consistency and helps identify important elements. For the purpose of this research a meeting is defined as ‘a synchronous focussed gathering of two or more participants for a specific purpose or purposes *a priori*’. This definition allows for face to face meetings as well as telephone and video conferencing.

The literature has no robust categorisation of the purpose of meetings and therefore a framework has been developed utilising the four new categories of problem solving; decision making; communication; and culture and relationships. Meetings can have more than one purpose and the concept of ‘combination meetings’ reflects this (English, 1987, Volkema and Niederman, 1995, Wallace and Wallace, 2000). Usually a meeting has one main stated purpose and a number of secondary purposes.

### **Meeting Modelling**

As identified in the literature review a meeting can be seen as a system with inputs and outputs. Modelling the meeting system can aid with understanding by providing clarity, simplification and emphasis on particular factors.

In order to help consider the elements required when scheduling a meeting the characteristics of a meeting were considered using Unified Modelling Language (UML). UML is “a general purpose visual modelling language that is used to specify, visualise, construct, and document the artefacts of any system” (Holt, 2004) and it has been used in a wide variety of fields. There are 13 different types of diagrams within UML and this research utilised the class diagram which has a basic structure of name, attributes and operations. A scheduled meeting was considered in terms of its attributes, with around 15 being identified. Three of these - venue, participants and type - were developed within their own class diagrams. The UML case diagram, allowed the concept of a meeting to be considered in a different way and gave information for the inputs to the new model. This was a novel approach as none of the literature had considered UML for meeting characteristics.

The research established a gap in the literature for an effective and efficient process for the scheduling of high value meetings (HVMs), with no suitable method documented for identifying the required resources and a practical approach for bringing these together. To address this, work has been completed on a model which presents the elements required for the two distinct activities of organising the meeting and managing the meeting (Figure 1). This utilises the E<sup>2</sup> model (Duffy, 2005), which is based on the Integrated Definition Language IDEF0. This sees an activity as a system, with three inputs of goals, inputs and resources which lead to outputs. Further work on the model showed that resources can be described as active as they use the inputs which can be referred to as passive (Boyle et al., 2009). For example in relation to organising a meeting the meeting organiser, a resource, will use the input of information on possible participants and availability of venues to give the output of where and when the meeting can take place.

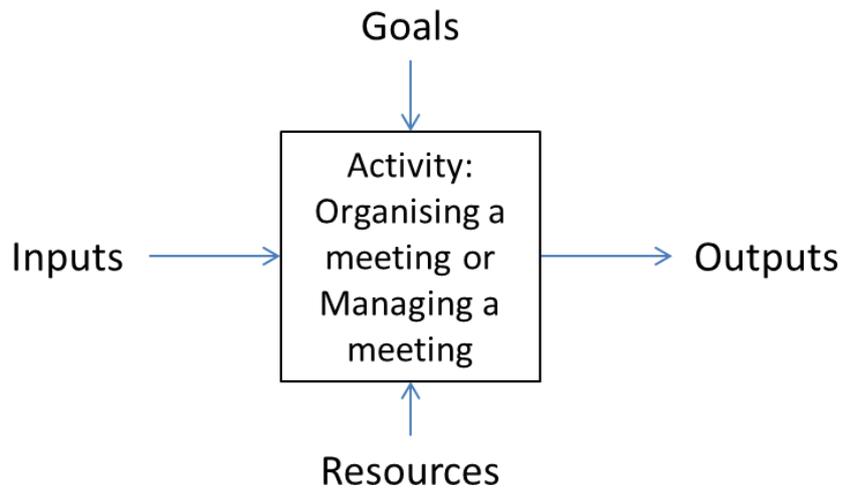


Figure 1 - E<sup>2</sup> Activity Model

The two models are inter-related with the majority of the outputs of the organising activity becoming inputs of the meeting managing activity.

*Efficiency and Effectiveness*

The E<sup>2</sup> model was developed with the added measures of effectiveness and efficiency in relation to the differing elements of inputs, resources, goals and outputs of an activity (See Figure 2).

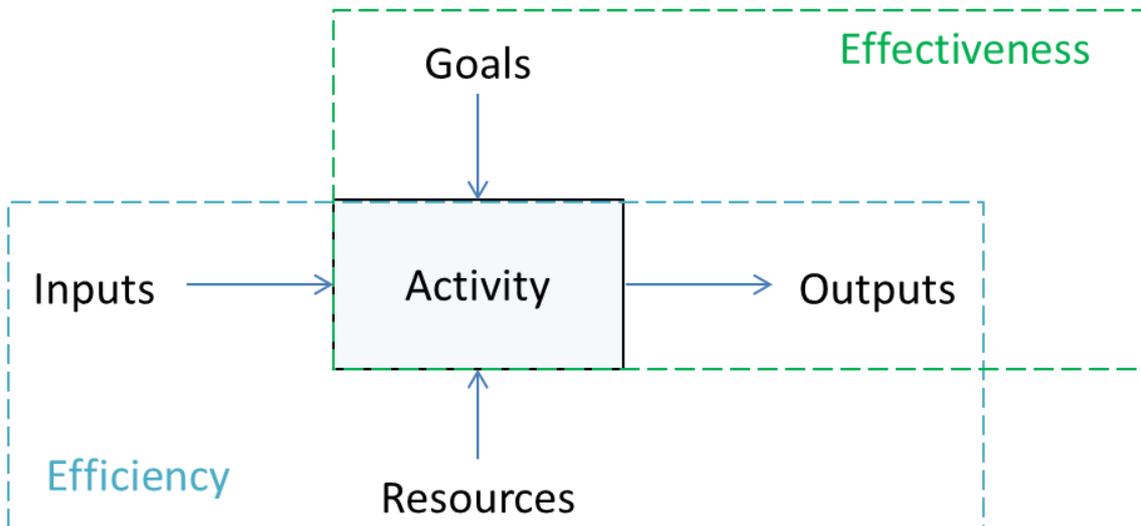
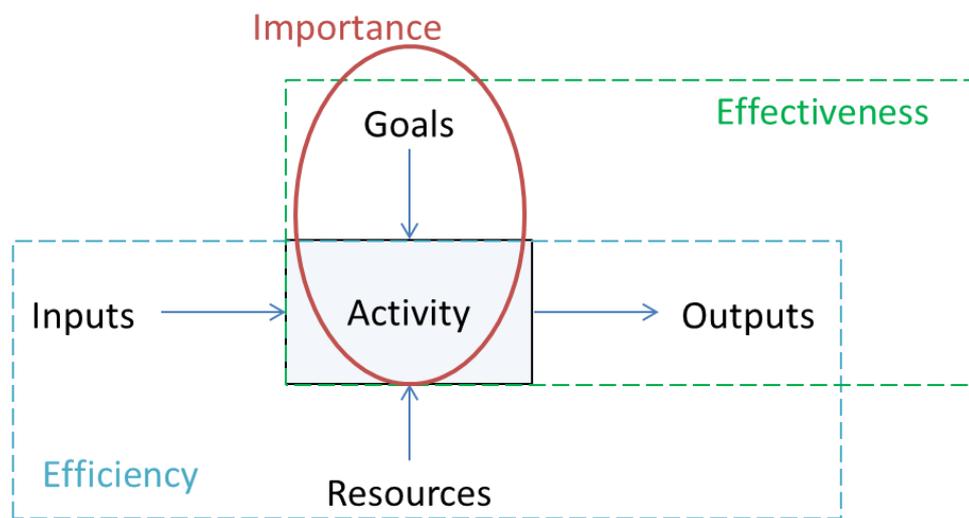


Figure 2 - E<sup>2</sup> Model with Efficiency and Effectiveness

Within the model effectiveness was defined as a measure that ‘reflects the degree to which a goal has been met’ (Duffy, 2005). Efficiency is the ‘relationship between what has been gained and the level of resources used’ (Duffy, 2005) and exists whether it has been measured or not. These definitions can be used for organising a meeting. However, in order to tailor the terms in relation to the management of meetings, meeting effectiveness is defined as ‘the extent the meeting achieves its aims and purposes.’ Efficiency is defined as ‘the extent the meeting achieves its aims and purposes with the optimum use of resources’.

### *Development of the E<sup>2</sup> Model*

The literature reflected on the concept of return of investment of time (ROIOT), where although a participant is engaged to a greater or lesser extent and agrees with the meeting outcome, they feel the overall effort was not worth it (Tyler 2007). There should therefore be the consideration to how important the activity is and this is not currently specifically reflected the E<sup>2</sup> model. Within an organisation, particular activities will have a level of importance and although an activity might be highly effective and efficient it may not actually have a high contribution to the aims and objectives of the organisation. Importance can be added to the E<sup>2</sup> model as shown in Figure 3. The term importance can be seen to be similar to those of significance and criticality. Importance is subjective and there can be differences between individuals as well as the overall organisation's stance.



*Figure 3 - E<sup>2</sup> Model with Importance*

In order to be of high value, a meeting requires to not only to be effective and efficient but also of importance. If a meeting is of low importance it will not matter how well it is organised or managed it will still be of lower value.

### *Value and Cost*

It is important to consider how cost and value are related to the concepts, within the E<sup>2</sup> model, to ensure clarity in descriptions and measurements.

Cost is defined by the Oxford English Dictionary as “that which must be given up or surrendered in order to acquire, produce, accomplish or maintain something” (Dictionary). The concept of given up or surrender is important as this highlights the two sided aspect to meetings, the cost in relation to the benefit. In relation to the E<sup>2</sup> model cost only relates to the aspects of inputs and resources (as shown in Figure 4).

In order to measure whether what was given up or surrendered was of worth or a good use of the resources will depend on value created. For this research value is defined as “contribution to satisfy need” (Reber and Duffy, 2005). Within the E<sup>2</sup> model, in relation to value, the relevant aspects are concepts of effectiveness, efficiency and importance (as shown in Figure 4).

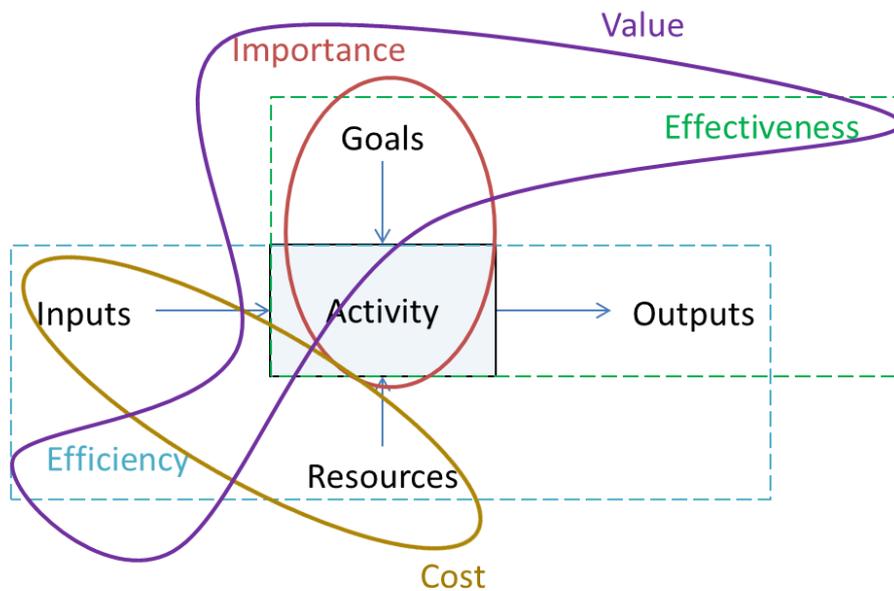


Figure 4 -  $E^2$  Model with Cost and Value

This model can apply to any activity and therefore includes both the organising of and the management of the meeting.

#### *Weighting of the Value and Cost Elements*

Firstly it needs to be considered if a meeting is the best way to accomplish what is required (Hawkins, 1999). If there is a more suitable alternative e.g. e-mail or shared document space, a meeting may not be a good use of resources and will not provide relative value. A mind-map was created to highlight the elements that relate to a successful meeting. Analytic Hierarchy Process (AHP) was then used to rank these elements in relation to importance, first in terms of value and then cost. AHP is a method that compares and gives weightings to a number of elements and as all the elements are compared against each other in pairs rather than simultaneously it provides a systematic approach to comparison.

It was found that purpose received the highest weighting in relation to value and therefore to have a high value meeting the most important aspect is to ensure there is an appropriate purpose and this is communicated successfully. Second in importance was scheduling the correct people, and this was found to be three times more important than the characteristics and behaviour of the participants. Information and meeting content were seen to be half as important as purpose. The four aspects seen to be of lesser importance were timing, actions, facilities and meeting type.

Cost was also considered and it was found that there were fewer elements that had an effect on the cost of a meeting. Scheduling the correct people, the location and the timing of the meeting had the greatest impact on cost.

The weightings, assigned by the research team, were based primarily on what was deemed important from the literature review, supplemented by the researchers' previous industrial experience. Further work would be required to investigate any variation between different organisations and particular types of meetings.

It is also important to consider if there is a trade-off between value and cost. The concepts can be represented graphically with a meeting having the potential to be anywhere within the graph (Figure 5). The organisation should aim to have meetings

within the high value, low cost area, by increasing the value of their meetings (direction A) or decreasing their costs (direction B) but ideally both (direction C).

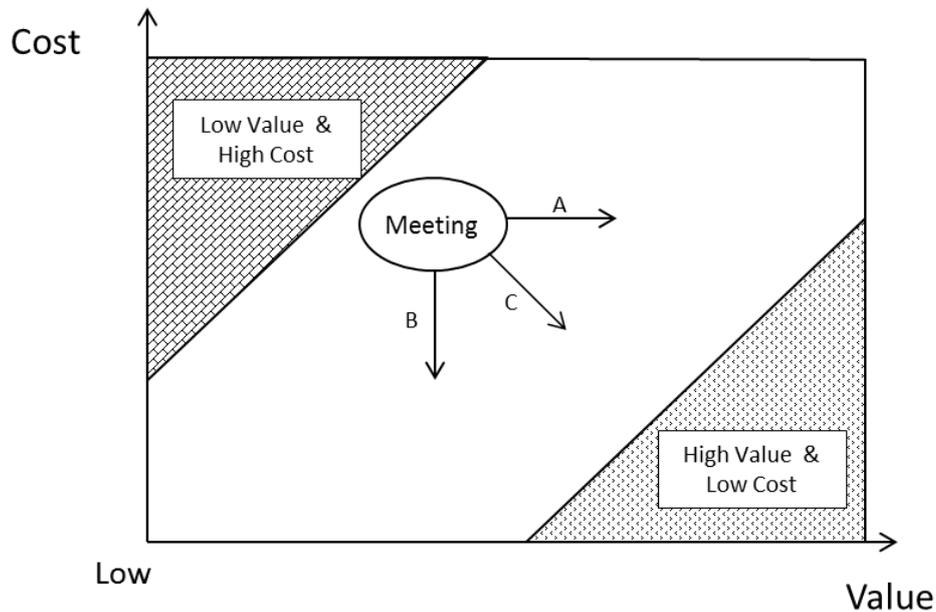


Figure 5 – Improving the Cost and Value of a Meeting

### Scheduling Tool

One aspect that can influence cost and value of a meeting is the scheduling of the meeting. Further work is required on aiding this process as "anyone who has ever tried to schedule a meeting among more than three people can appreciate the usefulness of some sort of automatic help" (Wainer et al., 2007). There are a number of issues with scheduling a meeting, which were recognised by the literature. Due to the increased number of meetings there is difficulty in finding a suitable free time slot where all the participants are available (Pivik and Goelman, 2011). People are involved in a number of different projects and are members of a number of teams (Dowling and St Louis, 2000, Sharma et al., 2009) and are therefore required to attend various meetings. There is also an increase in team working required between physically dispersed teams (Pivik and Goelman, 2011, Poltrock and Engelbeck, 1999). With participants attending a number of meetings during the day they may find "their time cut up into pieces too small to be useful" (Telgen, 1985).

The task of scheduling is time-consuming (Salamat, 1999, Tsuchiya and Takefuji, 1997, Thompson, 2002) with it being recognised that "the time spent coordinating and scheduling the meetings is substantial" (Dowling and St Louis, 2000). The complexity in scheduling is recognised (Tsuchiya and Takefuji, 1997) as a number of different pieces of information are required and there are a number of constraints. The information may not always be available and there are certain political issues and rules that a scheduler may not be aware of. Errors can be made due to lack of information but also the meticulous nature of the task with the requirement to focus on detail. It is an iterative process (Salamat, 1999), with the process also being described as tedious (Salamat, 1999).

Previous scheduling methods have predominantly focused on preferences and have not addressed current problems with the lack of participant availability and their

disparate locations. Within the case study organisation the 'as-is' position can be improved by the provision of a tool to assist meeting schedulers to take into account participant location and meeting cost and value. Further work will include the development of this tool.

### **Relevance/contribution**

The research contributes to the state of the art through the uniqueness of the model which considers both the scheduling and the management of meetings. It takes into account importance, value and cost where there has been no previous agreed measurement of these elements. Whilst the project will aim to satisfy the requirements of the case study organisation, it is expected that the solution will be generic and applicable to any medium or large organisation. The contribution will provide not only academic research within this under-represented area but a practical application for organisations in organising and managing meetings to increase value whilst minimising resources. As time lost in unproductive meetings is estimated at \$37 billion annually in the USA alone (Elsayed-Elkhouly et al., 1997) the potential saving through this research is significant.

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