

## ***Event Issues 1: Crowd number Forecasting for Special Events : discovering the industry standard***

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*“There is some 'science': but mostly 'art' to it!”*

*“It goes without saying that pre-event estimation of crowd capacity is extraordinarily un-predicable”*

*“My forecasting for the festival involved rain dancing and crossing a lot of fingers”*

### **Assumptions**

This paper concerns crowd number forecasting (CNF). In a number of replies to the question sent to event professionals, CNF was confused with crowd capacity planning and crowd estimating. CNF occurs over the event planning and implementation phase. To make a generalisation: CNF becomes more accurate the closer to the event but can spike. Capacity planning will be dependent on CNF.

### **The Issue**

Many aspects of the proposed event will depend on the expected crown numbers. In particular the risks identified at the time of writing are directly dependent on the ability to forecast the attendance. Numbers of barriers, food and water, logistics, parking and almost all operational elements will depend on how many people come to the event. The type of people, the target market, is another factor. However this paper solely concerns predicting, to the standard in the event industry, **the number of people** who will attend an event.

### **Methodology**

There is little written on methods to predict crowd numbers for special events. Therefore I sent out a simple question to a variety of event and festival professionals and other experts in this area. The replies are collated in the section “list of factors”. It is important to realise that this list is compiled from experience. Currently, to my knowledge, there is no disinterested study in this area.

### **List of factors**

This section contains a list of factors that the respondents gave as way to predict crowd numbers. A number of the respondents commented that one factor is not enough that they must be used together. The list includes:

#### **Analogy or precedents i.e. history**

Predicting the crowd numbers for a special event needs to consider events that are similar.

The similarity may include:

- Target market
- Geographic area

- Over all size or scope of the event
- Theme
- Events that may be linked to this event but occur before it. (this was suggested for sports events where there may be competitions leading up to a final event)

## Triggers

There may be actions that occur leading up to the event that have a huge influence on the crowd numbers such as a **sensational news story**.

At the beginning of the event there may be action that will suddenly increase or decrease numbers. The event team needs to be aware of this. For example:

**SMS** : Although not the basic communication media of the demographic, the SMS communication should be mentioned in crowd forecasting. It has been reported in the press a number of times, that SMS messaging can quickly create a crowd. One person is sent to the event to 'check it out' and that person replays their opinion to others as a broadcast. They, in turn, rebroadcast and the network becomes exponentially bigger. If the event appealed to this demographic, a free special event is at risk of sudden increases in attendee numbers.

If any part of the event uses ticket sales or promotional devices, a 'spike' in this may indicate a sudden increase in expected crowd numbers (or the opposite).

## Marketing

A primary role of marketing an event is understanding the interests of the target market. Therefore the crowd numbers can be highly influenced by factors in the marketing of the event. The list below are taken from the responses:

**Response rate to marketing:** There is wide disagreement on response rate and how the size of the response is interpreted. Response numbers to invitations sent is one way to gauge the interest. RSVP to an invitation will be an indication. But it cannot be assumed that 100% RSVP's will attend.

Other indicators include :

- Amount of advertising in comparison to other events.
- Website hits - there has to be a reason for the prospective attendee to go to the website
- Pre-purchased vouchers for food or wine
- Bookings of restaurants
- Booking accommodation
- Response to pre-event competitions
- The level of interest at the pre-event press launch

## Intangible

It would be incorrect not to include the 'gut feel' of the event team or the level of interest as a measure. This may be a result of the 'vibe' and 'word on the street'. In particular, this works well for the event team if they are in the same demographic as the expected attendees.

**Market Research** there can be a more formal method of planning and includes:

- Survey of interest
- Survey of disinterest
- Focus groups

## **External factors**

There are a number of external influences on projected audience numbers. These areas are dealt with in the section Environmental. The event team must be aware of the flow on influence of an external development. It is easy to overlook factors that are not obviously and directly connected to the event.

## **Analysis**

All the event professionals point out that it is very hard to predict crowd numbers to a one day, special event that is free and held outdoors.

There seems to be three methods :

1. Formal - such as tickets sales.
2. Heuristics – indicators that are known through experience . These include being aware of external changes that will affect crowd numbers.
- 3 “Gut feel”

As pointed out by OPTARE there are variables that the event management can influence and those that are outside the event and part of its ‘operating environment’. This leads to the following list of recommendations :

1. Researching similar events around the world
2. Understanding the demographics
3. Working closely with the marketing campaign and being constantly aware of the affect of promotion on crowd numbers.
4. Being aware of triggers that may spike the CNF
5. Setting up a system to be able to estimate the future numbers. The system would be matched to the event marketing timeline.

## **Case Studies**

### **IKEA store openings 2004 and 2005**

In two countries, the opening of IKEA stores lead to tragedy. In Saudi Arabia, three people were killed and in the UK there was crowd crush and a knifing. This is an example where marketing and promotional aims have overridden the OHS aspects of the event. The promotional campaign must be aligned with the event planning as simple changes in promotion can lead to disasters at the event.

### **Olympic Torch Relay in Australia 2000**

Numerous councils were taken by surprise at the numbers of people who turned up to see the Torch Relay come through their town or council area .There was little done to predict these numbers and the TV coverage of the Torch’s progress meant that the target market of this event was far larger than expected.

## **What will affect crowd numbers**

Below is a list of key factors that influence crowd numbers as compiled and reviewed by event and festival managers. Note this List is not exhaustive as each event is special and has characteristics unique to the instance.

## Promotion

- Quality of publicity
- Targeting promotion correctly
- Quality of PR company
- Timing of press releases
- Existence of other event promotion
- Staff/volunteers talking to the press
- Quality of press contacts

## Theme/content

- Quality of suppliers
- Combination of suppliers
- Attractiveness of entrance way
- Attractiveness of site
- Type of entertainment
- Quality of event designer
- Reputation of company for previous events

## Operations/Staging

- Quality and visibility of parking/transport
- Ability to obtain tickets and other promotional or logistics items
- Managing queues
- Visibility of entrance

## Environmental

- Time of year
- Type of weather
- Economic conditions
- Other events at same time for that audience
- Local authorities place last minute restrictions
- Ease of transport conditions and arrival

## Capacity

Quite a few respondents replied with statements on crowd capacity planning. The factors concerned with *capacity* and CNF are linked as *capacity* will limit the number of people allowed into the event. With a free event such limitations on numbers may be difficult to impose. The perception of the event capacity by the target market will influence the crowd numbers. If the target market knows there are only a limited number of toilets or parking spaces, for example, this may influence their decision to attend. Capacity decision in the planning may directly influence the crowd numbers.



## Conclusion

Marketing is the primary tool to reduce the uncertainty in forecasting of crowd numbers. Therefore the event team must be highly aware of any developments in marketing of the event. In particular the CNF should be part of the risk register and continually updated. This can be achieved by scheduling the CNF review task over the planning cycle to coincide with the marketing milestones. The event team should be aware of the triggers that will produce a spike in crowd numbers. These are difficult to plan for as they are often unexpected. However the event team needs to be aware of the flow-on and have a response plan ready. From the CNF will arise the capacity planning. This is a two way process and will develop together as the planning progresses.



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