# Free research paper about rfid research 

 bandsBusiness, Management

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## Introduction

Festivals are becoming more popular in the United Kingdom unlike a few years ago. With the increase in the number of visitors in the United Kingdom, it is becoming apparent that there is need to ensure that there is better management of visitors in these festivals. It will not only help in the management of the visitors, but will also create efficiency and better control of the process. This paper will focus on developing a new technology that will be used in the management and control of festival visitors. It is hard to keep track of the visitors and integrate the trends and the management of the visitors and how they need to have the systems to work effectively. With about 1000 festivals in the United Kingdom at the moment, it is hard to keep track of the over 175000 visitors that attend the festivals (Dobkin, 2012).

## Problem statement

The current problem is that it is hard to control the number of visitors who come to the festivals. There is poor reception of 3G technology and makes it hard to control the crowd that comes to the festivals. There is a need to have technology that will be used in the management of the crowd and the people who visit the festivals. There is a lot of theft as a result of lack of security and tracking of the visitors who come to the festivals. There is also the rise of stolen bands that is witnessed in the festivals. It is important to understand that the role that technology can play in this process.

## Design Research

The aim of this research is to find out what types of solutions festivals uses for entry and payment solutions to make the entrance and queues shorter
and smoother. I have done research through questionnaires amongst festival goers, interviews with a director of a large festival and observing large events and what problems they are facing with current entry solutions. One method that I found most useful was asking people at a large festival was what kind of improvement they would have liked to see. I have focused this research on finding out what kind of techniques are used and what can be done better both by asking festival goers and organizers. Organizers would like to be in more control both over visitors but also in terms of staff. I have done a research into what options there are for more advanced festival/event bands and also researched current problems and what can be done to solve them by incorporation a new technology into the wristbands.

## Current trends and findings

In UK today there are over 1000 festivals, from only a few hundred people to over 300 000. They all share the same issues and excitement of having a festival.

The current and most common festival band is a simple band used by festival goers to gain entry. With today's technology incorporated in the bands there are many ways of solving current problems such as long queues, stolen bands, and loss of control.

I found that there is 3 common technologies used in festivals today.

## They are called RFID, NFC and QRcode.

Technology has improved on festivals since 2012, but 2014 is seen as the major breakthrough year with more and more festivals using more advanced techniques

I did a research covering Europe - finding out how many festivals that are using RFID today.

## Future of festivals/Technology:

Since 2012 more and more festivals started to get more sophisticated software built by tech firms. More and more solutions to current issues on festivals on a large scale started to surface. A big part of the new development is the social media marketing that plays and important role. Suddenly the organizers can keep track of their visitors and also capture and analyze data (Worrall et al., 2014).

Visitor's integration is something that haven't really been possible up until recently. A deeper understanding of the consumer's desires can improve the festivals.

The latest technology is the RFID chip that also offers the cashless payments. The cashless payments are seeing the cusp of a major breakthrough at the moment with large festivals going completely cashless through both Touch to Pay solutions and Payband that is a RFID technology band that you can preload (Ahson, \& llyas, 2010).

Creativity from technology companies is improving promoters' lives in many ways, helping them understand more, communicate more, plan better, be more efficient and do the thing they do best - produce excellent events. The festival market is becoming more and more competitive with 1000 festivals today compared with 400 in 2009 in UK alone. The new technology and bands can be the way to integrate with customers and hopefully connect on another lever so that customers are coming back. Customers are
becoming more discerning and competition will increase in coming year as well.

## Issues:

In a report made by Festival Insight they asked what would be most likely to put them off attending the same festival(s) next year, 25\% said a 5\% increase in ticket prices would put them off - this is up from 19\% in 2012.

## Research methods

Ethnographic approach
For the research to be successful, the research will undertake an ethnographic approach to the collection of the data. The researcher will be immersed in the culture of festivals so that a clear understanding of the issues and the research that will be carried out. It is the only way the researcher will be able to understand the cultures of the people who attend the festivals. Since it is a culture that the researcher understand, it will be easier to adapt to the process. What the culture entails in the case is that the researcher will be required to take part in the festivals and understand the whole process. It will enable the researcher to understand what is required in the process. Having an understanding of the current process will enable the researcher to come up with better and further innovative solutions to the current challenges that have been stated.

For the data collection to be effective, the researcher will carry out participant observation so that the researcher will get the chance to interview participants and directors of the festivals. The directors are found in the festivals and they will be willing to share information with the
participants. It will also be necessary to undertake this step because it will be a way of getting facts about the findings and research that will be undertaken. Information that will be obtained if the researcher will be part of the festivals include the comfort of the participants and the views and recommendations of the participants. The process of registration for the participants will be made clear if the researcher will be part of the research (Ramanathan, Bentley, \& Ko, 2012).

Field notes will be used to collect the observations that shall have been obtained while in the festivals. The process of entering the festivals will be through hiring field assistants who will participate in other festivals. With the growth of the festivals in the UK, it is difficult to understand the different festivals and the processes that are used in the various festivals. The field assistants will be useful because the process of getting the results will be simplified. It is important to understand the requirements and what needs to be done in the entire process.

The data will then be analyzed through descriptive analysis of data. The data will be collected and organized. The organization will be done through getting information that deal with the various issues in the festival process. There will be data that deals with registration process of the attendants, then data that deals with the security of the wrist bands, and finally data that deals with the payment process and the inconvenience it is to users (Warther, 2014).

## Data collection instruments

There will be the data collection means that will be carried out in the research. There will be the need to have data that will then be useful in the
research. It will help to understand the views of the participants. The researcher will get the data that will be collected from interviews and questionnaires. The questionnaires will be carried out while the student is a participant of the questionnaire.

## Questionnaires

There will be the use of questionnaires in the data collection procedures. The questionnaires will be directed at the directors and the participants of the festivals. It is an efficient method of collecting data because it will be a safer and efficient and most reliable way of getting useful information. For the questionnaires to be assured, it will be important to have a pilot test that will be useful in understanding the types of questions that will be asked in the research. If there will be difficulties on the questionnaires that are asked, then there will be changes made as needful as it might require. The type of questions that will be asked will be both open-ended and closed ones. It will enable the participants to ensure that there is an understanding of the research that is being carried out. The questionnaire is shown in the appendix.

## Interviews

Interviews are important tools that are used when getting case study information. It will be useful in the research that will be carried out because there are different festivals that will be analyzed. It will help to show the procedures that are used in different festivals. Semi-structured interviews will be carried out in the study where the directors of different festivals will
be done. It will help to show and undertake the research that is needed in the entire process.

## References

Ahson, SA, \& Ilyas, M 2010, RFID handbook: applications, technology, security, and privacy, CRC press.

Dobkin, DM 2012, The RF in RFID: UHF RFID in Practice, Newnes.
Ramanathan, R, Bentley, Y, \& Ko, LWL 2012, Investigation of the status of RFID applications in the UK logistics sector, Logistics \& Transport Focus. Warther, RO 2014, U. S. Patent No. 8, 654, 018, Washington, DC: U. S. Patent and Trademark Office.

Worrall, D, Martin, E, Oberle, R, Barbaric, T, Kolaric, V, \& Manzi, G 2014, U. S. Patent No. 8, 646, 695, Washington, DC: U. S. Patent and Trademark Office. Appendix A: Questionnaire Introduction

This questionnaire is intended to assist the researcher in collecting data about use of RFID in wristbands that are worn on festivals. You have been identified purposely as an important respondent to the questionnaire below. You are requested to kindly answer the questions below appropriately. The information you will provide will be treated with utmost confidentiality and will be used solely for purposes of this research. If need be, the findings of the research will be shared.

Below is a brief questionnaire. Please tick ( $\sqrt{ }$ ) where appropriate Basic Details:

- Favourite festival
- Gender

5 Male ${ }^{5}$ Female

- Age

5 less than 20 yrs.
5 21-30 yrs.
$531-40 \mathrm{yrs}$.
5 41-50 yrs.
${ }^{5}$ Above 50 yrs.

- Level of Education

5 Doctorate
5 Masters
5 Bachelors
5 Tertiary
5 Other
Section B:
Part C: For festival directors only

- Please rate the degree of your agreement with the following statements
- The RFID wristband implementation will be completed within budget
${ }^{5}$ Strongly disagree
${ }^{5}$ Disagree
${ }^{5}$ Neutral
${ }^{5}$ Agree
5 Strongly agree
- At the present, the registration of participants of festivals are satisfied with the registration

5 Strongly disagree
${ }^{5}$ Disagree
${ }^{5}$ Neutral
${ }^{5}$ Agree
5 Strongly agree

- Wrist bands with RFID will be successful if implemented

5 Strongly disagree
${ }^{5}$ Disagree
5 Neutral
${ }^{5}$ Agree
${ }^{5}$ Strongly agree

- How satisfied are you with the current technology of wrist bands?

5 Very dissatisfied
${ }^{5}$ Dissatisfied
${ }^{5}$ Neutral
5 Satisfied
${ }^{5}$ Very satisfied

- What is the effectiveness of the current technologies that are used in wrist band?
${ }^{5}$ Extremely poor
${ }^{5}$ Below average
${ }^{5}$ Average
${ }^{5}$ Above average
${ }^{5}$ Excellent
- Business process reengineering refers to aligning the company business processes with the cloud computing software that will be implemented. Please rate the importance of business process reengineering for wrist band project.

5 Unimportant
${ }^{5}$ Of little importance
${ }^{5}$ Moderately important
${ }^{5}$ Important
${ }^{5}$ Very important

- Are you satisfied with how festival's management have handled registration of participants at the moment?
${ }^{5}$ Very dissatisfied
${ }^{5}$ Dissatisfied
5 Neutral
${ }^{5}$ Satisfied
${ }^{5}$ Very satisfied
- The suitability of Software and Hardware refers to the fit between the selected Cloud computing and the hardware. Please rate the level of suitability of software and hardware in your cloud computing project.
${ }^{5}$ Not applicable
${ }^{5}$ Not Suitable
${ }^{5}$ Neutral
${ }^{5}$ Suitable
${ }^{5}$ Very suitable
- How long have you been using the current process of entering festivals participants?

5 less than 6 months ago
${ }^{5}$ 6-12 months ago
5 12-18 months ago
5 18-24 months ago
5 More than 24 months ago

- Education and Training refer to the introduction of the RFID use for the participants, and to providing training with regard to the features of the RFID technology. Please rate the level of education and training in your project.
${ }^{5}$ Extremely poor
${ }^{5}$ Below average
${ }^{5}$ Average
${ }^{5}$ Above average
${ }^{5}$ Excellent
- User involvement refers to the users' participation in the development and implementation of the RFID wrist band. Please rate the level of user involvement in your RFID project.
${ }^{5}$ Extremely poor
${ }^{5}$ Below average
${ }^{5}$ Average
${ }^{5}$ Above average
5 Excellent
- Employee attitude refers to the perception towards the RFID project. How would you rate employee's attitude in your organization towards RFID wrist band?
${ }^{5}$ Very dissatisfied
${ }^{5}$ Dissatisfied
${ }^{5}$ Neutral
5 Satisfied
${ }^{5}$ Very satisfied
- The success of RFID wrist band project depends on the team working on the project. Based on your institution, do you agree with this sentiment?

5 Strongly disagree
5 Disagree
5 Neutral
${ }^{5}$ Agree
5 Strongly agree
Appendix B: Interview of Mitchell at BoomTown

