UNIVERSITY OF WESTMINSTER⌗

INFORMATICS INSTITUTE OF TECHNOLOGY

BSc in Information Systems with Business Management

Final Project Report

'Waste Crunch'

Food wastage management system

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2013193

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This report is submitted in partial fulfilment of the requirements for the

BSc (Hons) Business Information Systems degree

at the University of Westminster

Abstract

The hospitality is a service industry which includes hotels, bars and restaurants that offer people food, drinks and accommodation. It is an industry that is highly focused on customer satisfaction. This project will be focusing on the hotel sector that falls under this industry. The problem of food wastage is a critical problem seen globally which is common to hotel industry as well. The gravity of the problem is rising further with the increase in the number of hotels due to the expansion of the tourism industry.

The main categories of food wastage in hotels, identified through the pilot study were, buffet wastage, customer plate wastage, preparation wastage and staff wastage. Out of the four categories, this study focuses on the two areas, buffet wastage and preparation wastage. A comprehensive literature review was carried out to understand different aspects of the problem and the other contributing factors. With the knowledge gained, the author conducted an industrial survey with the use of qualitative and quantitative data collection methods. Information was gathered through interviews and focus group discussions with stakeholders, live observations by the author and through questionnaires distributed to the kitchen staff.

Lack of analysis in the buffet menu selected and the lack of visibility to the items wasted during preparation were the two main gaps identified in the categories of wastage addressed. Along with the data gathered on functional and non-functional requirements, an IT solution was designed to address the problem.

The proposed solution, 'Waste Crunch' is targeted to reduce the buffet wastage by suggesting menus by scientifically analyzing the past consumer trends and the current guest base. The preparation wastage is addressed by providing visibility to the items wasted daily. With the completion of the prototype, an evaluation was carried out in three levels, user evaluation, expert evaluation and self-evaluation. Finally, the conclusions and recommendations for 'Waste Crunch' were discussed.

Key words- Hospitality industry, Hotel sector, Food wastage, Buffet wastage, Preparation wastage, IT solution