

THE 10TH INTERNATIONAL CONFERENCE ON LIFE CYCLE MANAGEMENT

Topic: B Innovation – a Key Driver for More Sustainability – 5 Application and Transfer to Business

LIFE CYCLE MANAGEMENT IN THE BAKERY SECTOR

Authors: *N. Monteiro*¹; *J. Moita Neto*¹; *E. Silva*¹

¹ Universidade Federal do Piauí

INTRODUCTION

Life Cycle Management (LCM) is a methodology that can help industrial sectors to change their business focus, from a profit-centered approach to a balanced view, including environmental/social factors. In this research, the application of LCM in bakeries was investigated, considering the sector's entire value chain (from inputs to waste)

METHODOLOGY

Brazilian bakeries were visited to learn about products, services, production processes and socioenvironmental and economic sustainable practices, to identify bottlenecks and to propose alternatives based on LCM.

RESULTS

Analyzed aspects in the bakeries	Findings	Solution/recommendation
Implementation of sustainability in bakeries	The suppliers' choice considers only price, quality, and tradition.	To purchase products from companies with environmental certification.
Management tools to assist the implementation of LCM in bakeries	there is no concern about savings (water, energy) and waste management	Use of the PDCA Cycle and the SWOT Matrix to implement LCM initiatives
Life Cycle Sustainability Assessment and Social Responsibility	The only initiative on social responsibility is to donate bread	To improve the communications through the chain increasing the product labeling
Integration of LCM in small and medium-sized companies	There is no processes optimization nor integration among establishments	Optimize processes aligning input orders with periodic deliveries
Creating sustainable value with LCM through hotspot analysis	There is no identification of environmental hotspots. The only one identified is energy consumption	To identify environmental and economic hotspots aiming at an immediate action in those points to solve or minimize them.
From sustainable production to sustainable consumption	Consumers are not able to make environmentally conscious choices	To disseminate the life cycle thinking for the consumer to be able to indicate his choices and dictate the rules of the market

Roadmap for implementing Life Cycle Management in bakeries

