

Preface

The focus of this book is on environmental planning and management. We view planning as a critical component of pollution prevention and also a necessary component of resource optimization. Management of natural resources requires the evaluation of alternative options and the optimal selection of sustainable choices.

As corporations today compete for customers and market share, they are rapidly introducing new products, consuming limited natural resources, creating more waste and pollution. It is important to introduce corporations and their top management to sustainable practices. They become environmentally conscious when they understand the risks associated with poor environmental records. Such risks could be assessed and quantified as costs to the corporation. This book uses the four types of costs: internal, prevention, appraisal and external that are prominent in quality management literature to expose top management to the risks of poor environmental quality. More especially, the external failure cost which includes loss of customer goodwill is usually underestimated but has the greatest potential of affecting the survival of the firm.

Top management must be proactive and take a cradle-to-grave approach for its products. This requires proper life cycle assessment that would document all the inventories associated with the product as well as the products' interactions with the different environmental media: land, air and water.

Competing in today's marketplace requires a holistic view of both products and processes. It requires that companies pay attention to their stakeholders in addition to their customers. Environmental planning lays the foundation to adapt to the needs of the changing world and avoid the hazards, risks and high costs associated with poor environmental practices.

This book identifies good environmental practices, lays down effective strategies and practical models. It focuses on designing for the environment. This is based on the notion that by adopting preventive methods, external failure costs can be minimized. Contrary to the popular belief that the costs of implementing environmental practices are high, we have presented cases of companies that have increased profitability

because of their environmental programs. We have presented such practices in Environmental Action Boxes that appear at the end of some chapters. We have also referred to companies that have suffered huge costs and loss of customer goodwill due to their poor environmental practices. This book focuses mostly on using sustainable practices to achieve competitiveness. It refers to companies that have achieved such feat to encourage others to adopt proactive environmental policies. It also points to worldwide focus on international standards especially as outlined in ISO 14000 Environmental Management Systems.

A few of the chapters in this book were revised from my earlier research on environmental management. However, several new chapters on Designing for the Environment, Risk Assessment and ISO 14000, have been included.

This book is intended as an introduction to corporate environmental management and is suitable for basic courses in the subject. Practitioners would also find it helpful as it explains some of the basic concepts and environmental strategies that are in practice today.

Finally, I thank my graduate assistants Kaushal Patel and Nishant Sheth who worked very hard to organize the final manuscript.

Christian N. Madu
Lubin School of Business
Pace University, New York