Foreword

I am honored to be asked by Kai Jakobs to provide this forward to this work.

Standardization is a methodology for the definition, design, manufacture and creation of product and component parts, and also is a long recognized approach for efficient business processes. Standardization is achieved through careful consideration, gaining relevant information, consensus building and effective influence, top of field technical competencies, and carefully monitoring and managing initiatives and achievements against key product and process goals.

Many of the most thoughtful and successful global businesses recognize the value of standardization within both their products and business processes and credit it as an element in helping them achieve industry leadership. By leveraging component and product standards, and carefully standardizing particular aspects of their products, these businesses build and sustain a competitive advantage. By standardizing processes, business implement flexible processes, design products anywhere, and manufacture at any plant facility internationally, providing the utmost flexibility in maximizing efficiencies.

Beyond recognizing the need for internal standardization, businesses credit the strategic adoption of standards in processes and products, or *strategic standardization*, with helping them achieve industry leadership. Through strategic standardization, business leaders leverage standards to build and sustain a competitive advantage or at least avoid a competitive disadvantage.

*Strategic Standardization Management* (SSM) is “A management discipline and methodology that investigates all aspects of standardization across a business and/or industry, then defines, recommends, and implements appropriate strategies and policies to leverage standardization so that a firm can gain competitive advantage and avoid disadvantage” [Betancourt & Walsh, 1995]. I had the privilege of working closely with Messrs. Betancourt and Walsh through ANSI throughout the 1990’s in refining the early understanding of this emerging management discipline. This understanding was further researched and surveyed in the subsequent time period and culminated in a doctoral dissertation, follow-on journal articles and the development of educational programs and influence in academia and programs and courses which continue today.

A system of management focused on standardization is required to ensure that activities are adequately performed. SSM is an enterprise-wide, systemic competitiveness strategy and ongoing process that requires careful management of subject matter expert committee representation, which standards to affect and adopt, and alignment with the organizations’ technical, business and strategic plans. Management of this can be improved if the organization is considered a series of interrelated systems. Additionally, management of standardization requires ongoing oversight including return on investment and where-represented gap analyses being performed periodically.
Manufacturers understand the need for the interchangeability, and standardization assures purchasers that products are compatible and make a purchase decision based on cost, quality, and level of performance. Also, assessments of conformity with the standard must occur to further ensure quality and interoperability.

It is impossible for an organization not to comply with the requirements of some standards as standard pervade and influence our everyday lives. Considering global pressures to standardize products, it is a superior business strategy to explicitly address standardization. Standardization tends to be diffused within the organization that focuses on its core competencies; therefore it requires someone to continuously monitor standards work and cannot be left to chance. Top leadership must provide support for this level of organizational commitment.

There is also growing awareness that the term “standards” connotes much more than just the documents that prescribe technical requirements and specialized test methods that demonstrate compliance. Beyond the advantages for product or service, standards, if properly addressed, are one of the best marketing tools ever conceived.

This book contains a wealth of updated information on the value of standardization as understood by some of today’s top international experts. Papers include topics related to investing now in standardization to add future value, clearly and distinctly defining the difference between standardization and standards, business benefits and the role of internal standards. The many processes for standards development are discussed as well as understanding open standards. The human resource side of standards development is addressed recognizing resistance and process. Emerging issues such as intellectual property rights and legal consequences are also discussed. These are major issues being addressed internationally by the standards developing organizations. Finally, standardization benefits within design innovation and the essential need for focus on ethics are presented. There is something here for everyone.

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