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Applications of statistical and related methods to new technology and product development process —

Part 4: Analysis of non-quantitative and quantitative Voice of Customer and Voice of Stakeholder

Application des méthodes statistiques et des méthodes liées aux nouvelles technologies et de développement de produi —

Partie 4: Analyse du retour client (Voice of Customer) ou du retour des parties prenantes (Voice of stakholders) quantitatif et non-quantitatif

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 69, *Applications of statistical methods*, Subcommittee SC 8, *Application of statistical and related methodology for new technology and product development*.

A list of all the parts in the ISO 16355 series can be found on the ISO website.

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Introduction

Quality Function Deployment (QFD) is a method to ensure customer or stakeholder satisfaction and value with new and existing products by designing in, from different levels and different perspectives, the requirements that are most important to the customer or stakeholder. These requirements should be well understood through the use of quantitative and non-quantitative tools and methods to improve confidence of the design and development phases that they are working on the right things. In addition to satisfaction with the product, QFD improves the process by which new products are developed.

Reported results of using QFD include improved customer satisfaction with products at time of launch, improved cross-functional communication, systematic and traceable design decisions, efficient use of resources, reduced rework, reduced time-to-market, lower life cycle cost, and improved reputation of the organization among its customers or stakeholders.

This document demonstrates the dynamic nature of a customer-driven approach. Since its inception in 1966, QFD has broadened and deepened its methods and tools to respond to the changing business conditions of QFD users, their management, their customers, and their products. Those who have used older QFD models have found that these improvements make QFD easier and faster to use. The methods and tools shown and referenced in this document represent decades of improvements to QFD; the list is neither exhaustive nor exclusive. Users should consider the applicable methods and tools as suggestions, not requirements.

This document is descriptive and discusses current best practice, it is not prescriptive by requiring specific tools and methods.

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Applications of statistical and related methods to new technology and product development process —

Part 4:
Analysis of non-quantitative and quantitative Voice of Customer and Voice of Stakeholder

1 Scope

This document describes the analysis of the voice of the customer (VOC) and the voice of the stakeholder (VOS). These include translation of VOC and VOS into true customer needs, prioritization of these needs, and competitive benchmarking of alternatives from the customer's perspective. This document also provides recommendations on the use of the applicable tools and methods.

Users of this document include all organization functions necessary to ensure customer satisfaction, including business planning, marketing, sales, research and development (R and D), engineering, information technology (IT), manufacturing, procurement, quality, production, service, packaging and logistics, support, testing, regulatory, and other phases in hardware, software, service, and system organizations.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16355-1:2015, *Applications of statistical and related methods to new technology and product development process*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO 16355-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Basic concepts of QFD

The basic concepts of QFD are described in ISO 16355-1:2015, Clause 4.

5 Integration of VOC and VOS analysis and product development methods

5.1 QFD support for product development methods

QFD support for product development methods is referenced in ISO 16355-1:2015, 5.1.

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