INTERNATIONAL STANDARD

ISO 16355-2

First edition
2017-02

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

Part 2: Non-quantitative approaches for the acquisition of voice of customer and voice of stakeholder

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

Partie 2: Acquisition non quantitative du retour client (Voice of Customer) ou du retour des parties prenantes (Voice of stakholders)

Reference number
ISO 16355-2:2017(E)

© ISO 2017



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword ... **iv**
Introduction ... **v**
1 Scope ... **1**
2 Normative references ... **1**
3 Terms and definitions ... **1**
4 Basic concepts of QFD ... **1**
5 Integration of non-quantitative voice of customer (VOC) and voice of stakeholder (VOS) acquisition with customer research methods ... **2**
5.1 VOC and VOS acquisition support for market research methods for product development 2
5.2 Voice of customer and voice of stakeholder acquisition outline ... 2
6 Types of new technology and product development project for which VOC and VOS can be acquired ... **2**
7 VOC and VOS acquisition team membership ... **3**
7.1 QFD uses cross-functional teams ... 3
7.2 Core team membership ... 3
7.3 Subject matter experts ... 3
7.4 VOC and VOS acquisition team leadership ... 3
8 Tools for VOC and VOS acquisition and analysis ... **3**
8.1 General ... 3
8.2 Seven management and planning tools ... 3
9 New technology and product development voices ... **4**
9.1 Voice of business ... 4
9.1.1 General ... 4
9.1.2 Strategic planning ... 5
9.1.3 Business goals for projects ... 18
9.1.4 Identify project constraints ... 20
9.1.5 Project scope ... 20
9.2 Voice of customer (VOC) or stakeholder (VOS) (non-quantitative) ... 22
9.2.1 Identify customers or stakeholders ... 22
9.2.2 Marketing perspective and engineering perspective of customers and their activities ... 24
9.2.3 Prioritize customers or stakeholders ... 27
9.2.4 What is contained in the voice of customer (VOC) or voice of stakeholder (VOS) ... 29
9.2.5 Sources of VOC or VOS ... 29
Bibliography ... **39**

© ISO 2017 – All rights reserved

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 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 parts in the ISO 16355 series can be found on the ISO website.

© ISO 2017 – All rights reserved

Introduction

Quality Function Deployment (QFD) is a method to assure 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 lifecycle 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 find these improvements make QFD easier and faster to use. The methods and tools shown and referenced in the standard 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.

© ISO 2017 – All rights reserved

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

Part 2:
Non-quantitative approaches for the acquisition of voice of customer and voice of stakeholder

1 Scope

This document describes the non-quantitative approaches in the acquisition of voice of customer (VOC) and voice of stakeholder (VOS) and its purpose, and provides recommendations on the use of the applicable tools and methods. It is not a management system standard.

NOTE It does not provide requirements or guidelines for organizations to develop and systematically manage their policies, processes, and procedures in order to achieve specific objectives.

Users of this document include all organization functions necessary to assure customer satisfaction, including business planning, marketing, sales, research and development (R&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, *Application of statistical and related methods to new technology and product development process — Part 1: General principles and perspectives of Quality Function Deployment (QFD)*

3 Terms and definitions

For the purposes 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.

© ISO 2017 – All rights reserved