

之户关系管理

Customer Relationship Management

丁秋林 力士奇 著







客户关系管理

Customer Relationship Management

丁秋林 力士奇 著

清华大学出版社

(京)新登字 158 号

内容简介

本书介绍了客户关系管理的一般理论知识:结合应用方案分析了客户关系管理的系统结构及其功能 模块,总结了客户关系管理所涉及的业务流程,提出了采用面向对象技术的自动化过程控制解决方案。 对客户关系管理的数据存储集成和信息处理分析进行了深入探讨。

本书系统性强、内容详实、技术先进、实用性强、形式新颖、采用中英文对照的形式、可作为本科 生、研究生的学习指南以及研究开发人员的案头参考用书,也可供企业和政府掌握市场动向。

版权所有,翻印必究。

本书封面贴有清华大学出版社激光防伪标签,无标签者不得销售。

书 名:客户关系管理

者:丁秋林 力士奇 编著 作

出版者:清华大学出版社(北京清华大学学研大厦,邮编100084)

http://www.tup.tsinghua.edu.cn

责任编辑:朱英彪

印刷者:北京密云胶印厂

发 行 者:新华书店总店北京发行所

本: 787×960 1/16 印张: 10 字数: 125 千字 开 次: 2002 年 1 月第 1 版 2002 年 1 月第 1 次印刷

版

号: ISBN 7-302-05075-9/TP・2966 书

印 数:0001~4000 定 价: 16,00 元

前 言

随着互联网技术和信息技术的发展,以电子数据交换为基础的电子商务得到了越来越广泛的应用。在电子商务时代,企业的传统资源,如产品质量和价格等,在激烈的市场竞争中已无法再为企业带来新的竞争力,客户才是企业最为重要的资源,而客户关系管理正是一种以客户为中心的经营理念。

本书介绍了客户关系管理的一般理论知识,结合应用方案分析了客户关系管理的系统结构及其功能模块,总结了客户关系管理所涉及的业务流程,提出了采用面向对象技术的自动化过程控制解决方案,对客户关系管理的数据存储集成和信息处理分析进行了深入探讨。

本书有如下的鲜明特点:

2

- 1. 系统性强: 准确地介绍了电子商务的基本概念, 严格按逻辑逐步进行展开。
- 2. 内容详实:对 CRM 的系统设计、过程控制、数据存储、数据分析等内容均有详实的描述。
- 3. 技术先进:将电子商务涉及的信息技术,做到了画龙点睛的嵌入。
- 4. 实用性强: 泛泛而议 CRM 的文章太多, 缺乏实用性。本书可作为学习、研究的向导。
- 5. 形式新颖:中英文对照,便于读者既掌握技术,又学习专业外语。

本书可作为本科生、研究生的学习指南以及研究开发人员的案头参考用书,也可供企业和政府掌握市场动向。

张寅先生对形成本书内容的深入研究,刘隽小姐娴熟的翻译技巧,吴笑凡先生的认 真校核、审定,曹晖小姐的编辑、校对,徐焕良先生的独到见解,均对本书做出了极其 重要的贡献。

司徒伽罗女士、李勃先生、方鑫先生从市场角度对客户关系管理的精辟见解,也对本书的实用性做出了决定性的贡献。

书中部分设计取自南京大公务实智业顾问有限公司、南京三天临线资讯有限公司的具体案例,在此一并表示深切谢意。

丁秋林

E-mail: qlding@public1.ptt.js.cn

Preface

With the development of Internet technology and information technology, electronic commerce is being applied in more and more fields. In the era of electronic commerce, traditional enterprise resources such as quality and price of products won't bring new competitive power to enterprises in vehement market competition. And clients will become most resources of enterprises. As a part of electronic commerce, customer relationship management is a kind of management concept regarding clients as the focus of management and can efficiently improve the whole operational efficiency of enterprises.

This book introduces the general theories of Customer Relationship Management (CRM), analyzes the systematic infrastructure and functional modules of CRM according to application projects, summarizes business flows related to CRM, brings forward the solution to automatic process control by using object-oriented technique, deeply discusses the storage and integration of data and the processing and analysis of the information.

This book has following distinct characteristics:

- 1. Systematic arrangement: It introduces exactly the basic concepts of electronic commerce and develops step by step by logic.
- 2. Full and accurate contents: It describes system design, process control, data storage, data analysis, etc.
- 3. Advanced technology: It also covers information technology related to electronic commerce.
- 4. Strong practicability: There are too many superficial articles about CRM without practicability nowadays, while this book can be regarded as reference for study and research.
- 5. Novel method: This book adopts a form of half page in Chinese and half in English translation, which can help readers learn professional English at the same time grasp technology.

The book can both be used as tutorial for college students and post-graduates, as reference for researchers and developers, and be used for enterprises and the government to grasp market development direction.

The following efforts are greatly important to the book, including Mr. ZhangYin's

in-depth study on the contents involved in the book, Ms. LiuJun's adept translation skill, Mr. WuXiaofan's serious-minded collation, examination and confirmation, Ms. CaoHui's edition and checkback, and Mr. XuHuanliang's novel viewpoint.

That Ms. SiTujialuo, Mr. LiBo and Mr. FangXin put forward some pointed opinion on customer relationship management at the market aspect also contributes definitively to the practicability of the book.

Some cases mentioned in the book are from Nanjing DGWS Strategy Consulting Co, Ltd. and Nanjing STLX information Co. Ltd. Finally deep thanks are given to all that supply help to the book.

Professor DingQiulin E-mail: qlding@public1.ptt.js.cn

责任编辑:朱英彪封面设计:秦 旻

户关系管理 Customer Relationship Management

本书介绍了客户关系管理的一般理论知识;结合应用方案分析了客户关系管理的系统结构及其功能模块;总结了客户关系管理所涉及的业务流程;提出了采用面向对象技术的自动化过程控制解决方案;对客户关系管理的数据存储集成和信息处理分析进行了深入探讨。

本书系统性强、内容详实、技术先进、实用性强,形式新颖,采用中英文对照的形式,可作为本科生、研究生的学习指南以及研究开发人员的案头参考用书,也可供企业和政府掌握市场动向。



定 价: 16.00元

目 录 Contents

第1章	绪论		
	Exordium1		
1.1	引言		
	Intro	duction 1	
1.2	1.2 CRM 背景与现状		
	CRM background and present conditions		
	1.2.1	CRM 技术功能现状	
		Present conditions of CRM technical functions	
	1.2.2	CRM 系统结构模式现状	
		Present conditions of systematic structure modes of CRM 11	
	1.2.3	CRM 工作过程现状	
		Present conditions of operational process of CRM	
	1.2.4	CRM 数据信息现状	
		Present conditions of CRM data information	
	1.2.5	CRM 主要产品现状	
		Present conditions of CRM products	
1.3		f 背景与本书结构安排	
	CRM	1 background and framework of this book17	
	1.3.1	CRM 背景	
		CRM background	
	1.3.2		
		Contents and framework (chapter chart)	
第2章	CRM	[的系统设计	
	Syst	em Design of CRM21	
2.1	CRN	A 的系统结构模型	
	Syct	em structural model of CRM	

2	.1.1	CRM 的体系结构
		System structure of CRM
2	.1.2	CRM 的网络结构
		Network structure of CRM
		的系统功能模块
	Syste	ematic functional modules of CRM
2	2.2.1	客户市场管理分系统
		Customer market management subsystem26
2	2.2.2	客户销售管理分系统
		Customer sales management subsystem29
2	2.2.3	客户支持与服务管理分系统
		Customer support and service management subsystem 32
,	2.2.4	数据库及支撑平台分系统
		Database and platform supporting subsystem36
2.3		小结
	Sum	mary for the chapter40
第3章		[的过程控制
	Proc	ess Control of CRM
3.1	引音	
	Intr	oduction43
3.2	CRI	M 业务过程分析
	Ana	alysis of business process of CRM45
	3.2.1	客户销售业务过程
		Business process of customer sales45
	3.2.2	
		Business process of customer marketing48
	3.2.3	
		Business process of customer support and service52
3.3		M 过程控制的实现
	Rea	alization of process control of CRM55

	3.3.1	面向对象技术与子业务划分
		Object-oriented technique and division of sub-operations
	3.3.2	个性化用户界面
		Personalized user interface
	3.3.3	分系统集成
		Integration of subsystems
	3.3.4	信息自动传送
		Automatic transfer of information
3.4	本章	小结
	Sum	mary for the chapter
第4章	CRM	数据的存储与集成
×10 - 1	Stora	ge and Integration of CRM Data69
4.1		
		oduction69
4.2		库相关技术
	Tech	nniques related to database71
	4.2.1	
		Technologic strategies and key techniques71
	4.2.2	
		Distributed database technique ⁷³
	4.2.3	7
		Noticeable problems when creating CRM database ⁷⁶
	4.2.4	2-11
		Exerting maximum values of CRM database78
4		M 数据库的构建
	Cre	ation of CRM database ⁷⁹
	4.3.1	数据类型
		Data type
	4.3.2	
		Database configuration of CRM system80

	4.3.3	数据信息编码	
		Data information coding	. 82
	4.3.4	各分系统数据库的数据分类	
		Classification of data of each subsystem's databases	. 85
4.4	CRM	与其他系统间的数据集成	
	Data	integration of CRM with other systems	. 86
4.5	本章	小结	
	Sum	mary for the chapter	. 88
第5章	CRM	数据的处理分析	
	Analy	ysis and Processing of CRM Data	89
5.1	引言		
	Intro	oduction	89
5.2	_	f 的信息类型	
	Info	rmation type of CRM	90
5.3		1的信息分析处理	
	Info	rmation analysis and processing of CRM	95
	5.3.1	CRM 信息的一般统计分析	
		General statistic analysis of CRM information	96
	5.3.2	22.44	
		Data warehouse technique and OLAP	98
	5.3.3	+ % **/-> +++	
		Decision support of CRM	. 109
5.4	本章	• •	
	Sun	nmary for the chapter	. 118
第6章		4系统的开发	
	Dev	elopment of CRM System	. 119
6.1		•	
	Inti	roduction	119
6.2		系统设计	
	Sub	osystem design	121

3 数据库设计		
Database design		
6.3.1 关键信息编码		
Key information coding124		
6.3.2 数据字典及数据表关联		
Data dictionary and data sheet relations126		
6.4 运行效果分析		
Analysis of operational effects		
6.5 本章小结		
Summary for the chapter		
第 7 章 总结与展望		
Summary and Prospects137		
7.1 总结		
Summary137		
7.2 展望		
Prospects		
注释表141		
Exegesis Note		
参考文献143		

第1章 绪 论

1.1 引言

随着互联网技术和信息技术的 日臻成熟, 互联网规模日益扩大, 网 络用户数量迅猛增加, 互联网的应用 已经逐步进入了社会的各行各业,与 人们的日常工作和生活逐渐紧密地 联系在一起。互联网技术在全球的广 泛使用, 标志着人类社会开始进入网 络经济时代。网络经济时代一个最显 著的特征就是信息技术在传统商 业领域的应用,即电子商务。通过电 子商务,大大加快了世界经济的全 球化进程,国际经济结构进一步调 整,原有的时空间隔被打破,产品市 场逐步形成全球化趋势,同时使生产 和消费更加贴近,大大降低了产品的 成本。

Chapter 1 Exordium

1.1 Introduction

With the maturity of Internet technology and information technology, the scale of Internet is expanding, the number of network users is increasing rapidly. The application of Internet is permeating into every field of the society step by step and is combining with the daily life and work of people tightly. The worldwide extensive application of Internet technology marks human society's entry into the era of Network Economy. The most distinct characteristic of the era of Network Economy is the application of information technology in traditional business fields, that is, Electronic Commerce. E-commerce expedites greatly the globalization process of world economy. Through E-commerce, international economy infrastructure adjusts farther, the former time and space gap is broken, and product market is becoming the global trend. At the same time it makes production and consumption closer and reduces greatly the costs of products.

1

企业也获得了更加广泛的、公平竞争 的市场,同时消费者从中获得了更大 的选择权和更加个性化的服务。

电子商务是指以数字化电子手段实现整个商业活动的各个环节。它包括商业信息的发布与检索、电子广告、电子合同签署、电子货币支付和售前售后服务等一系列过程。其显著的特点是通过数字化电子手段,特别是用网络技术来完成商务活动的联结,尽可能减少面对面的接触和手工处理过程。电子商务的应用不仅是企业经营管理的变迁,而且更是整个流通领域的一场革命。

在电子商务时代,企业内外部的 运作方式和管理模式将会大为改观。

首先,企业内各部门和员工间的 沟通模式将有很大的变化。由于网络 大大缩小了时间和空间的距离,在内 部工作和业务流程的控制方面,企业 将会主动地大量采用电子商务模式。 无论该项业务涉及的员工或经理是 否在同一物理位置或网络上,业务的 处理将会同样顺利地进行。 Simultaneously enterprises gain a wider and fairer competitive market while consumers gain more choices and more personalized service.

E-commerce refers to completing every section of commercial activities by digital electronic means. It includes publication and search of commercial information, electronic advertisements, subscriptions of electronic contracts, payments in Electronic Currency, beforesales and after-sales services and many other processes. Its distinct characteristic is diminishing face-to-face contact and manual transaction process by using digital electronic means, especially network technology to realize the connection of commercial activities, the application of E-commerce is not only a change in the enterprise management, but also a revolution in the circulation field.

In the era of E-commerce, the operational patterns and management modes of internal and external enterprises will be changed greatly.

Firstly, there'll be great changes in the modes of communications between inner departments and staff. Because network shortens the time and space distance, enterprises will automatically take electronic commercial modes to communicate in the aspect of controlling



其次,企业对外的接口界面将大 大扩展。电子商务时代的终端可以是 多种多样的,除了台式计算机和便携 式电脑之外,还有更广泛的各类数字 终端,如:电话、电视、PDA、BP 机等,要求企业能很好地利用这些资 源,为用户服务。

此外,企业管理的内涵也在进一步的延伸,除了传统的企业财务、库存、销售、采购、生产等管理以外,涉及整个企业价值链的许多环节也被要求进入管理范畴。随着市场竞争的日益激烈,企业的产品和服务本身已很难分出绝对优劣。谁能把握客户的需要、加强与客户的沟通,谁就能取得竞争优势,捷足先登。

客户、供应商以及合作伙伴连成 一片的价值链已经成为企业与企业 之间竞争的核心。 inner transactions and operational flows. So whether staff or managers involved in this transaction are in the same physical position or network or not, the transaction will be successful as much.

Secondly, enterprises' external interfaces will expand greatly. The terminals in the era of E-commerce can be various, besides desk and portable computers, there are other kinds of digital terminals, such as telephone, television, PDA, Beeper and so on. The enterprises are required to utilize these resources well to provide services to customers.

Thirdly, the core meaning of enterprise management is stretching further. Besides traditional enterprise financial management, management, storage sales management, stock management and many parts involved in the entire enterprise value chain are required to be included in the management category. With the intensification of market competition, it's hard to tell absolute advantages in the enterprises' products and services. Those who can grasp the needs of customers and strengthen communications with customers can gain competition advantage and take an initiative.

The value chain combined by customers, suppliers and cooperation partners is becoming the core of competition among enterprises.

随着竞争的日益激烈,世界各地的制造业和服务业都经历着从卖方市场的痛苦转变。进入信息时代后,随着竞争的不断加剧以及产品和服务的极大丰富,特别是信息工具和渠道的快速发展,使得客户对产品和服务的选择范围不断扩大,选择能力不断提高,同时选择欲望也日益加强,因此如何把握客户的需求并以最快的速度做出响应,即如何吸引并保持客户已成为当今企业竞争的焦点。企业需要通过获得与客户关系的最优化来达到企业利润的最优化。



为了达到这一目的,企业必须了解与客户相关的各种信息,主要包括:客户基本信息、销售信息、市场信息、服务信息、业务运作情况等,并能根据这些信息事先或事后来相应地调整自己的经营行为。

传统的 ERP 系统是由 MRP、MRPII 等企业管理理论发展而来的,

With the intensification of competition, the manufacturing sectors and service sectors all over the world are undergoing a painful transition from seller's market to buyer's market. After entering the Information Era, with the continuing intensifying of competition and greater abundance in products and services, especially the rapid development of information tools and channels. customers have greater options towards products and services, their choosing abilities are being enhanced and their desires are being intensified. So how to grasp customers' needs and respond to them quickly, that is, how to attract and retain customers becomes the focus of competition among enterprises. Enterprises need to optimize their profits by reaching the optimization of their relationships with customers.

To achieve this goal, enterprises have to know all kinds of information about customers, mainly including customers' basic information, sales information, market information, service information, operation information, and can adjust their activities beforehand or afterward according to these information.

The traditional ERP system is developed based on the management theories of MRP, MRPII, which focus on 它们注重的主要是企业内部的管理 改革和理论变迁,是以产品为核心、 以成本控制为目标的管理体系,难以 考虑到整个市场"价值链"变动给企 业带来的影响和冲击,特别是Internet 应用的革命性变化,无法满足企业围 绕客户进行商业运作、实现电子商务 的需求。因此,需要通过引入客户关 系管理及供应链管理来拓展传统 ERP 系统的概念和范畴, 提供一种能 够反映企业与客户间复杂联系的管 理系统,不仅能够记录、追踪客户的 信息资料、企业与客户间的业务行 为,而且能够分析这些信息,为企业 提供各种决策依据,从而更好地适应 "网络经济"时代的企业管理需求。



the innovation of enterprises' inner management and the change of theory. It is the kind of management systems that focus on products and regard cost control as their goal. So they can't forecast the effect and impact brought about by the changes in value chain of the whole market, especially the revolutionary change in the Internet application can't satisfy the needs of enterprises to make commercial transactions and realize E-commerce surrounding customers. Therefore it's a need to import Customer Relation Management and Supply Chain Management to expand the meaning and scope of traditional ERP system and provide a management system that can reflect the complex relationship between enterprises and customers. The system can not only record and track information of customers, business activities between enterprises and customers, but also analyze these information and provide all kinds of decision-making basis for enterprises in order to adapt to the management needs of the enterprises in the Era of Network Economy.