

国核心期刊（遴选）数据库 收录期刊

# Value Engineering

中国商界文联 会刊

中国技术经济研究会价值工程专业委员会 会刊

中国高等教育学会价值工程分会 会刊

中国期刊网 全文收录期刊  
中国学术期刊（光盘版）

中国学术期刊综合评价数据库来源期刊

万方数据—数字化期刊群入网期刊

中文科技期刊数据库收录期刊

Q K 1 9 0 7 9 2 6

ISSN 1006-4311

CN13-1085/N

JIAZHI GONGCHENG

2019 ②

下旬刊（总第 518 期 / 第 38 卷）

# 价值工程

ISSN 1006-4311



06>

9 771006 431068

万方数据

# 价值工程

2019年2月下旬刊(总第518期/第38卷)  
1982年创刊 2019年2月28日出版

中国商界文联会刊

中国技术经济研究会价值工程专业委员会  
中国高等教育学会价值工程分会 会刊

封面刊名题字:袁宝华

■ 主管单位:

河北省科学技术协会

■ 主办单位:

河北省技术经济管理现代化研究会

■ 总 编:高志彪

总编室:师瑞

电 话:0311-87024742

■ 编辑部:马慧霞

刘英禄

电 话:0311-83020178

0311-83036626

传 真:0311-87024742

投稿信箱:vezzsbjb@163.com

网 址:[www.vezzs.com](http://www.vezzs.com)

责任编辑:高生明

封面设计:王金军

版面设计:韩宇红

■ 国际标准连续出版物号:ISSN 1006-4311

国内统一连续出版物号:CN 13-1085/N

国内邮发代号:18-2

国内订阅:全国各地邮局

国内发行:河北省报刊发行局

国外发行:中国国际图书贸易总公司

印 刷:廊坊市长岭印刷厂

■ 编辑出版单位:价值工程杂志社

社 址:石家庄市槐安西路88号卓达

物业楼A501室

邮 编:050091

国内定价:30.00元人民币

海外定价:30.00美元

# 目 录

## \* 价值管理 \*

- 基于公平视角下青海藏区农牧民收入的主观感知度分析 ..... 邱伟临等(1)
- 技术创新与区域产业结构优化的实证研究 ..... 宋文娟等(6)
- 杭州市居家养老服务现状、存在的问题及对策分析 ..... 王圆晓等(9)
- 建筑工程造价特点及动态控制实施方法研究 ..... 史立梅(12)
- 基于CCR-DEA的省域全要素能效评估 ..... 黎恒等(15)
- 基于F-AHP法的高校突发事件应急管理能力评价研究 ..... 杨霞等(19)
- 基于可拓物元模型的雄安新区土地集约利用潜力评价研究 ..... 陈超(22)
- 以故障管理为核心的运维服务评价体系研究 ..... 唐毅等(25)
- 基于LEC模糊分析法的建筑施工现场安全管理风险评估 ..... 丛龙涛等(29)
- 基于项目管理的配电网建设实证研究 ..... 赵幽幽(32)
- 新能源企业人力资源培训体系研究 ..... 王建红(35)
- 互联网平台企业商业模式创新影响因素研究 ..... 张婉露(38)
- “营改增”背景下施工企业减税对策研究 ..... 于凯等(41)
- 精细化管理在路桥施工项目管理中的作用研究 ..... 高伟连等(44)
- 海底管道安全停输时间及再启动研究与实践 ..... 李玉清等(47)
- 网络层次分析法在水利工程投标风险决策中的应用研究 ..... 傅大健(50)
- “互联网+”背景下特色乡村旅游推广路径探讨 ..... 陈旭元等(53)
- 集团化企业降低杠杆策略研究 ..... 沈立铸(56)
- 老城区污水全收集全处理建设研究 ..... 鲁修为(59)
- 乡村振兴战略背景下农村电商高效化发展的路径探索 ..... 李鲁等(62)
- 全国各省份公路运输 AHP-DEA 效率评价 ..... 尉蔚(65)
- 财务风险管理的研究状况分析及未来发展趋势 ..... 郭玲玲(68)
- 我国药品流通领域的行政监管问题及对策建议研究 ..... 张顺良(71)

## \* 价值链·供应链 \*

- 基于互联网+外卖食品供应链安全监管问题研究 ..... 姜苏玲等(74)
- 基于演化博弈论的装配式建筑供应链信息资源优化配置研究 ..... 李悦等(77)
- 农产品供应链质量风险探究 ..... 严爱琴(83)

## \* 功能载体创新 \*

- 北京地铁新机场线下穿燃气调压站变形控制技术 ..... 武俊杰(86)
- 村镇建筑基础滑移隔震技术研究与应用现状分析 ..... 龚永达等(90)
- 复杂条件下大断面水泵房硐室注浆与锚固加固技术实践 ..... 陈力慧等(93)

玻璃纤维沥青混合料路用性能研究 .....	沈楸 等(96)
倒挂井壁法竖井施工技术 .....	王勇 等(99)
短切玄武岩纤维透水沥青混合料路用性能研究 .....	曹佳伟 等(102)
基于 ProCAST 的高性能铝合金 GIS 罐体低压铸造工艺研究 .....	朱云(105)
高速公路隧道施工技术及控制要点研究 .....	代意斌(108)
粤赣高速公路浅埋偏压矮寨隧道施工技术研究 .....	秦良伟 等(111)
浅析隧洞钻爆开挖施工工艺优化 .....	林茂青(115)
顶管施工技术在荆门市污水处理项目中的应用浅谈 .....	张志豪(118)
地铁车站侧墙施工缝处渗漏水预防控制措施 .....	罗维军(121)

#### \* 价值应用 \*

云南富宁县某冶炼项目所处背斜构造区地下水污染风险分析 .....	梅向阳 等(125)
三维激光扫描和 BIM 集成技术在古建筑迁建中的应用 .....	李涛会 等(129)
风电场运行状况分析及优化 .....	毕丽萍(132)
基于主成分因子分析的体检指标综合评价 .....	李伟春(135)
含软弱夹层砂岩隧道开挖二维数值模拟分析 .....	吴晓辉(138)
相变材料改善夏季墙体传热特性数值模拟研究 .....	刘朋 等(141)
再生沥青混合料灰色关联和灵敏度分析研究 .....	顾万 等(144)
南充城市园林绿化在棕地修复方面的运用 .....	陈奇 等(147)
自动化技术在海上油田安全管理中的应用 .....	刘俊刚 等(150)
BIM 在工程建设中应用的必要性 .....	刘岳明(153)
无损检测技术在道桥检测中的应用 .....	陈军(156)
无人机低空摄影测量技术在平舆县某镇规划中的应用 .....	丁振宇 等(159)
铝合金板式节点的面外弯曲刚度研究 .....	王玲 等(162)
轴向通流球冠形旋转靶流动与传热数值研究 .....	张宽 等(165)
西门子 PLC 与 HMI 的以太网通讯的应用 .....	张浩(168)
河北科普文化产业创新发展的途径研究 .....	李翠亭 等(171)
A <sup>2</sup> O 法处理 10000m <sup>3</sup> /d 生活污水工艺设计 .....	张君来 等(174)
基于 HyperMill 虚拟机床的建立与仿真 .....	高奎强 等(177)

#### \* 工业工程 \*

烧结钕铁硼磁体制粉工艺流程改进及布局优化 .....	李俊峰 等(180)
----------------------------	------------

#### \* 理论综述 \*

考虑员工学习行为的动态生产率下生产库存优化研究综述 .....	伏开放 等(184)
乡村旅游研究综述 .....	董秋云(188)
矿区地表沉陷监测技术发展状况 .....	魏盛昊 等(191)
48V BSG 技术研究与趋势分析 .....	严宏昇(194)

#### 郑重声明

1. 本刊所刊载内容未经书面许可,任何部分不得以任何形式翻印、转载、复制,及存储于检索系统,提供给公众或私人使用。
2. 来稿在 15 个工作日内给予回复录用与否,若未收到回复信息,请来电咨询稿件进展。来稿正常刊登周期为 3 个月内,未录用者可自行处理。请勿一稿多投,不涉及保密、署名无争议,请作者自留底稿,恕不退稿。
3. 编辑部对来稿文章标题、内容、参考文献等保留删修权,不同意删修的稿件请在来稿中声明。
4. 本刊已被“中国知网、万方数据数字化期刊群、中文科技期刊数据库”收录。凡向本刊投稿作者,若不同意在上述数据库收录,请在来稿注明。

**Value Engineering**  
**(VE)**  
**Fortnightly Issue**  
**Started in 1982**  
**Vol.38 2.c**  
**(Sum No.518)**  
**Published in Feb. 28, 2019**

**Inscribed:** Yuan Baohua  
**Executive Editor-in-chief:** Gao Zhibiao  
**Manager:** Hebei Association for Science and Technology  
**Sponsor:** Hebei Institute of Technology Economy and Modern Management

**Chief Editor's Department:** Shi Rui  
**Editor:** Editorial Team of VE  
**Publisher:** Magazine Publishing House of VE  
**Address:** Room A501, Zhuoda Property House, No.88 Huai'an Road  
**Tel:** (0311) 87024742  
**E-mail:** vezsbbj@163.com

**Printed by:** Changling Printing House, Langfang  
**Distributor:** Shijiazhuang Post Office  
**Subscriptions:** Chinese Local Post Office  
**Domestic Issue Code:** 18-2  
**Domestic Single Price:** ¥30.00  
**Overseas Single Price:** \$ 30.00  
**Open Publishing**  
**ISSN 1006-4311**  
**CN 13-1085/N**

# CONTENTS

## VALUE MANAGEMENT

- 1 Subjective Perception of Income of Farmers and Herdsman in Tibetan Areas of Qinghai Province from a Fair Perspective ..... DI Wei-lin, et al.
- 6 Empirical Research on Technological Innovation and Regional Industrial Structure Optimization ..... SONG Wen-juan, et al.
- 9 Analysis on the Current Situation and Existing Problems of the Community Endowment Service in Hangzhou and Its Countermeasure ..... WANG Yuan-xiao, et al.
- 12 Research on Construction Project Cost Characteristics and Dynamic Control Implementation Method ..... SHI Li-mei
- 15 Provincial Total Factor Energy Efficiency Assessment Based on CCR-DEA ..... LI Heng, et al.
- 19 Study on Evaluation of Emergency Management Capability of Colleges and Universities Based on F-AHP Method ..... YANG Xia, et al.
- 22 Evaluation of Intensive Land Use Potential of Xiong'an New Area Based on Extension Matter-Element Model ..... CHEN Chao
- 25 Research on Operation and Maintenance Service Evaluation System with Fault Management as the Core ..... TANG Yi, et al.
- 29 Risk Assessment of Safety Management in Construction Site Based on LEC Fuzzy Analysis Method ..... CONG Long-tao, et al.
- 32 Empirical Research on Power Distribution Network Construction Based on Project Management ..... ZHAO You-you
- 35 Research on Human Resource Training System of New Energy Enterprises ..... WANG Jian-hong
- 38 Research on the Influencing Factors of Enterprise Business Model Innovation in Internet Platform ..... ZHANG Wan-lu
- 41 Research on Tax Reduction Countermeasures for Construction Enterprises under the Background of "Replacing Business Tax with VAT" ..... YU Kai, et al.
- 44 Research on the Role of Refined Management in Road and Bridge Construction Project Management ..... GAO Wei-lian, et al.
- 47 Research and Practice on Safe Shutdown Time and Restart of Submarine Pipeline ..... LI Yu-qing, et al.
- 50 Application Research of Analytic Network Process in Bidding Risk Decision-making of Hydraulic Engineering ..... FENG Da-jian
- 53 Discussion on the Promotion Path of Characteristic Rural Tourism under the Background of "Internet+" ..... CHEN Xu-yuan, et al.
- 56 Research on the Strategy to Reduce Leverage in Group-based Enterprises ..... SHEN Li-zhu
- 59 Research on the Full Collection and Total Processing of Sewage in Old Urban Area ..... LU Xiu-wei
- 62 Exploration Path of Efficient Development of Rural E-commerce under the Background of Rural Revitalization Strategy ..... LI Lu, et al.
- 65 Evaluation of AHP-DEA Efficiency of Highway Transportation in Provinces of China ..... WEI Wei
- 68 Research Status of Financial Risk Management and Its Future Development Trend ..... GUO Ling-ling
- 71 Study on Administrative Supervision Problems and Countermeasures in the Field of Drug Distribution in China ..... ZHANG Shun-liang

## VALUE CHAIN·SUPPLY CHAIN

- 74 Research on Security Supervision of Take-out Food Supply Chain Based on Internet+ ..... JIANG Su-ling, et al.

77 Research on Information Resource Allocation Optimization in Prefabricated Building Supply Chain Based on Evolutionary Game Theory	.....	LI Yue, <i>et al.</i>
83 Research on Quality Risk of Agricultural Product Supply Chain	.....	YAN Ai-qin

## FUNCTION CARRIER INNOVATION

86 Deformation Control Technology of Beijing Metro's New Airport Line Crossing under Gas Regulating Station	.....	WU Jun-jie
90 Analysis of Current Research and Application on Sliding Base-isolation Technology for Rural Buildings	.....	GONG Yong-da, <i>et al.</i>
93 Practice of Grouting and Anchoring Reinforcement Technology for Large Section Pump House in Complex Conditions	.....	CHEN Li-hui, <i>et al.</i>
96 Study on Road Performance of Glass Fiber Asphalt Mixture	.....	SHEN Qiu, <i>et al.</i>
99 Shaft Construction Technology with Inverted Side-wall Method	.....	WANG Yong, <i>et al.</i>
102 Study on Road Performance of Short-cut Basalt Fiber Porous Asphalt Concrete	.....	CAO Jia-wei, <i>et al.</i>
105 Research on Low Pressure Casting Process of High Performance Aluminum Alloy GIS Tank Based on ProCAST	.....	ZHU Yun
108 Research on Construction Technology and Control Points of Expressway Tunnel	.....	DAI Yi-bin
111 Research on Construction Technology of Shallow-buried Abutment Aizhai Tunnel on Guangdong-Jiangxi Expressway	.....	QIN Liang-wei, <i>et al.</i>
115 Analysis on Optimization of Construction Technology of Tunnel Drilling and Explosion	.....	LIN Mao-qing
118 Application of Pipe Jacking Construction Technology in Jingmen Wastewater Treatment Project	.....	ZHANG Zhi-hao
121 Prevention and Control Measures for Leakage in Construction Joints of Side Walls of Metro Stations	.....	LUO Wei-jun

## VALUE APPLICATION

125 Risk Analysis of Groundwater Contamination for a Smelting Project in an Anticline Area in Funing County, Yunnan Province	.....	MEI Xiang-yang, <i>et al.</i>
129 Application of 3D Laser Scanning and BIM Integration Technology in the Relocation of Ancient Buildings	.....	LI Tao-hui, <i>et al.</i>
132 Analysis and Optimization of Wind Farm Operation	.....	BI Li-ping
135 Comprehensive Evaluation of Physical Examination Indicators Based on Principal Component Factor Analysis	.....	LI Wei-chun
138 Two-dimensional Numerical Simulation Analysis of Excavation of Tunnel Containing Soft Interlayer Sandstone	.....	WU Xiao-hui
141 Numerical Simulation Study on the Improvement of Heat Transfer Characteristics of Wall by Phase-change Materials in Summer	.....	LIU Peng, <i>et al.</i>
144 Grey Correlation and Sensitivity Analysis of Recycled Asphalt Mixture	.....	GU Wan, <i>et al.</i>
147 Application of Nanchong City Landscaping in Brownfield Restoration	.....	CHEN Qi, <i>et al.</i>
150 Application of Automation Technology in Safety Management of Offshore Oilfields	.....	LIU Jun-gang, <i>et al.</i>
153 The Necessity of the Application of BIM in Engineering Construction	.....	LIU Yue-ming
156 Application of Non-destructive Testing Technology in Road and Bridge Detection	.....	CHEN Jun
159 Application of UAV Low-altitude Photogrammetry in Planning of a Town in Pingyu County	.....	DING Zhen-yu, <i>et al.</i>
162 Study on Bending Stiffness of Aluminum Alloy Gusset Joint	.....	WANG Ling, <i>et al.</i>
165 Numerical Study on Flow and Heat Transfer of Axially Rotating Spherical Crown Rotating Target	.....	ZHANG Kuan, <i>et al.</i>
168 Application of Ethernet Communication between Siemens PLC and HMI	.....	ZHANG Hao
171 A Study on the Innovative Development Path of Culture-based Science Popularization Industry	.....	LI Cui-ting, <i>et al.</i>
174 Process Design of the Treatment of 10000m <sup>3</sup> /d Domestic Sewage by A <sup>2</sup> /O Method	.....	ZHANG Jun-lai, <i>et al.</i>
177 The Establishment and Simulation of Virtual Machine Tool Based on HyperMill	.....	GAO Kui-qiang, <i>et al.</i>

## IE

180 Process Improvement and Layout Optimization of Sintered NdFeB Powdering Process	.....	LI Jun-feng, <i>et al.</i>
---	-------	----------------------------

## THEORETICAL REVIEW

184 Review of Inventory Optimization under Dynamic Productivity Considering Employee Learning Behavior	.....	FU Kai-fang, <i>et al.</i>
188 A Literature Review on Rural Tourism	.....	DONG Qiu-yun
191 Development of Surface Subsidence Monitoring Technology in Mining Area	.....	WEI Sheng-hao, <i>et al.</i>
194 48V BSG Technology Research and Trend Analysis	.....	YAN Hong-sheng

# 2015第三届价值工程与项目管理国际会议

◇ 剪影 ◇



北京航空航天大学党委副书记、副校长、中国工程院院士张军



美国价值工程师协会主席  
玛丽安·刘易斯



米兰比科卡大学教授、IEEE  
系统杂志总编Vincenzo Piuri



终身价值专家、博士、台湾  
新竹交通大学教授张柏毅



北京市工程咨询公司  
副总经理王革平



西南财经大学副教授、北京价  
值工程学会副秘书长张汉鹏

