

基于前景理论与多Agent模拟的KIBS员工合作与冲突行为研究

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Research on KIBS Employees' Cooperate and Conflict Behavior Based on Prospect Theory and Multi-Agent Simulation

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摘要 随着知识经济时代的到来,知识密集型服务业(KIBS)已经成为西方主要发达国家和地区产业结构调整关注的重点方向和近年来学术界的研究热点之一。文章研究了KIBS员工合作与冲突行为产生机理与演化规律,首先结合了人格心理学、前景理论和博弈论的相关理论,设计了KIBS员工合作与冲突行为决策模型。之后在仿真软件Anylogic 6.5.0上建立了相应的多Agent模拟模型,并针对收益参数和群体沟通这两种影响因素设计了模拟实验。最后对模拟结果进行了分析,发现收益参数中除了惩罚系数,控制因子对最终行为比例也产生影响,而沟通概率则对演化过程行为变化的幅度产生影响。

关键词: 知识密集型服务业 合作与冲突 多agent模拟 Anylogic 行为运作

Abstract: Along with the globalization of knowledge economy, knowledge-intensive business service(KIBS) has become the focus of industrial restructuring in the major western developed countries and regions as well as a hot topic in management research recently. This paper investigates the generating mechanism and evolutionary law of KIBS employees' cooperate and conflict behavior. A behavior model of KIBS employees' cooperate and conflict is proposed in accordance with theories of personality psychology, prospect theory and game theory. Then Anylogic 6.5.0 is used to implement this multi-Agent simulation model. Parameters of income and group communication are analyzed in the later simulation experiment. The result shows that they affect the cooperate and conflict behavior of KIBS employees in different ways.

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