

Contracting as a Science

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What is a Science?

- **Study of Observable Facts**
- **Scientific Method**
- **Description of Natural Phenomena**
- **Classification of Phenomena**
- **Empirical Relationships**
- **Systematized Body of Knowledge**
- **Theory, Principles, Laws, Paradigms**
- **Practical Problems**
- **Understanding, Explanation, Prediction, Control**

Why a Contracting Science?

- **Knowledge and Theory**
- **Cause and Effect Relationships**
- **Simplify Understanding**
- **Operational Definitions**
- **Practitioner-Oriented Research with Solutions to Problems**
- **Enhance Policy and Decision Making**
- **Focus Academic Research**
- **Enrich Education and Training**

Body of Knowledge

- **Theoretical/Scientific Body of Knowledge**
 - Theories, Principles, Laws, Paradigms
 - Research: Discovery of New Knowledge
 - Scientific Method, Empirical Data
 - Models, Taxonomies, Typologies
- **Practitioner Body of Knowledge**
 - Methods, Tools, Techniques, Procedures
 - Research: Application of Knowledge
 - Policies, Best Practices, Rules of Thumb

Classification/Taxonomy

- **Description/Classification of Subject Matter**
- **Procurement Tasks**
- **Contracting Officer Decisions**
- **Goods/Services**
- **Buying Decision Approaches**
- **Potential Areas for Classification**
 - **Elements of Supplier Base**
 - **Supplier Performance Incentives**
 - **Contracting Relationships**
 - **Public Sector vs Private Sector Practices**

“Schools” of Contracting Thought

- **Process School**
- **Behavioral School**
- **Relationship School**
- **E-Procurement/E-Commerce School**
- **Reformist School**
- **Contracting Out/Privatization School**
- **Eclectic School**
- **Other Schools: Governance, Partnership/Alliance, Performance-Based**

Potential Contracting Paradigms

- **Management Concepts**
- **Economic Aspects**
- **Legal/Judicial Features**
- **Political Facets**

Selected Theories Employed by Contracting

- **Principal-Agent (Agency) Theory** (Economics)
- **Transaction Cost Theory** (Economics)
- **Theory of Organizational Buying Behavior** (Marketing)
- **Portfolio Theory** (Finance)
- **Resource Dependence Theory** (Sociology)
- **Relationship Marketing** (Marketing)
- **Expectancy Theory** (Psychology/Marketing)

Selected Theories with Potential Application to Contracting

- **Resource-Advantage Theory** (Marketing)
- **Prospect Theory** (Psychology)
- **Goal Setting Theory** (Management)
- **Equity Theory** (Psychology)
- **Representative Bureaucracy Theory** (Sociology)
- **Adaptation-Level Theory** (Psychology)
- **Stewardship Theory** (Management)

Potential Contracting Theories

- **Theory of Contract Types**
- **Theory of Equitable Adjustment**
- **Theory of Contract Termination**
- **Theory of Reasonableness**

Is Contracting A Science?

- **Applied Discipline**
- **Emerging Science**
 - **Distinct Subject Matter**
 - **Description and Classification of Subject Matter**
 - **Underlying Uniformities or Regularities Among Phenomena**
 - **Scientific Method**
- **Same Growing Pains as Other Social Sciences**
- **Behave as if a Science**

Toward a Science of Contracting

- **Dialogue Among Academics and Practitioners**
- **Colloquium on Contracting Science**
- **Journal of Contracting Research and Theory**
- **Annotated Bibliography of Contracting**
- **General Classification System(s)**
- **Scientific Body of Knowledge**
- **Contracting Paradigm(s)**
- **Contracting Theory**