Critical Evaluation of Prices in the Information Technology Age:

HISTORY, FEATURES AND CRITICAL COMPARISON OF COST BASED, MARKET/VALUE BASED, AND WILLFULLY/ARBITRARY PRICES

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I. Information on the Seminar Paper

The preparation and writing of the seminar paper has been divided into four blocks.

Phase 1: Preperation

Phase 3: Writing the Paper

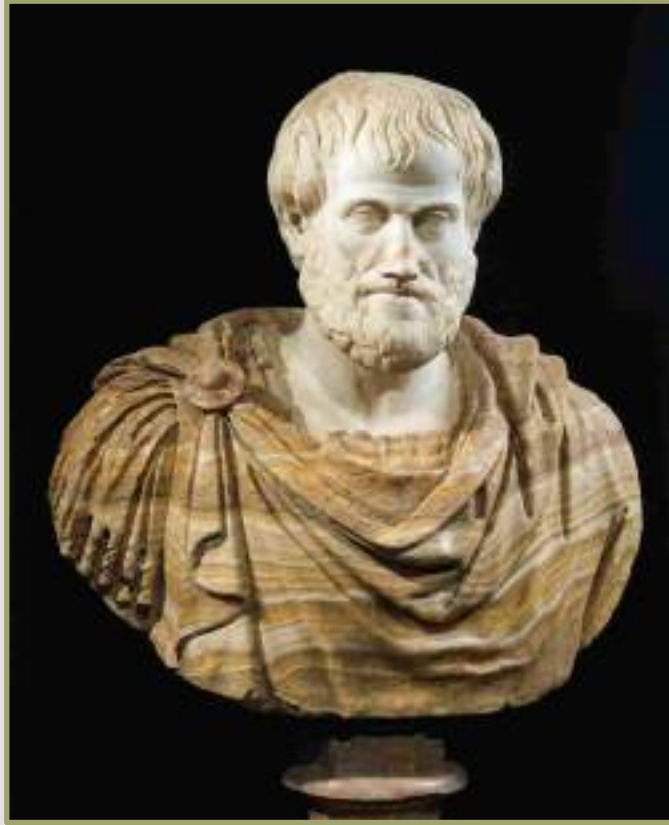Phase 2: Research & Evaluation

Phase 4: Correction & Submission

Facts about the Seminar Paper

- 41 pages in total, **32 pages of continous text**

- No in-depth previous knowledge, but **basic knowledge of pricing**

- **First seminar paper** that was written **in English**

- In summary: **A demanding, but definitely interesting topic that has been extensively discussed and analyzed**

Table of contents of the seminar paper

II. Historical Perspective of Pricing

Antique & Pre-classical Times

Antique

- A time of great cultural development and **philosophical knowledge**
- **First economic considerations** on the equilibrium of exchange and justice **by Aristotle**
- **Ancient Rome** as the first empire with a **uniform monetary system**
- Prices in ancient Rome for wheat depend on the distance from Rome

Pre-classical Times

- religious and **power-political influences on prices**
- Trade in a **local markets**, focus on agriculture
- **Thomas Aquinas** developed the **concept of the just price**
- Doctrines of **Scholasticism, Mercantilism**, and **Physiocracy**

Classicism & Neo-classicism

Classicism

- **Adam Smith** as the father of modern economic theory
- Differentiation between **market price** and **natural price**
- **Influence of supply and demand on price level**
- **David Ricardo** brings interest into economic theory and **takes time components into account for price formation**

Neo-classicism

- **Modern economic theory is based on neoclassical ideas**
- No longer the entire economy in **focus**, but **individual subjects**
- **Consumption theory** as a foundation for modern microeconomics
- **Willingness of consumers to pay becomes relevant** for the first time

Quick Question

,Do You think that insights from philosophers like Thomas Aquinus are still relevant in pricing today?'

III. An Introduction to cost-based,value-based & arbitrage pricing

Three Pricing Strategies

COST-BASED PRICING

VALUE-BASED PRICING

ARBITRARY PRICING

Features of the Pricing Strategies

COST-BASED PRICING

- **Price** is **determined by costs** and pre-determined **profit mark-up**
- Advantages: **simple calculation method**, calculation of prices with historical data
- Disadvantages: The calculation base must be complete, **competition and demand not taken into account**

VALUE-BASED PRICING

- **Price** is **determined with the perceived value for the customer**
- Advantages: **Price reflects value exactly**, ideal for providers and consumers
- Disadvantages: **difficult to determine value precisely** in practice

ARBITRARY PRICING

- **Markets** are **not always in balance**, so prices are sometimes too high or too low
- Advantages: **new products** and innovations **can often be offered with surcharges**
- Disadvantages: Disadvantages **for the customer**, the value of the goods does not correspond to the price level

Quick Question

,Which of the presented pricing methods would you pursue as an entrepreneur?'

IV. Critical Evaluation of Prices in the Information Technology Age

Pricing Strategies of Software Companies I

○ Software is becoming more and more relevant in the corporate context

○ New technologies and **5G enable large amounts of data to be exchanged in real time around the world**

○ Focus: **Cloud Computing - Software as a Service**, Security as a Service, **Infrastructure as a Service**

Pricing Strategies of Software Companies II

o Instead of entire ERP systems, only **rent of individual modules**

o License purchase and software maintenance contracts replaced by **rental contracts**

o individually bookable, **flexibly expandable**

o Examples of providers: **SAP, Salesforce,** Microsoft and Adobe

Pricing Strategies in the Mobile Gaming Industry

- **Mobile games market share increases**, penetration rate is 23.9% in 2021

- Focus: **free-to-play games**

- Free to play, but **benefits from in-app purchases**

- Use of an **internal monetary system**

- Currency must be bought with real money

- **Computer games are much cheaper**, although technically much more complex

Importance and Current Development of Pricing

In the age of information technology, **data forms the basis for modern pricing strategies**

Personalized Pricing

Data

Behavior-based Pricing
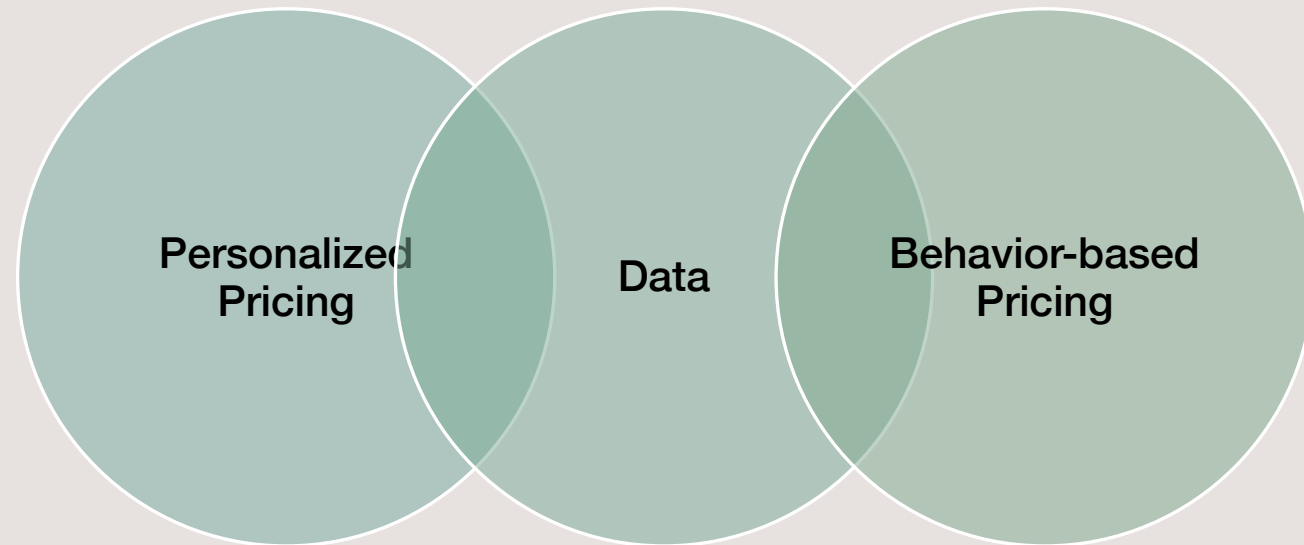
Pricing of Data

o The **importance of data in business is increasing rapidly**

o Data is important in all areas of the company

o Data is traded through data marketplaces

o Relevant data: **sensor data**, geographic data, **personal data**

o Factors for the value and **price level of data**: **freshness and level of detail**

o Data marketplaces: Xignite and **Microsoft Azure Marketplace**

Personalized and Behavior-based Pricing

Personalized Pricing

- With the help of user data, **personal offers** are made

- Goal: to have the **most detailed picture of the customer** available

- **Privacy is a major point of contention**

- Is viewed quite critically in politics and society

Behavior-based Pricing

- Here, too, **user data basis**, but with **reference to the past**

- The **focus is on the customer's purchase history**

- In practice: **Internet cookies** and automatic data collection

- Problem for both strategies: **companies are not transparent about the data usage**

Outlook into the future

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o **Pricing will remain highly relevant** across all industries in the future

o **Environmental and climate policy** will have an **impact on prices**

    -> **companies** like Apple have already **set their own agenda**

o **Algorithmic pricing** will become hugely relevant in the 2020s

o **Bundling** as a pricing strategy **is experiencing a revival with personalized pricing and data usage**

o **Value-based pricing** and perceived value are also gaining in importance

Time for Questions & Discussion

Sources

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