

Stakeholder motivation

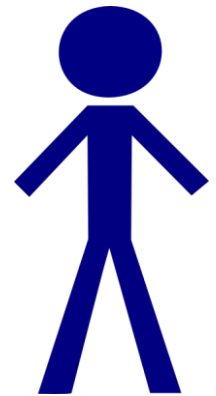
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IoTSec meeting

Stakeholder model – capturing motivation

- Set of Utility Factors (UF)
 - capture an aspect of utility (importance for decision maker)
 - Initial Value – representing current state
 - Final Value – representing desired end-state
- Set of strategies that the stakeholder considers
 - strategy allows the transition from current state to desired end-state
- Mental operation that selects a strategy to maximize utility



Ontology of motivational theories

- Purpose: - organize domain knowledge
 - make comparisons possible among various traditions
 - make connections explicit among concepts
- Sources: recent papers that aim to unify/integrate various theories and approaches
- Currently contains:
 - 47 papers spanning a century
 - 21 theories
 - 373 concepts covering major concepts including: Instincts, Needs, Values, Desires, Goals

Loss/harm avoidance

- **Universal, basic motive of humans**
- Theories that address different forms of loss avoidance motivation:
- Approach-avoidance motive – McDougall, Murray
- Field theory – Lewin
- Reactance theory – Brehm
- Regulatory focus theory – Higgins, Molden
- Self-enhancement theory – Taylor, Brown
- Terror management theory - Becker
- 16 basic desires theory - Reiss
- Prospect theory – Kahneman
- ...



Regulation authorities and politics
EU policies, Data Protection Authority...

Increase revenue



DSOs

Supply of insecure devices



Manufactures of Smart equipment



Service and market providers

Increase revenue

Lack of maintenance

Overcharging

Uninterrupted electricity supply (basic needs influenced due to dependency)
Loss of comfort

Accurate bills
Loss of money

Exploit personal data for business opportunities

Exploit personal data for business opportunities

Privacy (data collection, transfer, storage..)
Loss of control over sensitive data



Home Owner
(customer)



Regulation authorities and politics
EU policies, Data Protection Authority...

Requirements that are costly to implement

Revenue

Loss of money



DSOs

Ensure installed device security

Loss of money on testing

Supply of insecure devices



Manufactures of Smart equipment

Access consumption data

Loss of data availability

Reputation

Loss of customers

Unreliable service provision

Change provider

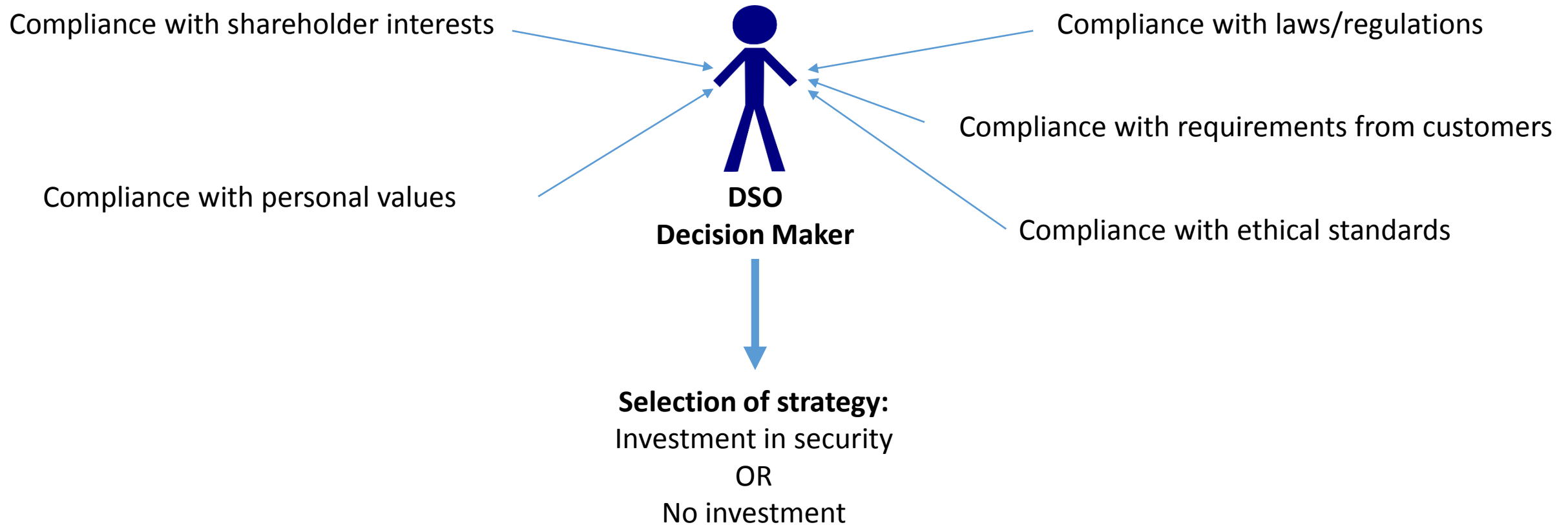


Home Owner (customer)



Telecommunication providers

Aspects of compliance



Compliance with authorities (tax paying):

- Beside Audits and Penalties for non-compliance
- **Norms**
- **Perceived fairness of the tax system**
- **Trust** in government

survey study

Compliance with moral vs social norms

- **Public observability** of choices results in more equal allocations in dictator game

experiment

Compliance in relation to peer behavior

- Providing Performance Indicators (comparing one's achievement to others) increases non-compliance when others are highly non-compliant
- Competitive environments..

experiment

Compliance with ethical standards

- Framing effect on ethical decision making: - different ethical behaviors under *gain vs loss frames*
- More unethical behavior (gathering insider information to trick competitor, lying) observed in loss frame than in gain frame

experiment

Thank you for your attention!