Why people withhold information: Information exchange as social dilemma

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Abstract The flow of information between people often does not flow as smoothly as it could. In virtual settings people could actively participate and contribute their knowledge, but they often are reluctant to do this. This situation can be explained when we consider the knowledge exchange as a social-dilemma situation. The presentation will show the theory and will present experimental finding about the information-exchange dilemma.

Keywords: Information exchange, social dilemma, experimental research

A problem which is often reported when people exchange knowledge via e-forums or shared databases is low participation. In online seminars, virtual classes or organizational knowledge management projects, many people only passively participate in the information-exchange activity by reading the other participants' messages and contributions, but they do not actively engage in making their own contributions. This high rate of free-riding could have multiple reasons: The topic being dealt with may have low intrinsic value for the participants and thus would not motivate all persons to engage in exchanging their knowledge. But even if group members are motivated to make some contributions, there is a high message threshold. People perhaps are afraid of making incorrect statements which they cannot delete afterwards, or they feel that they have not reflected upon their contributions long enough to write them down. A further obstacle is that it takes additional time and effort to externalize knowledge, because personal knowledge must be written down and worked out in a way that others can understand it. And in many – mainly organizational – contexts unique knowledge serves as power, and contributing it to a database and thus sharing it with others would mean losing this power. All these barriers for contributing raise individual costs for a contributor. And these costs lead to the situation that the decision to externalize knowledge and enter it in a shared repository represents a kind of *social dilemma* (Cabrera & Cabrera, 2002; Cress & Hesse, 2004; Dawes, 1980; Thorn & Connolly, 1987): A potential knowledge provider receives no private benefit for entering information. Instead, s/he only incurs the private costs of investing time and effort. So whereas all the other users can (at least potentially) benefit from his/her knowledge-sharing behavior, the contributor personally has no direct benefit, only costs. This means that every person would benefit more if s/he behaved uncooperatively and withheld their information. But if all individuals did this, there would be no knowledge exchange and everyone would have more costs than if all had co-operated. In the long run everyone would end up less well off.

During the last 10 years my Lab conducted many experimental studies to investigate how people behave in this dilemma. We developed several experimental setting where we are able to control people's costs and benefits and the social cues people receive from the other group members. In this highly controlled setting we investigated the influence of many different factors and empirically received answers for the following questions:

- How do people subjectively perceive this dilemma? (Cress, Kimmerle & Hesse, 2006)
- How effective are bonus systems? (Cress, Kimmerle & Hesse, 2006)
- Which impact do costs have? (Cress et al. , 2003)
- Which influence has the situation of anonymity during the knowledge exchange process? Can the provision of social awareness about the presence of other group members enhance people's contribution behavior? (Cress, 2005; Wodzicki, Schwämmlein, Cress & Kimmerle, in press).
- Do people who have more/less knowledge than others contribute more/less information to the shared repository? What are their individual opinions about equity? (Cress & Kimmerl, 2008)
- Should knowledge exchange environments provide identifiability in order that every group member gets information about the contribution behavior of all the other group members (Kimmer, Cress & Hesse, 2007)
- How do social norms influence people's contribution behavior? (Cress & Kimmerle, 2007)
- How can knowledge exchange be influenced by the design of the human-computer interface (Kimmerle & Cress, 2008).

These finding together provide a broad picture about how people behave in the information-exchange dilemma and which factors influence their motivation to share knowledge. In general the results show that the barriers to contribute are very high and the subjectively perceived costs are influential. The finding show that there is no easy solution to the motivational problem, but it is a bundle of factors which have to be regarded.

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