Social Micro-Payments in Enterprises

How to Foster Intrinsic Motivation and Overcome Social Dilemmas

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Implicit Contracts, Overjustification Effect, Social Dilemma, Trust Capital, Awards

This paper presents a management tool named 'Social Micro-Payments in Enterprises' designed to deliberately invest in trust capital as a key success factor for knowledge enterprises. We explain the problems of generic incentives regarding the employees' intrinsic motivation and the semi-optimal outcome of social dilemmas by using the concept of implicit contracts. Subsequently, we demonstrate socio-psychological mechanisms to improve the quality of implicit contracts, like communication, participation and awards. Examining the underlying conditions of implicit contracts in detail, we present necessary prerequisites for the internalisation of values and the build-up of system trust. Based on this theoretical framework we construct a new management tool and deliver a best practice perspective.

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1. Introduction

"Tis impossible to separate the [chance of] good from the [risk of] ill" (David Hume).

Who would have thought at the beginning of the 21st century that the largest and most successful encyclopaedia in today's world is almost completely based on voluntary participation? Wikipedia excelled against prominent and well-endowed competitors on its way to world leadership, including Microsoft Encarta and Encyclopaedia Britannica. The online participation that enabled this unexpected development was not induced by payments but was seemingly intrinsically motivated. People posting or reviewing articles on Wikipedia contribute to a worldwide collective good without getting paid. Their individual reasons for doing so may differ – some may simply like the project while others may want to promote a certain topic – but the overall outcome shows that the risk of delegating the main responsibilities to the users themselves has eventually paid off.

Facing such new possibilities to connect people and their efforts of contemporary social media, this paper works towards introducing a management tool based on the idea of micro-payments in order to psychologically match the wish for autonomy with the wish for social relatedness, building up trust capital and fostering intrinsic motivation.

We will start out with the common approach to the contractual relationship between employer and employee. Therefore, we will qualify the contract theory and the principal-agent problem as some general terms of the economic theory (section 2). From this, we will conclude how common incentive systems, based upon an overestimation of explicit contracts and due to a lack of implicit contracts, lead to a so-called 'crowding out' of intrinsic motivation. We will define the concept of intrinsic motivation and its importance for knowledge management (section 3). Then, we will show various phenomena that support a further improvement of implicit contracts and, simultaneously, of intrinsic motivation: namely communication, participation and 'now-that'-rewards. Subsequently, we will demonstrate the psychological mechanism of awarding (section 4). In the following part, we will extensively concentrate on implicit contracts and their underlying mechanism – trust. We will introduce a two-level conception of trust and outline the functionality of promises. Implicit contracts are strongly connected with and dependent on reciprocity and internalised values (section 5). We will give economic reasons why a typical social dilemma – which is the basis of the principal-agent problem – under certain constraints cannot be solved solely via explicit contracts.

Dealing with the public good paradigm, we will explain the concept of system trust, emphasising the importance of the crowd (section 6). To summarise this analytical part of the paper, we will illustrate the necessities and capabilities for creating trust capital in social groups such as enterprises (section 7). Thereafter, we will introduce and explain our tool 'Social Micro-Payments in Enterprises' (SMPE) (section 8).

2. Fundamentals

2.1 Contract Theory

Contract theory is based on the idea that economic actors make contractual arrangements in order to build up reliability regarding mutual expectations. Complete contracts, which are of the most importance, are defined as those contracts in which the respective rights and the behaviour of the participating parties are determined for a possible future state. However, such complete contracts remain a mere hypothetical model, as their development would be far too complex and expensive with regard to time, money and rational capacities. The absence of complete contracts in the real world leaves us with the creation of incomplete contracts to operate and manage human relations. For example, no contract explicitly forces you to be polite to your neighbours, but politeness is certainly a widely accepted social norm and can be described as an implicit contract between almost all residents in the world. Implicit contracts like this tend to be incomplete, while explicit contracts are normally aiming at completeness by continuously revising them in order to include every possible state of the world.

Thus, the concept of explicit contracts does not deliver a feasible descriptive model for reality because it leaves out the level of interpersonal and implicit expectations via informal agreements of the contracting parties. In other words, the parties "share an unwritten understanding about pay, hours, work quality, working conditions, job security, and other dimensions of employment" (Bertrand 2004: 724). From here, the bundle of all these understandings will be deemed 'implicit contracts'. In fact, the labour market is governed just as much by 'invisible handshake(s)' as by Adam Smith's 'invisible hand' (cf. Okun 1981: 9). Once these implicit contracts are concluded, "Firms will not opportunistically renege on implicit contractual agreements with their workers because they may suffer higher labour costs in the future if they do so" (Bertrand 2004: 728).

The concept of implicit contracts – i.e. where they are needed, how they may be improved, and what effects they may have – will be delineated in the following. As a paragon for the importance of implicit contracts, we will qualify the subject matter trough the principal-agent problem.

2.2 The Principal-Agent Problem

The principal-agent problem describes a situation in which a principal wants to hire an agent to perform a certain task under the constraints of an asymmetric information relation between the principal and the agent. One may transfer the principal-agent constellation to various situations. In this paper, however, we will concentrate exclusively on the relation between employer (principal) and knowledge worker (agent). The employer is interested in the manpower of the employee, who in turn demands stable and fair wages in order to plan with a sense of security.

In the academic discussion, the problem is generally described in terms of diversified opportunistic behaviour on behalf of the agent. According to this view, most agents can be described along the following aspects: hidden information, hidden action, and hidden characteristics. Here, one may distinguish two situations: before the explicit contract is enforced ('ex ante') and once the contractual arrangement binds ('ex post') (cf. Jensen/Meckling 1976: 305ff.).

- 1. Agents may 'hide information' from the principal if they have knowledge about some outside effects that could influence their future work ('ex ante').
- Agents may 'hide actions' because the principal does not have the possibility to supervise and control all their actions ('ex post').
- 3. Agents may 'hide characteristics' if they have not shown all of their qualities or flaws before the contract with the principal was concluded ('ex ante').

The traditional measures to solve such problems involve designing an incomplete contract that sets incentives and control mechanisms to let the agent (worker) not abuse the concessions of the principal (employer). The mechanism behind this design is the desire to create an interest alignment between principal and agent, which is sought through variable incentive wages, bonuses and control systems. With respect to these approaches, one clearly sees the concentration of theoretical approaches on incomplete and explicit contracts. As Hiller points out:

"Indeed, the standard principal-agent theory predicts that an explicit contract provides more incentives to workers than an implicit contract. Consequently, this latter should have vanished over time" (2008: 2).

By describing the principal-agent problem, we laid down the foundations for working out the meaning of implicit contracts and the borders of explicit contracts. Therefore, we will further concentrate on the general and psychological effects that can arise from the incorrect design and use of incentive systems in knowledge companies.

3. Designing Incentive Systems

3.1 Overjustification Effect

"With other words, rewards could effectuate a strange kind of behaviour: they are turning a game to a graft" (Pink 2009: 7), as the quote by Daniel H. Pink argues, the problems that arise from the application of bonuses and incentive systems in knowledge-based enterprises¹ are manifold. Moreover, Pink hints directly at the psychological impact that incentive systems have on our intrinsic motivation to work. Intrinsic motivation is, according to Frey and Osterloh, the root of and the condition for the joy of working and job satisfaction, intrinsic adherence to values and norms such as fairness, ethical norms, team spirit, and achieving one's aims. Here, one can already perceive the importance of intrinsic motivation for the quality of implicit contracts. In contrast, examples for factors influencing extrinsic motivation can be the appreciation from others, wages, bonuses, or grades that can be managed by explicit contracts (cf. Frey/Osterloh 2000: 25ff.).

In their seminal paper from 1973, Mark Lepper and David Greene discovered the 'overjustification effect'. From a psychological standpoint, it is described as the phenomenon that "subjects [in the expected-award conditions] show less subsequent intrinsic interest in the target activity than subjects in the unexpected-award and no-award conditions" (Lepper/Greene 1973: 130). But what does that mean for the daily routine and why should it be a problem? Before determining

¹ Knowledge-based enterprises are businesses that deliver knowledge-based products or services and therefore are strongly dependent on their intellectual capital. (Brinkley: 2008: 5).

the reasons for the foundations of these results, the constraints under which they appear, and the importance of subsequent intrinsic motivation or interest, let us take a look at some examples.

3.2 Examples: Bob and the Kindergarten Teachers

Let us imagine Bob, who is working as a car designer in an enterprise. Bob truly loves inventing and creating new cars and has dreamt of doing this since he was a child. He considers himself to be appreciated and well-paid in his job. Due to a restructuring measure, the management of his enterprise decides to set him an incentive to finish more drafts. Let us imagine that it is decided that he is to be paid an extra of €200 for every new draft. What is going to happen, according to the overjustification effect? After a while you will notice that Bob will not produce drafts that are as good as those he made before. To be sure, he will increase his output in order to create quantitatively more drafts, but the originality and quality of the drafts will decrease. In fact, Bob will not seem to commit as much as before. What is the problem? In response to management's incentive, Bob is focused only on pitching new drafts in order to gain the bonuses, which takes away from him the ability to enjoy his work and consequently his capability to be creative.

The decision to introduce variable wages is a result of the principal-agent perspective and the assumption that one can regulate everything via the design of an explicit contract. One can find a similar result if kindergarten teachers give candies to the children for every painting they submit: They will eventually show less interest in painting than before (cf. Pink 2009: 21).

The effect can also occur with expected punishment. In a school in Israel, the kindergarten teachers had a problem with parents who were picking up their children too late, because some of them had to work longer every day. The teachers asked for more parents' support, but only with minor success. Therefore, they set up a financial punishment for every 10 minutes they had to wait for the parents. The result: Parents came even later than before. Why? By using financial punishments, the educators changed a formerly personal relational obligation between themselves and the parents into a transactional obligation. The guilty consciences (or cognitive dissonances, described below) that the parents had when coming to late changed into free-rider behaviour, where the parents felt that they could use a service and let their children stay longer in the kindergarten (cf. Gneezy/Rustichini: 11ff.).

In general, one may therefore conclude that it is, on the one hand, very difficult to trigger intrinsic motivation, while it is, on the other hand, very easy to destroy it. Thus, the overjustification effect should, if possible, be avoided.

3.3 Reasoning for the Overjustification Effect

Why does the described effect appear under expected reward conditions? Generally, one has to distinguish between 'expected rewards', also called 'if-then'-rewards that are paid for a predefined action that has been delivered by the agent at a particular time, and 'non-expected rewards', also called 'now-that'-rewards, which are distributed spontaneously for a reached goal or a particular effort.

The perception of every reward has two sides, an informational or relational and a controlling side, whereas the latter effect is much stronger for 'if-then'-rewards. When receiving such a reward, its control function lowers the self-autonomy of the rewarded individual, which partly explains the overjustification effect: from a certain moment on, the controlling outweighs the informational character. The mean of a reward, the original intention of which had been to motivate a better outcome by informing the individual about what is good, has become an end in itself and now controls the behaviour of Bob, who is just focusing on submitting as many drafts as possible in order to get the bonus (cf. Frey/Osterloh 2000: 30).

Additionally, expected rewards may evoke a change in the psychological relation between principal and agent. If this is the case, a former environment of trust, in which the principal knew that Bob does a good job, may be transformed into an environment of mistrust where only the transactional character of the relation remains. This change results in impersonal and opportunistic behaviour, as illustrated by the kindergarten example. The efficacy and modes of actions of trust and mistrust will be analysed in section 6 (cf. Frey/Osterloh 2000: 34ff.).

3.4 Intrinsic Motivation and the Management of Knowledge

Every enterprise has a 'resource pool', which contains all soft factors and routines such as good relations to customers and suppliers, a good image, a special kind of corporate culture, fairness and a kind of team spirit. Accordingly, it is obvious that this pool represents a main strategic resource in knowledge-based enterprises. Only the cultivation of intrinsic motivation enables employees to

participate and further develop these pool resources, as these fields cannot be measured explicitly in financial terms (cf. Frey/Osterloh 2000: 35ff.).

An effect that accompanies the neglect of pool resources is the refraining from unappreciated and hardly measureable goals and achievements such as customer satisfaction. When introducing fixed goals, employees will tend to demand too little of themselves and to take the easiest way out: shirking responsibilities is highly probable. Intrinsic motivation, in contrast, is the foundation for the development of creativity and innovation. Sam Glucksberg, a psychologist at Princeton, has researched this phenomenon by testing how quickly two groups could solve a brainteaser: While the first group had no prospect of a reward, the second one was offered monetary bonuses related to the quickness of problem solving. The second group required on average three and a half minutes longer than the first one (cf. Glucksberg 1962: 36ff.). What is the explanation? Solving a brainteaser problem requires creativity and new heuristics – attributes only available through intrinsic motivation, while extrinsic incentives promote algorithmic thinking. Another aspect of intrinsic motivation, as will have been noticed, is its very strong link to the implementation of values and norms, which can be seen as a framework to create the so-called 'corporate culture'. As a result, one can conclude with Frey that "organisational knowledge coupled with intrinsic motivation of the employees is the main source for sustainable and defendable market advantages" (Frey/Osterloh 2000: 57).

As such, it can be observed that the principal-agent approach, based on incentive systems, is, from a management perspective, only useful for very generic and measureable tasks. The more complex the task gets, the less one can forego intrinsic motivation. This has major impact on a knowledge-based economy, where a lack of creativity and a neglect of pool resources would render innovations and economic success more difficult. If managers focus only on explicit contracts that contain explicit incentive systems and neglect the development of qualitative implicit contracts, intrinsic motivation will be crowded out. The endeavour for the future of the knowledge economy, therefore, consists of finding a balance between extrinsic and intrinsic motivation and developing adapted incentive systems that do not conflict with the latter. As a possible part of the solution in the following section we suggest three mechanisms for the improvement of implicit contracts: communication, participation and awards.

4. Mechanisms for the Improvement of Implicit Contracts

4.1 Communication

What is the special benefit of successful communication networks inside an enterprise?

"[E]xchanging mutual commitment, increasing trust, creating and reinforcing norms, and developing a group identity appear to be the most important processes that make communication efficacious" (Ostrom 1998: 7).

This quote by Nobel Prise winner Elinor Ostrom emphasises the outstanding importance of communication within groups and companies. Moreover, empiric research by Frey and Osterloh shows that uncomplicated and institutionalised channels of communication decrease transactions costs, whereas it is not important whether the communication is institutionalised or not (Frey/ Osterloh 2000: 225ff.). Additionally, humans generally behave in a more cooperative manner if they communicate.

The following experiment conducted by the University of Zurich shows this explicitly: Scientists gave the participants a certain amount of money and left it up to them to decide whether or not they would pay an arbitrary amount to another person. The observation: If the other person was unknown, they donated on average 26% of their total amount. However, if the participant could communicate with the recipient before the transaction, they spent on average 48%.

Furthermore, only well promoted communication networks can enable a 'bottom-up' debate about what, why, and to what extend certain norms are important in an enterprise. Thus, communication networks provide an initial investment to create norms that can be the groundwork for cooperative behaviour. Additionally, employees tend to perceive a process as fair if they have the possibility to share their opinions on the issue. This socio-psychological effect, called 'procedural fairness', enhances a "bigger acceptance even from inconvenient decisions" (Frey/Osterloh 2000: 225). Especially in knowledge-based enterprises where incentive systems can lead to unintentional side effects, a mutual atmosphere of institutionalised communication appears to be crucial to create a framework for functional implicit contracts. To sum up, institutionalised communication tends to make individuals more cooperative and forms the basis for the development of common norms and for the emergence of procedural fairness.

4.2 Participation

By defining participation in enterprises, one can distinguish between immaterial and material participation. Material participation denotes the financial participation of employees through share-options and wages, while immaterial participation can be defined as the "direct or indirect participation of the employees in information, coordination and decision-making processes of the Company" (Martins et al. 2005: 14). With regard to the above-mentioned description of intrinsic motivation, it seems obvious that more immaterial participation bears the potential of the self-setting of goals and, hence, an increase of intrinsic work motivation. Material participation, by contrast, can obviously be described as providing for extrinsic motivation. By participating, an effect called 'psychological ownership' can occur. Potential psychological ownership can refer to the entire enterprise as well as to specific aspects of the organisation such as the team, work equipment or the work itself.

In terms of our previous example, Bob could experience such psychological ownership in three different dimensions: Firstly, there could be the perception of self-efficacy. Bob may have the general confidence that he is able to accomplish a given task for the organisation and will, hence, make a difference. The second dimension of psychological ownership is accountability: Bob may tend to make individuals and circumstances accountable for failures and misguiding decisions concerning his organisation, because it "is the nature of psychological ownership that owners want to achieve 'the best' for their ownership objects" (Martins/Pundt/Nerdinger 2005: 24).

With the third and highest level of ownership, the enterprise will become part of Bob's self-conception: identification is reached.² Regarding its implementation, psychological ownership appears to be more likely if

"[...] individuals can exert the ownership rights related to their formal possession [(extrinsic motivation)], receive information about the object [(communication)], and have an influence over it [(participation)]. Consequently, financial employee participation will only lead to a high level of psychological ownership if it is accompanied by mechanisms of immaterial participation in the company" (Martins et al. 2005: 25).

² See in this volume Hofmann/Habenschuss/Sonnenberg 2014:181.

This statement by Erko Martins suggests that in order to evoke psychological ownership, material participation is only one ingredient in addition to communication and participation. This insight can be supported by research by Frey and Osterloh which tries to measure the quality of implicit contracts through the variables of trust, loyalty, corporate commitment, job satisfaction and working atmosphere, and determined that institutionalised participation and communication have positive impact on all five categories (cf. Frey/Osterloh 2000: 227ff.).

4.3 Awards

Awards express a form of extrinsic motivation, although they can also be immaterial. The main characteristic of awards and what distinguishes them from rewards is that they typically come as a surprise for the recipient. Therefore, the informational quality outweighs the controlling dimension of the award. Apart from the famous example of the Academy Awards presentation, an award is usually given 'now-that' and not 'if-then'. In fact, this absence of a controlling component establishes positive emotional reactions that will be specified in section five of this paper.

It could be argued that a person, who already received an award, cannot be motivated for future actions. However, studies show that the opposite is true, and a likely reason for this may be found in the concepts of justification and self-image: The recipient, if potentially able to reject the award before it is given, will try to prove himself loyal to the spender's reasons for the award. Thus, the reception of an award provides the commitment from the agent to adapt his self-concept onto the content of the appreciation. One may even understand this adaption as a promise to the spender and oneself (cf. Frey 2010: 1ff.). Furthermore, every award can be perceived as a contentious signal to the community, illustrating the values and measurements of the spender, which are apparently fulfilled by the receiver. In this sense, awards can implement role models (section 5).

As opposed to payments where an adequate measurement of performance and its translation into money is often impossible, an award expresses general appreciation and can thus scale and honour efforts that cannot be measured. Regarding this gradation, the character of awards involves a certain kind of publicity, while payments are normally treated as a private issue.

This publicity remains a significant and lasting motivational aspect for the recipients of awards: The reputation they possibly gain increases their willingness to contribute their work to the community. Regarding the development of pool resources, this increased desire to contribute constitutes an advantage of awards as opposed to normal financial payments. If awards are connected with

money the amount will mainly symbolise the importance of the award. Additionally, the meaning of an award obviously also depends on the status of the spender as well as on its uniqueness. If everyone could received a Nobel Prise for anything, it would certainly lose much of its value.

After qualifying our theoretical work with the principal-agent problem, we have here delineated the problem of displaced intrinsic motivation that emerges from traditional incentive solutions. In fact, we have shown that communication, participation and a certain usage of awards in terms of extrinsic 'now-that'-motivators can improve the quality of implicit contracts, and that those have to be the foundations for the development of new approaches in order to solve the principal-agent problem.

5. Trust as Underlying Mechanism

5.1 Reduction of Complexity

Given the situation of a job interview, supposedly few applicants would indicate 'trusting' as one of their personal strengths (quite unlike 'trustworthy'). The reason may be that in such 'professional' contexts, many would rather consider trust a weakness. Annette Baier, a female philosopher investigating trust in terms of ethical behaviour, seeks to explain this repudiation with the 'psychology of adolescents': While every newborn has to show an innate trust (towards the parents) in order to survive, the ability to overcome this infantile "readiness [...] to initially impute goodwill to the powerful persons" and its replacement with "vigilance and self-assertion, by self-reliance or by cautious, minimal, and carefully monitored trust" is seen as an important step towards adulthood and is subsequently "glorified as the moral ideal" (Baier 1994: 108).

In order to deal with the term 'trust', we will first place it in contrast to the mechanism of mistrust, and then examine the motives a person may have to trust and to fulfil trust on two levels. "Trust reduces social complexity, therefore it eases the life by overtaking a risk", writes sociologist Niklas Luhmann (1973: 78). Such reduction of complexity is necessary for us to create viable life-situations we can handle and base decisions upon. However, let us first look at the other side of the coin to reduce complexity: mistrust. What is the difference between the two mechanisms? When we display mistrust, we most often have a specific negative expectation of how the other party will act – mistrust is grounded in a narrow view (cf. Luhmann 1973: 78ff.). Optimal incentive

contracts, as defined above, are settlements spiked with mistrust: As we expect something unpleasant from our counterpart, we try to protect ourselves against it by explicitly specifying fines for misbehaviour and rewards for good behaviour. Therefore, we try to reduce risks instead of taking them on. When trusting someone, on the contrary, we do not expect one specific action from the other party, but rather a generally good-willed attitude within a generously wide frame of allowed actions. Therefore, implicit contracts are trusting, as they do not explicitly mention expectations. Can such a reliance on good will only be naive?

5.2 Two Levels of Trust

Mostly, the reasons for trusting someone are based on the perception of the person whom to trust. As mentioned above, the most basic, infantile level of trust is driven by the motive to trust such people who have power over oneself and that one is dependent on. In such cases, one could easily imagine that this level of trust is very likely to be abused. However, this view would neglect one scientifically observable mechanism that is likely to occur on the side of the one trusted: As the brain region Nucleus Caudatus that forms part of the human reward system, which is important for the establishment of trust and fairness, is stimulated in such cases, a person that receives trust as a reward is affected positively on an emotional layer and more likely to justify it (Priddat 2010: 47f.). Thus, the trusted can be "capture[d] and hinder[ed] emotionally by [the] demonstration[s] of trust" (Luhmann 1973: 71). Still, trust-giving and –receiving in this basic sense is rather primitive and seems unlikely to promise reliable persistence.

The second level of trust is more reflective. As it can take place in interactions with people on the same level of power, it is more voluntary than the first variant of trust (cf. Baier 1994: 116f.). In these cases, the central motive for a person to trust another is a certain kind of promise given by the latter. It is important to note that promises – depending on their degree of explicitness – may mean quite different things: They may range from rarely trust-dependent, safeguarding contracts (that contain fewer trusting (implicit) than mistrusting (explicit) elements) to mere votes of confidence (cf. Baier 1994: 118f.). The more trusting and, implicit a promise becomes, the more it focuses on the promisor's identity and integrity. It becomes more relational.

The following considerations will relate predominantly to the second kind of promise, showing of what use integrity may be in terms of reputation, and how promises can be a very effective way of making people internalise values. Firstly, however, one has to address the question of how

a promise may be focused on a person's identity. Given the existence of a "reflection of the own self-display" in the person that is to be trusted, his or her outwardly shown character traits can be called promises in themselves – because a person naturally "feels obliged to his or her own self-concept" (Luhmann 1973: 67). In other words: The signals a person sends out to others that suggest certain character attributes have as well passed that person's own self-perception and thus represent a more or less conscious promise about oneself to the outer world.

5.3 Reputation and Reciprocity

"[W]hen the probability of two individuals meeting each other again is sufficiently high, cooperation based on reciprocity can thrive and be evolutionarily stable in a population with no relatedness at all" (Axelrod/Hamilton 1981: 1394).

This famous hypothesis by the political scientist Robert Axelrod³ suggests that the probability of a repeated encounter is a very strong factor with respect to building up cooperation. More explicitly, organisations or working teams that fulfil the constraint of recurring reciprocity are likely to trigger off "reputation effect mechanisms held by a network of relational contracts" (Zanini 2007: 33). Relational contracts are a sub-form of implicit contracts and consist of promises concerning identity that can create reputation. Reputation itself can contain a set of character attributes (for example, competence), but always has to imply trustworthiness. As mentioned above, signalling those attributes can happen consciously or not, but if someone purposefully tried to achieve a good reputation, feigning admired attributes would be a feasible option.

This approach entails many difficulties, though, and its chances of lasting success are low: As mentioned before, trust is a mechanism that reduces social complexity. Therefore, "if someone misuses trust, one has to overtake this complexity oneself" (Luhmann 1973: 70). To illustrate this, let us assume a situation where one wants to impress a person and displays a certain conviction one, in fact, does not really have. On the level of analysis of promises, this means that one makes a promise about one's character; if the addressed person 'accepts' it and therewith trusts the promisor, not actually being this character would be like misusing trust. Meeting this person again then requires remembering the expectation one has created, as one would not fulfil this expectation

³ In his empirical studies, Axelrod proved that the strategy 'Tit-for-Tat' – an 'a priori' cooperative, but very provocative behaviour in social interactions – was more successful as opposed to less cooperative strategies.

naturally; one would have to take on social complexity. Subsequently, "justify[ing] trust is easier as rule of conduct in all lasting relationships" (Luhmann 1973: 70). Justifying the trust in promises about one's character is the meaning of behaving with integrity. Thus, integrity is the easiest way to achieve and preserve reputation (in the sense of trustworthiness).

This is the first reason why promises and, similarly, relational contracts can work: They are reliable if "[the participating] agents [...] exhibit preferences for reciprocity" (Hiller 2008: 2), or in other words, if they expect iterative encounters between them, because their integrity and therefore reliability is highly probable due to the building up of reputation and the chance of reducing social complexity.

5.4 The Free Decision to Give and to Keep a Promise

It is worth noticing that a promise about one's character does not have to be explicitly given at all: On this level of promises, there is the possibility of unconsciously inspired confidence and of the subsequent reception of unwanted trust. Still, before the emergence of an intentionally reliable trust relationship, the trusted person should always have the possibility to reject it.

This normative statement is reasonable not only because of the general right of self-determination, but also as it entails a psychological effect interesting for motivational purposes. According to the concept of cognitive dissonance, people will feel a certain amount of discomfort if they harm their self-concept, and they may do so in two ways: Either if they purposely did something that appears silly to themselves, or if they – purposely or not – harm someone else with their behaviour (cf. Aronson 1994: 238f.). While the latter situation can basically be described well with the traditional mechanism of guilty consciousness, the former is more interesting in combination with the concept of promises.

Let us come back to our example and imagine that the boss of Bob's car manufacturer someday comes up to Bob and says: "Mr Andrews, I appreciate very much the way you work together with your colleagues." Bob, who feels honoured by this, answers: "Thank you very much." Clearly, the compliment is a statement about Bob that he can harmonise well with his own self-conception. A few days later, however, the management sets up a little competition among the employees for the best draft. The winner will receive a prise; however, if a team created the draft, the prise will have to be evenly distributed among its members. While Bob works on his draft, a colleague addresses him and confesses that he does not have a good idea yet, and then asks Bob if they could work together.

Bob already had a good idea himself, though. Now, it is his decision whether to cooperate or not. If Bob decides not to cooperate, he will justify this with respect to the prospect of receiving the full prise. Perhaps he will ask himself whether he is not as cooperative as he should be. To clarify this issue for himself, he will either evaluate that special situation as not being a typical situation for cooperation, or he will lower his own aspirations for being cooperative, reasoning that one should also be an individually ambitious person.

If, on the other hand, Bob decides to cooperate, he will be distracted by the fact that he obviously did a stupid thing: He will have chosen to cooperate, though he could easily have had the prospect of the full prise. But why did he do so, then? Probably because he accepted his boss's compliment so light-heartedly that he felt an obligation to it whilst at the same time feeling somewhat stupid for this. Nonetheless, as Bob obviously does not consider himself a silly person, he will begin to come up with reasons for his behaviour. Therefore, he will begin to think that, in this case, being cooperative was really worth it: His colleague is a really nice person, and working together is a lot more fun. Furthermore, Bob believes that his colleague will certainly return the favour sometime. To sum up: What happens is that Bob will begin to think of reasons why his colleague is a nice guy and, alongside, will discover some advantages of cooperation in general. The generality descends from the fact that his reasoning takes place before the actual experience of this very cooperation, only induced by his cognitive dissonance. In this way, the next time the management announces a competition, Bob will not feel that stupid again for cooperating. Perhaps, he may even propose collaboration to his colleague the next time. The reason is that Bob arrived at the advantages of cooperation for himself, which made them become part of his own evaluation system. Bob learned the value of cooperation.

5.5 Self-Justification and Cognitive Dissonance

The process that takes place after Bob has decided to cooperate is called self-justification after the experience of a cognitive dissonance (cf. Aronson 1994: 213f.). The latter occurs as he opts for an action he comes to regret afterwards – even though, in fact, he will not be able to regret his decision to cooperate, as he feels obligated to it due to his former decision to accept his boss' compliment. This acceptance created an obligation because similar to the awards mentioned above the compliment was a statement about his identity. As Bob accepted it as part of his own

self-concept, he simultaneously sent a signal back to his boss promising to stick to this value. To illustrate it metaphorically: his boss offered Bob a relational contract (see above) and he signed it.

Let us assume for a moment that Bob's boss did not compliment him, but instead sent out a newsletter to all employees, which said that cooperation is demanded from everyone, and that non-cooperative behaviour will be sanctioned if noticed. This would have had an impact not primarily on Bob's decision, but on his subsequent reasoning. Now, if he is cooperative, Bob will not blame himself for being silly at all: The question "Should I not have known it before?", and thus the feeling of regret will not arise. Bob will perceive the 'disadvantage' of sharing the prise with someone else as not freely precipitated by him, but as enforced from the outside. In other words, he will not – induced by a cognitive dissonance – be intrinsically motivated to justify his cooperation. Instead of having deliberately agreed to an implicit, relational contract, he was forced into an explicit, 'complete' one. Thus, his justification will be taken in by the extrinsic motivation of (in this case) a threat.

The mechanisms of cognitive dissonance and self-justification in this form have been mainly researched by social psychologist Elliot Aronson, who sees them as "a big step for the development of a steady system of values" for an individual, as it "leaves the possibility to find an own justification" (1994: 218). In combination with trusting, one may then list the following steps of a process: Demanding a promise of someone – via a compliment, for example – can be the necessary prelude for a situation in which that person comes in the conflict of...

- ... keeping or breaking the promise. If the person keeps the promise, although the opposite would have been more reasonable...
- ... the person will feel stupid not for keeping the promise, but for making it in the first place, as it 'should have been clear' that this promise would not be easy to be kept. Therefore, the person will experience the unpleasant feeling of a...
- ... cognitive dissonance. To solve this, however, the person will be intrinsically motivated to think of other reasons for keeping the promise, i.e. the person will be longing for...
- self-justification. As an outcome, the person will then internalise these reasons, which can
 be special character attributes of the persons involved as well as reflections on the subject of
 the kept promise itself.

The process could alternatively be described as the sequence of being offered a relational contract, singing it (metaphorically), regretting this decision afterwards facing the effort to adhere to the contract, and finally reasoning in favour of it in order to solve the cognitive dissonance.

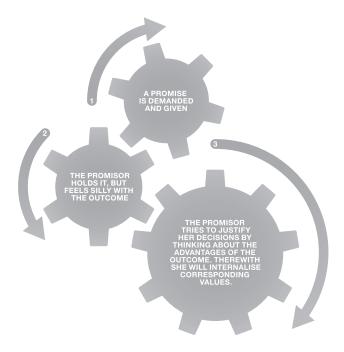


FIGURE 1: THE SELF-FULFILLING FORCE OF A PROMISE (OWN SOURCE)

5.6 Moral Values and Norms

It can be reasoned, as such, why intrinsic motivation is the root of personal adherence to values and norms: These components of corporate culture have to be internally reasoned and justified in order to become binding for the individual. Rules of conduct based solely on compliance (extrinsic motivation) are, in this light, not very likely to induce such individual reasoning. What is crucial about promises is the ability of making a free decision of whether to keep or break it. Only this

form of freedom, in combination with not being forced (but perhaps nudged) to promise something (or, accordingly, accept trust) in the first place, can ensure the functioning of the presented process of self-justification and internalisation (cf. Aronson 1994: 55f., 239f.).

Of what importance are these commonly shared values, such as cooperation or fairness? According to business ethicist Josef Wieland, "[the functioning of] implicit [...] contracts [is] dependent on the former efficacy of moral standards" (Wieland 1993: 13). What is the reason for this? Let us look back at the example of Bob's cooperation: Once he had justified to himself why cooperation with his colleague and in general was a good thing, his adherence to the implicitly given promise to his boss became much more likely. In general, most implicit contracts are likely to be grounded on some general idea or conviction (like the idea of cooperation); if such a moral conviction is already internalised in the self-conceptions of both parties, it will be most helpful for the contract's functioning. Therefore, the education of such values through the self-fulfilling force of promises is likely to reduce the risks of implicit contracts.

To conclude, steady trust relationships can therefore mainly be built on the second trust level, i.e. the level of promises. The emotional affectedness on the first level of trust only plays an intensifying role if trust was transmitted in a rewarding way (e.g. with awards or compliments). Implicit contracts depend on formerly internalised moral values. These values can be induced into people by the self-fulfilling force of promises on identities (offering and accepting relational contracts) that is explainable through the effects of cognitive dissonance and self-justification. Given reciprocal expectations of iterative encounters, a steadiness of such character attributes (the adherence to the relational contract) is likely, as integrity is the easiest way to maintain reputation.

6. Approaches to Social Dilemmas

6.1 The Prisoner's Dilemma

As already shown in the beginning, the traditional approaches to the principal-agent problem are incentive and control systems based on explicit contracts. However, regarding the outcomes for both parties, such a system of mistrust can only be the second best option. The reason for this is best demonstrated with the so-called 'Prisoner's Dilemma' (cf. Tucker 1950: 1ff.).

	P2 COOPERATES (REMAINS SILENT)	P2 DEFECTS (CONFESSES)
P1 COOPERATES (REMAINS SILENT)	- 2 / - 2	- 6 / - 1
P1 DEFECTS (CONFESSES)	- 1 / - 6	- 4 / - 4

FIGURE 2: PRISONER'S DILEMMA (OWN SOURCE)

The matrix shows that the Prisoner's Dilemma describes a situation between two players. Imagine there are two prisoners who committed the same crime, who are now being held in two different cells without being able to communicate with each other. The state's attorney attempts to make a deal with them: Although the jail sentence for the offence committed is normally six years, they can get out earlier if they confess. When both confess, they will both be imprisoned for four more years. If both remain silent, they will both get only two more years. However, if one remains silent and the other confesses, the principal witness regulation will be effective, meaning that the one who confessed gets only one year, while the silent one has to serve the full six years.

We are observing this situation from the prisoner's point of view: Cooperation for both means remaining silent, thereby generating the best outcome for both: a common good. However, considering the scenario with only one prisoner in isolation, the situation presents itself in a different light: If player 1 assumes that player 2 will be cooperative, the only rational thing to do for player 1 will be to defect, because, in this case, his outcome is even better. But player 2 will be aware of this beforehand, and so, fearing such exploitation/abuse, will defect as well. They will both confess, thereby arriving at an outcome not optimal for both of them, even though they have decided on a rational choice basis. In the Prisoner's Dilemma, two mistrusting players will both prevent their personally worst outcome, but taken together will yet not reach the first best outcome. They will not rely on each other, assuming that they both would always choose the personally best outcome instead of the commonly best.

The usual solution of mistrust to this scenario is a third party that threatens the participants with sanctions and makes a defection too costly: which is the concept of the principal-agent relationship. This effort, though, produces costs in itself. As mentioned regarding the principal-agent problem, this would be the agency costs⁴ as well as the negative results of the overjustification effect. These costs make the first best outcome unachievable.

⁴ They are defined as the result of firstly, the monitoring expenditures by the principal; secondly, the bonding expenditures by the agent; and thirdly, the residual loss (cf. Jensen/Meckling 1976: 308).

Only if both players trusted each other beforehand would they arrive at the first best outcome. However, as this cannot be presupposed, the question arises how such implicit contracts could be established. According to Wieland, "moral goods [such as trust] must, from the economical perspective, as well [...] be evaluated by prises" (Wieland 1993: 16). This shows that the use of trust relationships implies costs: They have to be created – the implicit contract has to be arranged – before they can be used (cf. Luhmann 1973: 84ff.). Still, once moral goods, like the internalised sense of cooperation, are created, they do not necessarily have to be enforced the next time. In contrast, controlling and sanctions have to be in place all the time in order to remain effective. Therefore, it can be assumed that the more social dilemmas occur between the two players, the cheaper the solution based on trust, once established, will be.

6.2 System Trust

In real-life situations, social dilemmas like the Prisoner's Dilemma occur mostly with more than two players involved. If collective goods are involved, they are called public good paradigms and generally describe situations, in which individuals are dependent on the allocation of such goods. The problem of these situations is that for everyone, there is an incentive to act as a free rider, which means letting the others pay for the allocation of the good and consume it for free (cf. Leschke 1996: 85). A prominent case is the payment, or evasion, of taxes. Generally, tax collection is enforced in order to ensure the functioning of the system: The government demands reports from its citisens and threatens them with sanctions. It is the nature of the beast, though, that the mechanism of sanctions can never be complete. As this seems to hold true in general, there is a certain necessity for the voluntary good-will of the members in all public good paradigms. The relative importance of this 'moral' behaviour will be shown in the following.

An empirical study on the collection of taxes found out that the opinion on taxation within the society has a significant impact on the extent of tax evasion, while the severity of its punishment and the rate of controls were less influential (cf. Leschke 1996: 89). On the contrary, it was assumed that extensive measures by the state sent the wrong signal to the individual because they implied that the majority of the other citisens evade taxes. Consequently, taxpayers believed that they were paying too much in relation to the others. The study shows that the fear of being exploited, combined with the prospect of not paying taxes, outweighs the fear of sanctions by the government, even though their severity and probability increase. It follows that the suspicion of

exploitation presents a great threat to the voluntary contribution to the tax system. The citisens do not trust the system.

System trust is, according to Luhmann, the "trust that others do trust a third party like I do" (1973: 76). As mentioned above, trust means the reduction of one's own complexity through the expectation of good-will in another party. Regarding tax collection, such trust would directly concern the government, therewith making the assumption of its good-willing behaviour (and competence). What, now, is the distinctive feature of system trust? "Paying taxes always is a good thing" would be an opinion that may help justify the trust in the tax system. Still, however, such a conviction would have to be very strong to stifle the suspicion of free-riding behaviour of others.

6.3 Influencing the Group

For a more convincing justification to system trust, the individual will need more information: The opinions of the group, or at least of its majority, will have to be evaluated, as trusting a system will naturally become easier "with the increasing cooperation tendency of the others" (Leschke 1996: 87). Therefore, the key to making trusting in a system simpler is to endorse communication. Within this communication, people will possibly try to have an influential impact on others, for example by way of what Leschke calls "spontaneous social sanctions" (1996: 89). These social sanctions would function on the level of compliance, i.e., on the level of extrinsic motivation, and could force those system-members who have not internalised reasons to trust in the system themselves to collaborate. They could, in the same ways as the sanctions from the government, also have an effect of habituation on those formerly free-riding individuals (cf. Aronson 1994: 55f.).

The other way of influencing potential free-riders would be to make them internalise respective values that would make them justify their system trust. Such a process could be induced by the self-fulfilling powers of promises as they were displayed above (e.g. the instrument of compliments could be used here). Additionally, with every person that noticeably joins the contributing part of the group, the task of trusting in the system for all the others will become easier:

"[...] if individuals believe that everybody will continue to play the trust-game, although the short run payoff from defecting is higher than the long run payoff from the rule obedience, it ensures an on-going cooperation of all parties" (Zanini 2007: 34).

Therefore, system trust can be seen as a self-enforcing mechanism. To sum up, the possibilities of a system's members to influence the group are: (1) sanctioning others to ensure compliance, (2) complimenting others to induce the process of internalised justifications, or (3) trusting in the system and informing others about it.

6.4 Between Mistrust and Trust

The solution to social dilemmas such as public good paradigms is often to be found in a hybrid between institutionalised mistrust and the dependence on system trust among its members. Accordingly, in addition to the motivation balance described above, extrinsic motivations such as controlling structures or explicit contracts are necessary in order to ensure a foundational willingness to contribute to collective goods. However, such measures should not be driven as far as to hamper system trust through signals of mistrust. After all, as Luhmann points out:

"A social system that needs or cannot avoid a mistrusting behaviour of its attendees for certain functions, needs at the same time mechanisms that avoid the mistrust to gain the upper hand, becoming a destructive force through processes of mutual increase" (1973: 84).

Addressing especially the economic environment, one must not forget that the neoclassical economy generated an "egoistic acting model figure [named] homo oeconomicus" (Leschke 1996: 96), which was chosen to be the determining actor of all its theories, leaving by definition no place for such 'weak' attitudes like trustworthiness.⁵ This theoretical background suggests a prevalence of mistrust in economic systems. Especially in this environment, system trust is rather likely to be hampered by the wrong signals. What can the above examination of trusting in a system contribute to enterprises? As we have explained above, knowledge enterprises store a lot of their value in a so-called resource pool, containing commonly shared knowledge about the "what" and the "how" of the enterprise's business. There is, however, no guarantee that employees will contribute to this pool, as this most often means additional effort. While, so far, we have laid the focus on communication and participation in order to solve this, one could also declare an enterprise's

⁵ By Luhmann's definition of mistrust, the concept of the neoclassical homo oeconomicus and of the agents in the game-theory is a mistrusting one, as it narrows the human down to a subject showing opportunistic behavior (self-interest-assumption).

resource pool a collective good of the enterprise. Overcoming the underlying social dilemma and the investment in system trust would thus contribute to one of the essential values of enterprises, which is the commonly shared knowledge amongst the employees.

6.5 Summary: Trust Capital in Enterprises

At first, we delivered a two-level definition of trust, then explained relational contracts with the promise-mechanism and showed why the latter occurs on the layer of personal identities, and has two implications: firstly, that individuals are likely to behave with integrity within repetitive relations, and secondly, that demanding promises, for example by giving respective compliments, can induce their self-fulfilment by way of the promisor's internalising of self-justifications. This last educational effect can, again, positively affect the functioning of promises or, in a broader sense, of implicit contracts. We consider such iteratively developed trustworthiness and internalised moral values and norms, all of which leading to high reliability, to be integral components of trust capital.

Subsequently, we problematised trusting systems, employing the Prisoner's Dilemma as a typical social dilemma. We reasoned that, in order to come closer to the first-best outcome, a balance of explicit as well as implicit contracts is needed, as only the dependency on trust, therefore the deliberate "investment in a trust capital, whose return is the establishment of stable expectations, which implies sinking [agency] costs" (Wieland 1993: 22), accounts for the fact that complete control is economically unreasonable. Lastly, we exemplified that system trust is highly dependent on a group's behaviour, and showed that the allowance for influential and informative exchanges between the system members is therefore crucial. We see these interactions as another integral component of trust capital.



FIGURE 3: TRUST CAPITAL IN ENTERPRISES (OWN SOURCE)

7. Social Micro-Payments in Enterprises

7.1 Social Micro-Payments in the Web

The two internet enterprises 'flattr' and 'kachingle' that both started their service in 2010 developed the business concept of Social Micro-Payments: for content on webpages that internet users appreciate, they should be able to reward the creator with a small amount of money – a so-called Micro-Payment (cf. L.M. 2011). The payment is based, unlike with other payment systems for the web like flat rate-tariffs, on a purely voluntary whish for appreciating someone's work: the access to the delivered content remains unrestricted. Peter Sunde, cofounder of the Swedish start-up 'flattr', explains the idea in an interview with Meike Dülffer: "The system is here to show that people are willing to pay for things and they don't have to be forced to pay. There is a will to give money. It doesn't have to be a payment, it has to be more an appreciation model" (Dülffer 2010).

Another interesting aspect about especially 'flattr' is its payment procedure. Every user who has a 'flattr'-account is both: a giver and a receiver. One can receive payments over a little 'flattr'-button that can be attached to own web content. To make the procedure of spending easy and feasible, the user at first charges his account with a certain amount of money (from €2 to €100). Anytime he appreciates delivered web content, he clicks on the respective 'flattr'-buttons. Only at the end of a month, the 'clicks' will be counted and the user's available amount of money will be distributed to the recipients proportionally: the user's money gets divided by the number of clicks. This approach has two advantages: Firstly, the user doesn't have to limit the 'flattering' at any time due to lack of money. Secondly, the operation of appreciating another's work remains simple, without the need to exactly measure the worth of the content (cf. L.M. 2011). Sunde: "If there is less problems with giving money, more people will give money" (Dülffer 2010).

As one can see, Social Micro-Payments in the web are driven by the user's intrinsic motivation to appreciate other's work. They presuppose internalised values like a sense for fairness and offer an easy and elegant way of voluntary participation through a fast payment procedure. Thereby, these services were a great inspiration for our tool.

7.2 Bob and the Social Micro-Payments

Bob is disillusioned with his job as a car designer. Although he received some appreciation in the situation described in section 5, his resignation is well advanced through the overjustification effect and due to a lack of trust in his corporation. He has no more intrinsic motivation to design the car of the future and thinks about quitting his job. All of a sudden, however, the management presents a new business tool that awakens his interest: Social Micro-Payments in Enterprise.

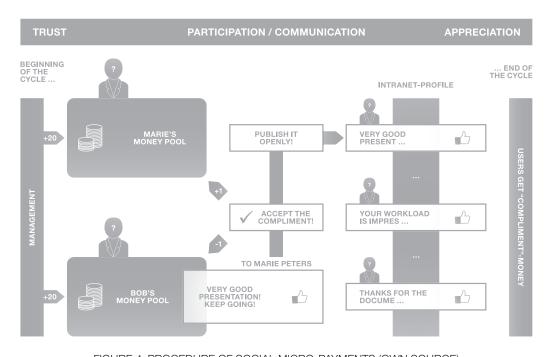


FIGURE 4: PROCEDURE OF SOCIAL MICRO-PAYMENTS (OWN SOURCE)

The six key points of the tool are:

Credit of Trust

Bob and his colleagues get the same amount of money in their intranet profile account that cannot be paid out to oneself.

Appreciation

They can communicate with their colleagues by clicking a "compliment" button on their respective intranet profiles. This action will eventually transfer a part of their own money budget to the colleagues.

Informational feedback

Bob has to give a short comment feedback with the compliment, giving reasons why he thinks the recipient has earned an award.

Transparency

Both compliment and feedback are openly visible (without any information about the transferred money) on the respective profile if both the recipient and spender agree with this. Otherwise, it will only be delivered as a private message.

Autonomy

Bob is free to decide whether he wants to participate in the tool at all. Every recipient of a compliment can decide freely whether to accept the award or not. In the second case, the transaction will be cancelled.

275

Continuity

The recipient's money will be paid out in accordance with the spender's budget at the end of a temporally randomised pay-out cycle.

7.3 Reasoning

In the following we will analyse the emergence and merits of the tool's key features: credit of trust, appreciation, informational feedback, transparency, autonomy and continuity. To apply SMPE in an enterprise or working team, an initial monetary investment is required. This money, however, is invested without imposing any constraints regarding its subsequent use and therefore communicates a credit of trust, which gives responsibility to Bob and his colleagues and allows for meaningful participation. However, one has to be careful about the exact amount that is provided by the principal in terms of the overjustification effect: The setting of a too high incentive for the employees could make them be more interested in the tool than in their actual work. Instead, the tool should only do a background job as a transmitter and supporter of social relations.

The uncomplicated form of spending is a result of usability reasons. The combination of the awards with money plays an important role in strengthening the importance of the award, the feedback and hence the accompanying appreciation. Giving a compliment can be perceived, like demanding a promise about one's personality if it is combined with appropriate informational feedback. The feedback plays the role of the subject terms of the relational contract that the complimenting person offers.

If this feedback concerns the recipient's self-concept in a complimentary way – if the relational contract is set up in mutual agreement – the foundation for a trusting interaction is laid. Also, through the mechanisms of communication and participation, a general debate may evolve about which, what and why norms, rituals, actions, decisions are important. Therewith, the kind of corporate culture that is desired and enforceable by the employees emerges, and their feeling of 'procedural fairness' rises. As a result of the participation, the effect of a psychological ownership is likely to occur, which would lead to an increasing identification with the organisation. Moreover, the feedback weighs the informational as opposed to the controlling character of the (already 'now-that') award in order to avoid the crowding out of intrinsic motivation.

Transparency correlates with the given signal character of any public award. However, the use of this instrument remains a double-edged sword if it is mandatory: Bob may not want to be a role model concerning an aspect of behaviour that does not fit his respective self-perception. Additionally, a potential competition for feedback and appreciation would be more likely to occur if every transaction was visible. Competitions like these represent one of the purest forms of 'if-then'-rewards. The means of feedback and awards would turn into an end in themselves. Still, accepted compliments about contributing behaviour that are openly visible facilitate the spread of information necessary for the self-enforcing mechanism of system trust to occur. Therefore, transparency is a sensitive feature that we believe to be controlled at best by the employees themselves.

The credit of trust that enables the implementation of SMPE as well as every given compliment should be refutable in order to be perceived as a valid offer. Consequently, if someone does not feel comfortable with the responsibility of giving feedback at all, they should be able not to participate. This autonomy is an important constraint for the self-fulfilling force of promises. Only if Bob accepts a compliment autonomously will he feel truly committed to it. The option of refutation must always exist beforehand. The case of refutation, moreover, can get interesting as well: The negative consequence for the trust relationship between him and the spender is obvious and should be dealt with through communication. Bob's internalised values, in contrast, will be even stronger, given the fact that he gave up money in order not to betray them.

Our tool is designed to animate a continuous process of communication. Therefore, randomisation of the moment of pay-out is important in order to set up an unexpected award condition. The avoidance of making awards predictable at the end of a predetermined pay-out cycle shall prevent the development of 'if-then'-loops between colleagues. The employee's attention should be focused on the process of giving and receiving awards rather than on the expected pay-out. A fixed pay-out cycle would encourage the abuse of the tool.

7.4 Discussion

SMPE enable the creation and preservation of Bob's intrinsic motivation while implementing participation through a communication network. Inspired by the award-concept and the first level of trust, the main form of communication consists of a compliment combined with feedback. This tool will create trust capital in the previously defined sense in order to overcome social dilemmas and to promote the functioning of implicit contracts. It stands out due to the responsibility Bob

and his colleagues experience: As its appliance requires a monetary investment without hedging the explicit contracts involved, the tool truly corresponds with the fact that moral competence does not arise through formulas or definitions of virtues, but through one's own experience of acting responsibly in one's own right (cf. Pfriem 2007: 97).

Understanding corporate culture in the sense of Lazear⁶ we suppose that SMPE are an initial investment in the implementation of values such as participation, appreciation and open communication which are induced by trust and promises/relational contracts and work technically through the giving of award-like compliments. If we consider that "[...] the relative proportion of each type of contract is driven by an evolutionary process" (Hiller 2008: 1), we assume that SMPE could shift the distribution of contracts in an evolutionary process towards increasingly qualitative implicit contracts. We understand SMPE as a possibility and inducement to give many small 'invisible handshakes'.

SMPE lay the foundation for intrinsic work motivation, paradoxically through the extrinsic 'now-that'-rewards, and hence point out a path to more creativity, innovation and joy of work. From this perspective, we assume that SMPE can contribute greatly to an appropriate balance of extrinsic and intrinsic motivation and offers, due to social relatedness and the innovative way to allocate moral goods through an effective, self-induced value education, a new approach for solving the principal agent-problem.

7.5 Best Practice

Regarding the implementation of SMPE, some questions remain open. To exemplify the kinds of issues that could arise concerning the application we ask three of them:

How to examine the amount of money that should be distributed?

The amount that every employee receives at the beginning of a cycle should fulfil two main functions: On the one hand, it should be large enough to signal trust and the importance of the awards every employee can distribute. On the other hand, it must not be too large in order to prevent the

^{6 &}quot;Corporate culture is thought to change the way that workers choose to act without using direct monitoring and compensation. It generally requires an initial investment that instills a particular set of values in its workers so that they behave in the desired fashion as a natural consequence of utility maximisation" (Lazear 1995: 89).

overjustification effect that would cause the users to think more about the money than about the content of the awards: the feedback they carry.

How to introduce the tool to the employees?

As the aim of SMPE is the establishing of trust capital, its reception as a sign of trust and not as (another) attempt to control the employees is crucial. Accordingly, there should not be any possibility to analyse the statistical data the tool generates. We think that it is highly probable that the employees in general will make use of the tool due to its focus on social interaction, the pleasure of participation, and the prospect of being honoured with a monetary award.

How to set up a feedback template?

Some employees may be uncertain about how to express a compliment to a colleague or what elements feedback should contain (in other words, how to arrange a relational contract). Therefore, it could be reasonable to develop a template for the creation of compliments that pre-sets and provides the basic structure or some phrases. This instrument should be used carefully, though: Too many restrictions would certainly lower employees' sense of self-autonomy.

Concerning its general application, we expect the tool to be most utile in enterprises that are dependent on the creativity of its employees and therefore on intrinsic motivation and implicit contracts in general, just like start-ups, consulting firms, but also in internal project groups of big enterprises and public sectors. Similarly, the whole sector of knowledge enterprises we recognise as an area of application, as the optimal use of the employees' knowledge demands for the deliberate adaptation of communication systems and the valorisation of the enterprise's resource pool. Further we suggest that especially multi-cultural workgroups could benefit from the extensive building up of relational contracts and the reciprocal education of values that SMPE are capable of delivering.

'Now-that' rewards have already been successfully implemented in Kimley-Horn and Associates, a big civil-engineering company in North Carolina: Here, at any time, for any reason, and without any permission, any employee can award a bonus of 50 dollars to any other employee. Regarding the outcome of this tool, the management experienced that trusting in employees in this way pays off:

"It works because it's real time, and it's not handed down from management," says Barry Barber, Kimley-Horn's human-resources director. "Any employee who does something exceptional receives recognition from their peers within minutes. [...] There's very little oversight and virtually no abuse. And when we think of what our clients received for that \$55 [the extra \$5 is to cover taxes]", Barber says, "we know it's money well spent" (Pasquariello 2007: 1).

8. Conclusion

To sum up, we have shown the importance of implicit contracts concerning intrinsic motivation, delineated the problems of generic incentives regarding the semi-optimal outcome of social dilemmas, and demonstrated possibilities to improve the quality of implicit contracts with communication, participation and the award-mechanism. Subsequently, we have introduced and examined the investment in trust capital, signifying the creation of relational contracts and internalised values, and evaluated it as an indispensable ingredient of any effective approach to solve social dilemmas. Furthermore, we have expressed ways to create system trust and enhance the contribution to collective goods. Building up on this theoretical framework, we finally presented our tool: Social Micro-Payments in Enterprises. After launching the tool, its design and its premises that we reasoned based on the previous insights, we illustrated a best practice perspective. Naturally, we are very interested in proving the hypotheses we deployed and the benefits SMPE promises to accomplish in reality in order to meet the further need for empirical research. As we believe in the great value of trust capital, we consider this tool to have a prosperous future. We would like to end the paper with a quote by Niklas Luhmann:

"Instead of bracing oneself against the unpredictability of the other's full complexity of possibilities, one can as well try to reduce this complexity, namely by concentrating on the education and preservation of mutual trust" (1973: 71).

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