Flexibility and Trust – About the Meaning of Trust in Changing Processes

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Abstract

Fundamental economic and social changes have strongly influenced the conditions under which companies have to operate during the last couple of years. The dynamics of the business environment, which are among other things increasingly forced by the globalization of markets, development of new technologies and subsequently growing competitive pressure, requires that companies adapt to their environment not only reactive, but rather act proactively to exist on the market permanently. This means, that in companies radical change processes are not even uncommon in addition to permanent changes.

Regarding the success of any change process it is of vital importance that the concerned employees and departments are involved in the success of the project and cooperate closely.

For this reason trust is becoming more and more important in business environment, especially against the backdrop of economic crisis, of mergers, outsourcing, short-time work and job loss. The setup and permanent care of a trustworthy corporate culture, the content of which includes the constructive handling through management of the anxieties and emotions of the employees concerning upcoming changes, finally provides the basis for successful cooperation.

Currently there is no scientific consensus about what trust is, how it can be measured, evaluated and influenced. These issues are now being investigated by empirical studies. Thus, the meaning of "professional" trust was determined by means of a quantitative questionnaire. One aim of the empirical study was to investigate the existence of trust-promoting and trust-inhibitory factors in companies and to generate rankings regarding their importance for the employees. The perceptions should be the basis to build and maintain a reliable culture of trust in companies, especially during the implementation of change processes.

Keywords: flexibility, stability, trust, co-operation, change processes
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Literature
1. Introduction

Economical, technological and societal change is a financial challenge, which constantly has to be dealt with by companies. As a result, rising competitive constrains, for instance by short product life cycles or globalization of the markets, lead companies adjusting to their environment not only reactively but rather proactively, to be able to steadily exist at the market. This means permanent adjustments and drastic transformation processes are no rarity in companies. For finishing a transformation process successfully, it is essentially meaningful that relevant associates, or respectively, departments engage for the success of the project and cooperate closely with each other. On this account the construct of trust gains a constantly rising meaning in the business environment, in particular with the background of economic crises, merges, production shifts, short-time work or work place loss. The development and constant fostering of a trustful business culture, which involve, among others, the management’s constructive handling of the associates’ anxieties and emotions regarding upcoming changes, eventually forms the foundation of a successful collaboration.

Currently, no consensus among scientists exists, about what trust is, how it can be measured, evaluated and purposefully affected. Due to the fact that barely any improvements in this direction are expected without severe theoretical anchoring in research, the project “StabiFlex-3D” (“systemic trust due to stable-flexible system standards and a participative Change Management”) of the Professorship of Human Factors and Ergonomics at the Chemnitz University of Technology, aided by public funds of the EU and of the Federal Ministry of Education and Research, picks out exactly this question. Therefore the meaning of „professional“ trust using a quantitative questionnaire, applied in multiple companies, was determined. One aim of the empirical study was to research the existence of trust-promoting and -inhibiting factors in the companies and to develop ranking orders relating to their meaning for the associates. On the one hand, a tester for the existence of professional trust in organizations, deriving from the inquiry and analysis, is to be developed. Furthermore, the findings will form the foundation for constructing and maintaining a resilient trust culture in the company, in particular during the execution of transformation processes.

2. Meaning of Trust in Research

Different approaches exist in the science, about how to define trust, which part in everyday or working life it plays, how it develops or how it can be affected. [JSW82] or [KKN70] define trust as a result of experiences. According to Luhmann [2000], on the contrary, trust is seen as systemic and systemic-induced achievement. It is a mechanism for reducing social complexity and demonstrates a risky effort in advance. Trust is not cross-situational stable, but varies according to the cooperation partner [GLI82]. The consideration of trust as a variable of experience deals with the developmental process of trust. It is assumed that experiences from the past affect the extent of trust, which is demonstrated in the current situation [KSC03]. Figure 1 demonstrates the described perspectives regarding trust in summary.
Trust is a central variable for the construction and the stability of hard-working and successful acts in organizations [Bie95]; [JGE98]. It must be assumed that with a lack of trust there exists a high probability of failure for the intra- and inter-organizational cooperation [CJU95]; [DTE98]. Trust as a fundamental element shall support cooperative behavior and adaptive organizational structures, for instance mainly setting up networks, and advocate communication. Furthermore the fast formation of ad hoc work groups is facilitated [BBR99]. With trust the degree and quality of the communication increase, because the fear of self-opening gets decreased. By an open communication again, cooperation and team work are made easy [Bül07].

3. To Change with Trust

Changes, caused by always more complex framework requirements and demands concerning companies, have become a permanent companion of many organizations. For remaining competitive, it is necessary to constantly question and continuously improve strategies, aims and processes. Companies oftentimes face immense challenges while accomplishing such transformation processes. These procedures pose big obstacles both at colleagues in social and emotional sense and at the business organization in technical and economical sense. Each change means giving up old, well-known behavior-schemata and engage in something new, insecure. This process is always connected with emotions of the involved people, for instance euphoria or anxiety, which oftentimes are the activator for conflicts and resistances. Given that the success of a
transformation, and with it of the company, essentially depends on the attendance of all involved, occurring anxieties and resistances should early be recognized and reacted to adequately.

There are different factors that affect the success of change processes crucially (Fehler! Verweisquelle konnte nicht gefunden werden). For example, trust, communication and transparency as well as colleague participation explicitly have to be considered by the executive managers.

**Figure 2: Influencing Factors on Change Processes**

**Trust**, in this context, is considered to be the central factor of successful leadership behavior in change processes. This means the colleagues’ trust into the skills of the decision-makers on the one hand, their integrity and reliability, as well as trusting in the work of the team. On the other hand, the executive manager has to trust in his/her own employees and convey confidence for the upcoming change project. To remain or sustain trust and good collaboration, an open and honest intercourse is essential. After all, how can trust in business be entrenched?

For building up and respectively remaining trust, **communication** and **transparency** are immensely important. Simply with a targeted, stable and foresighted communication it is possible to avoid misunderstandings, rejection, frustration and trouble, or rather to break down anxieties, in particular during transformation processes. Generally, information should be given promptly, continuously and related to the target group. Furthermore, a clear demonstration of aims, meaning and/or benefit of the process is very important to achieve the understanding of the concerned people. Additionally, made decisions should be communicated, justified
and maintained, as well as a time orientation of the procedure should be given. Moreover, it is important to clearly describe successes, as well as problems and failures. For example, associates feel insecure if negative news are repressed and thus call the trust in integrity and reliability of the executive manager into question. 

**Participation** of the colleagues is indispensable, as well, to accomplish transformation processes in a trustful and successful way. The active attendance causes the associates to identify more with the project and to increase motivation. Room for creativity can be given during the process of decision-making, for instance, or during the development of possible solution concepts. With the help of workshops, brainstorming, group discussions and other communication forums, the collective experience-knowledge can be used ideally and a qualitative well solution can be found. Worries and anxieties of the associates should be asked about and taken serious, as well.

In conclusion, planning and accomplishing transformation processes concern all areas of business and thus depict a complex challenge for executive managers. The introduced success factors and recommended behaviors give hints how transformation processes can be implemented by executive managers successfully. A clear, structured and participation-orientated approach can help to severely diminish the risk of undesired and unsatisfactory results or even the failure of the whole process.

4. Method

Within the context of developing the cooperative project “StabiFlex-3D”, the field of the trust culture will be delineated three-dimensionally and hence solutions for the construction and strengthening of system trust will be developed (Figure 3). Thereby, systemic trust is the ability and willingness for the entity of risky advance performances, which enable a functional interaction between the system and its relevant environments.
Figure 3: Dimensions of Trust

- Here on the one hand, the trust culture within a team plays a major role. At this interpersonal dimension, it is about the cooperation of each individual organization member (e.g. the department or group manager and all team members).
- On the other hand, the intra-organizational dimension is very important for change processes, because it reflects the cooperation and the mutual understanding of the various organization units of a company.
- In addition, the company-wide inter-organizational dimension should not be neglected. It results from the cooperation of multiple branches of one company and/or the cooperation of different companies within the product development process.

In the literature, there is a multitude of measuring instruments for evaluating trust. However, for business application, especially at small and medium enterprises, they are only capable to a limited extend. This is due to the concept which is based upon existing trust scales, focusing rather on personal trust between individuals and oftentimes approaching the construct trust from the sociological/psychological perspective. For evaluating inter-personal, intra-and inter-organizational relations in and between enterprises and networks, thus, these methods are not useable for people with practical experience.

This is where the project "StabiFlex-3D" picks up. It combines knowledge from relevant research literature and results of different studies dealing with trust, and develops upon this information an instrument to measure and evaluate organizational trust, which is applicable in practice.
During the adaptation of this project, an as-is-analysis of the trust culture of the relevant project partners has to be carried out and at the same time it has to be listened to their specific questions, as well. In particular, it should be examined what can be possible effects of management style, the handling of problems, the company's position within the value chain, and also the identification of the associates with the company. Moreover, the business culture, communication structure and established customer relations have been analyzed. In addition, the behavior of companies in critical situation or during transformation processes has been evaluated.

The research design of the statistic inquiry provides a combination of interview and questionnaire in this context. The interviews primarily serve as adaptation of the questionnaires of the respective praxis projects. The concept development and exertion of the questionnaire is carried out with the purpose of adjusting the existence and priority of the resources and stressors, i.e. trust-aiding and trust-repressing factors, which have been taken from literature, with the praxis. Subsequently, the results are unified with the measuring instrument "Chemnitzer Vertrauensinventar 3D" (CV3D) and represented. In Figure 4 the procedure during the development of this instrument is depicted in summary.

Figure 4: Development of the "Chemnitzer Vertrauensinventar 3D" (CV3D)

In the first step a pretest was conceived, which was accomplished in companies of different branches, sizes or organization structures. Subsequently, a statistic editing of the questionnaire followed by choosing reliable items, and the determination of factors based upon a factor analysis respectively. The result was a second, now
improved and shortened questionnaire. Right now, it is about to get answered by associates of further companies. Deriving from the questionnaire, a short test was created with the filtered data of the empiric analysis by the help of the determined relevant factors. Afterwards, the results are converted in a graphic presentation, the so-called "finger print". It displays the trust level of a team, an organization entity and/or the whole company during a certain point X in time as flashlight. If recurrently applied, it is capable of demonstrating the organization development chronologically, for instance during a change process [KHÖ11]. In the following chapter, first results of present research work will be discussed more into detail. On the one hand, results of the quantitative questionnaire concerning the trust-aiding and trust-repressing factors will be introduced. Furthermore, the visualization tool "finger print" will be presented.

5. Results

5.1 Trust-Aiding and Trust-Repressing Factors

In times of continuous changes, trust can build up a foundation on which constant transformations of enterprises can be carried on. For examining the role of trust and particularly trust-aiding and trust-repressing factors, a quantitative questionnaire was initiated in multiple companies. Associates of a variety of functions within the concern took part in the census. Up to now, 165 questionnaires have been evaluated. However, the phase of analysis if not finished yet. In Figure 5 the ranking of trust-aiding and trust-repressing factors, which have been determined in the interview so far, are depicted in extracts.
### Trust-Aiding Factors

Assessment of the meaning on the basis of a 4-level scale (unimportant to very important)

<table>
<thead>
<tr>
<th>rank</th>
<th>item</th>
<th>average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>reliability of chiefs</td>
<td>3.78</td>
</tr>
<tr>
<td>2</td>
<td>continuous communication among associates</td>
<td>3.76</td>
</tr>
<tr>
<td>3</td>
<td>reliability of associates</td>
<td>3.72</td>
</tr>
<tr>
<td>4</td>
<td>positive work climate (e.g., conversations with associates, mutual respect, openness)</td>
<td>3.69</td>
</tr>
<tr>
<td>5</td>
<td>cooperation among associates</td>
<td>3.69</td>
</tr>
<tr>
<td>6</td>
<td>integrity of the executive manager</td>
<td>3.67</td>
</tr>
<tr>
<td>7</td>
<td>openness among the team</td>
<td>3.66</td>
</tr>
<tr>
<td>8</td>
<td>open talks about problems with the chief and collective solutions</td>
<td>3.60</td>
</tr>
<tr>
<td>9</td>
<td>open talks about problems among associates and collective solutions</td>
<td>3.57</td>
</tr>
<tr>
<td>10</td>
<td>efficiency and competence of chiefs</td>
<td>3.56</td>
</tr>
<tr>
<td>11</td>
<td>cooperation with the chiefs</td>
<td>3.54</td>
</tr>
<tr>
<td>12</td>
<td>continuous communication with the chief</td>
<td>3.53</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td>...</td>
</tr>
<tr>
<td>24</td>
<td>overlapping hierarchy during the cooperation</td>
<td>3.19</td>
</tr>
<tr>
<td>25</td>
<td>cooperation with customers</td>
<td>3.14</td>
</tr>
<tr>
<td>26</td>
<td>appreciation of the own work due to customers</td>
<td>3.12</td>
</tr>
<tr>
<td>27</td>
<td>material impulsion for effort (e.g., company car, bonuses)</td>
<td>2.97</td>
</tr>
<tr>
<td>28</td>
<td>continuous communication with the customer</td>
<td>2.97</td>
</tr>
<tr>
<td>29</td>
<td>in-house services (e.g., in-house kindergarten or sport)</td>
<td>2.57</td>
</tr>
</tbody>
</table>

### Trust-Repressing Factors

Assessment of the strain on the basis of a 4-level scale (not at all to very much)

<table>
<thead>
<tr>
<th>rank</th>
<th>item</th>
<th>average</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>short-time work</td>
<td>2.08</td>
</tr>
<tr>
<td>17</td>
<td>constant control by the chief</td>
<td>2.17</td>
</tr>
<tr>
<td>16</td>
<td>under challenge</td>
<td>2.39</td>
</tr>
<tr>
<td>15</td>
<td>negative consequences due to the chief</td>
<td>2.39</td>
</tr>
<tr>
<td>14</td>
<td>no possibility to plan the professional career</td>
<td>2.47</td>
</tr>
<tr>
<td>13</td>
<td>overtaxing</td>
<td>2.40</td>
</tr>
<tr>
<td>12</td>
<td>frequent staff changes</td>
<td>2.50</td>
</tr>
<tr>
<td>11</td>
<td>competitive behavior among associates</td>
<td>2.59</td>
</tr>
<tr>
<td>10</td>
<td>lack of openness within the team</td>
<td>2.64</td>
</tr>
<tr>
<td>9</td>
<td>missing appreciation of the own work</td>
<td>2.67</td>
</tr>
<tr>
<td>8</td>
<td>doubts about the survival of the company</td>
<td>2.70</td>
</tr>
<tr>
<td>7</td>
<td>unjustified criticism by the chief</td>
<td>2.79</td>
</tr>
<tr>
<td>6</td>
<td>unequal treatment of associates</td>
<td>2.84</td>
</tr>
<tr>
<td>5</td>
<td>unreliability of the chief</td>
<td>2.87</td>
</tr>
<tr>
<td>4</td>
<td>negative communication across departments</td>
<td>2.89</td>
</tr>
<tr>
<td>3</td>
<td>reduction of jobs</td>
<td>2.89</td>
</tr>
<tr>
<td>2</td>
<td>missing cooperation</td>
<td>2.91</td>
</tr>
<tr>
<td>1</td>
<td>insufficient work climate</td>
<td>2.93</td>
</tr>
</tbody>
</table>

Figure 5: Trust-Aiding and Trust-Repressing Factors
The preliminary condition of hitherto existing written inquiries allows first conclusions already, concerning essential influence factors on the professional trust relation. The demonstrated results show which factors in the business environment possibly aid trust notably, and which factors are suspicious of effectively influencing trust in a negative way. It indicates that an insufficient work climate and missing cooperation are the factors which put the biggest burden on the trust relation. On the contrary, reliability of chiefs and the continuous communication among associates are the factors which aid trust predominantly. The accomplished expert interviews approved and substantiated the results of the questionnaire. However, concluding evaluations and statements are not possible until the definite completion of the inquiry.

In summary, at the current project situation it can be stated that aspects like transparency, openness, reliability, honesty, and qualification of the participants mark substantial factors for the development and preservation of a trust relation within an operational reference frame. Furthermore it was detected that relevant influencing factors cannot get classified in stressors and resources basically. Here, rather situational aspects play a major role whether and how individual influencing factors develop to be trust-aiding or trust-repressing.

5.2 Measuring and Evaluating Trust

Enterprises are intended to get the ability to measure the trust level of a team, an organization entity and/or the whole company at a certain point X in time using the short test CV3D. The visualization of results is carried out via the so-called fingerprint (see Figure 6).
The spider diagram (also known as radar or net diagram) proved suitable for displaying the finger print, because multiple factors of trust, which can be taken from the questionnaire, are possible to be displayed at the same time. Moreover, further operationalizations, i.e. sub-groups of the factors, can be determined and depicted. The origin point of all factors is placed in the finger print’s center. The diagram’s contour line connects the maximal achievable values of individual factors and sub-groups (100%). The task for the management or the representative of the respective research field is to define the target values for each factor. They reflect the individual weighting factors, thus provide information about the meaning or importance and prioritization of the respective factors and their sub-groups for the company. While implementing and evaluating the short test CV3D, the result shows an actual-line in the spider diagram. The area, limited by this line, thus refers to the quality of trust forming, i.e. development, and can be depicted as “o-trust-level” (“organizational trust level” as company indicator). In the process it is considered that indeed the total area decreases with deficits of individual factors, but it increases again with particular potentials of other factors. This is very important because diverse enterprises come with different target-lines, due to their individual situation (size of company, type of management, organizational structure, and others).

The finger print is interpreted as follows: The better the relations in the respective research area, the farther the actual-line in the radar diagram. The more deficits arise in the development of trust in a business environment; the closer to the center is the line.

With the help of the operationalization of factors to sub-groups, a continuative completion is carried out as described above. The following Figure exemplary depicts possible correlations, which with the help of the still ongoing analysis have to be determined to the full extend (without any claim to completeness).
6. Perspective

In the course of the project the focus concentrates on the evaluation of the quantitative questionnaire, which is currently applied in various enterprises. With this final evaluation, it is intended to display the ranking orders of trust-aiding and – repressing factors and to test the hypotheses, formed during the project.

In addition, it is aimed to further promote the development of the measuring instrument “CV3D”. With the help of this short test, which should not exceed 50 items and one double-A4-page, business partners and team spokespersons, department managers and managers should be able to evaluate relations in all three dimensions of systemic trust, independently. Moreover, action recommendations, which are specific to the determined problems and deficits, shall be provided for the user, according to the visualized finger print.

Figure 7: Depiction of Factors and Sub-Groups of Trust (exemplary)
Literature


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