
Trust Relationships and Knowledge Sharing in Organizations: Hints for a Theory

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i-TRUST

1. A few points on ISTC model of Trust and its nature and dynamics
2. the relationship between **K-management** (in particular knowledge (K) *explicitation and sharing*) and **trust**.
 - **TrustNetworks**

1. A few points on ISTC model of Trust and its nature and dynamics

(i)

Mental disposition: evaluation, expectation

(*Beliefs*) (perhaps not enough for..): Competence, Willingness, Persistence, Motivations. A “theory of Mind” (FIG)

Decision and act: to rely upon, to count on, to delegate

(*Goals*) (‘welfare’; ‘vulnerability’, etc.)

$G_0: \text{Goal}_X(g)$ $PE_1 \left[\begin{array}{l} B_1: B_X \text{ Can}_Y(\alpha, g) \\ G_1: W_X \text{ Can}_Y(\alpha, g) \end{array} \right. \quad (\text{Competence})$ $PE_2 \left[\begin{array}{l} B_2: B_X \langle \text{WillDo}_Y(\alpha) \rangle g \\ G_2: W_X \langle \text{WillDo}_Y(\alpha) \rangle g \end{array} \right. \quad (\text{Disposition})$	Core Trust
$B_3: B_X \text{ Dependence}_{XY}(\alpha, g) \quad (\text{Dependence})$ $G_3: \text{Goal}_X \neg(\langle \text{WillDo}_X(\alpha) \rangle g)$ $G_4: \text{Goal}_X \langle \text{WillDo}_Y(\alpha) \rangle g$	Reliance

(ii)

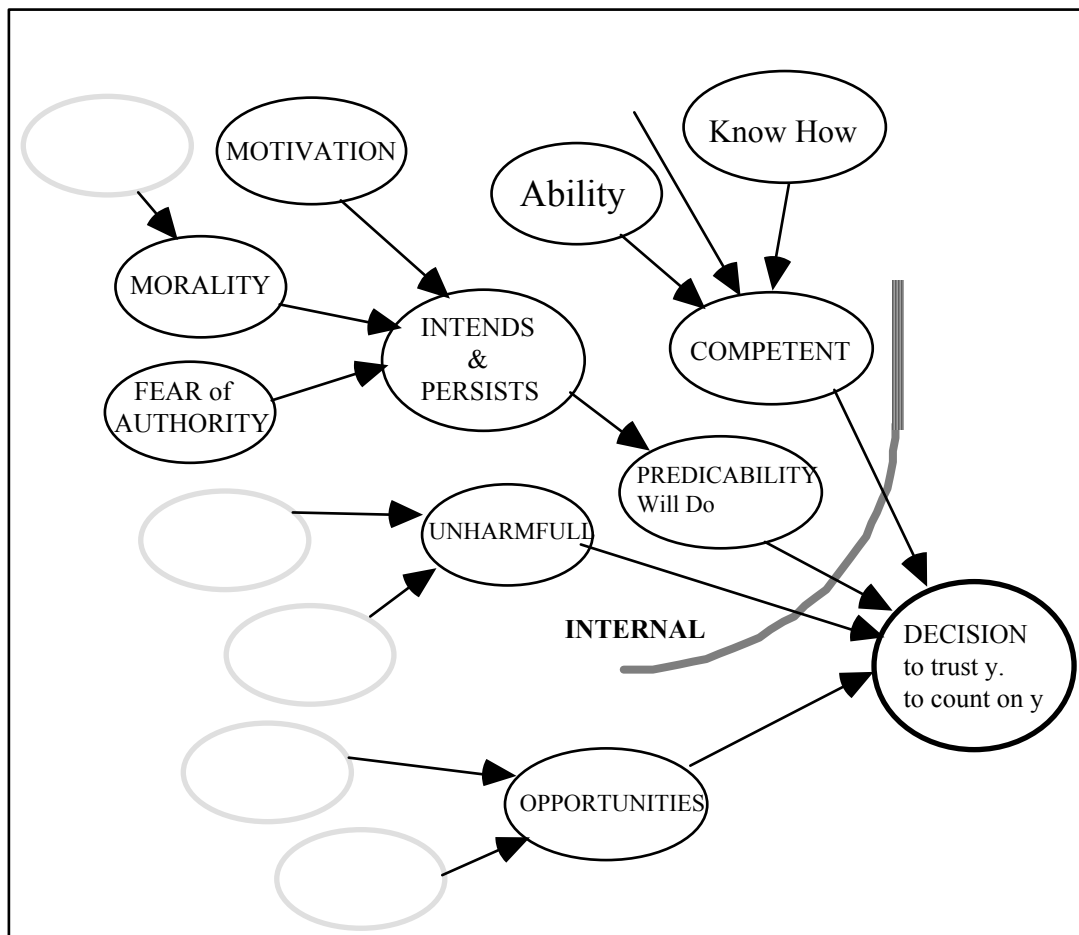
Internal Attribution

(Trust in Y)

External Attribution

(infrastructures, environments, rules, circumstances, ...)

da *Cognitive Anatomy of Trust* - Bocconi, Milano 16 dic '98



(iii) _____

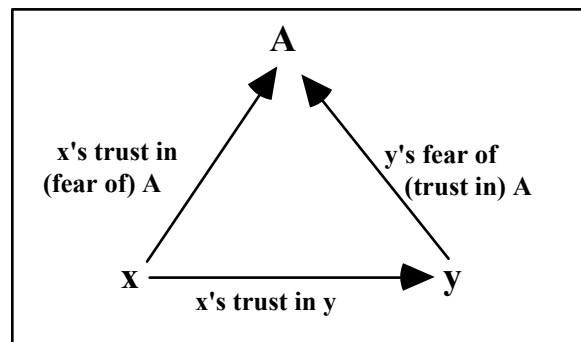
Uncertainty, Risk (Goals!)
(risk-acceptance threshold)

(iv) _____

Degree of Trust derived from the certainty and degree of constituents **Beliefs**

(v) _____

Three parties Trust



Trust Dynamics:

- **Trust affects trustworthiness**
- **Does Trust creates trust?**
- **Trust pseudo-transitivity:**
(Trusts X Y) & Belx (Trusts Y Z) → (Trusts X Z) ??
- **Trust atmosphere: diffuse and *by default* trust**

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2. K-management and trust

(in particular **knowledge (K) explicitation and sharing**)

Our claim is that trust plays a crucial role in making cognitive capital a collective, explicit, and circulating capital.

Organization actors do not only have the problem of:

- being conscious about their private K or
- about K they store in files, data bases, etc., or
- in making explicit their implicit K;

they might have serious troubles in sharing this K with their colleagues and employers for reasons due to social relationships, and in particular to trust.

- **Making K *explicit* and sharing it is not simply a cognitive process, is a social process and *decision*.**

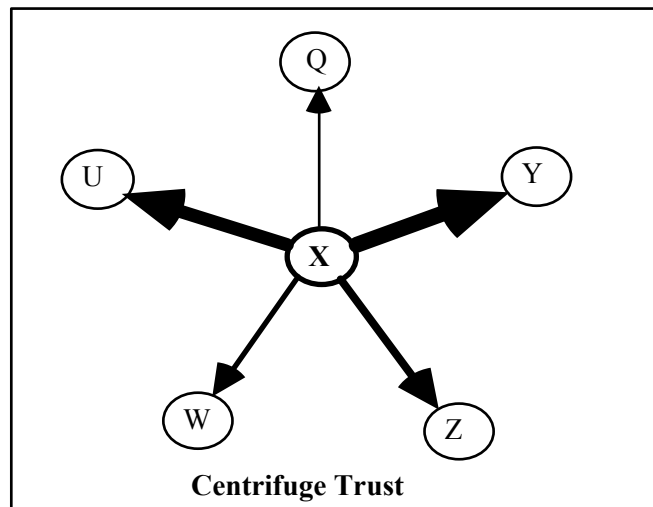
On the basis of the previous model of trust attitude in socio-cognitive terms (beliefs, expectations, and goals towards the other and risk), one can model this process.

TrustNet and its predictions

a sort of *trust-sociogram*, that we call TrustNet. Let's characterise the main features and properties of such a network.

Links can be unilateral and asymmetric, or bilateral. They can be more or less strong/weak depending on the strength, intensity of trust; links can be more or less permanent, stable, since this sociogram can either characterise a temporarily social situation where X has to rely upon somebody or choosing somebody for cooperation, or can characterise a structure of acquaintance, of stable social "relations".

Unilateral: only centrifuge/outputting arrows.

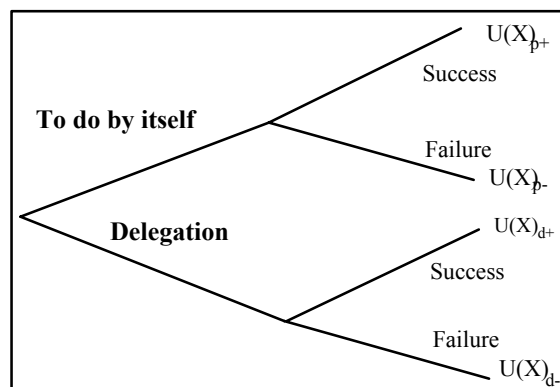


Predictions

The strength of X' trust in Y is a predictor of X's choosing Y for reliance, of X's counting upon Y.

Although more risky relationships can be preferable.

In fact our model of the role of trust in decision is as follows



and an equation predicts whether X will rely upon Y or not, on the basis of her degree of trust and of utility and risk.

However, this is a generic prediction. Let's now apply this way of reasoning to K sharing.

Predictions about K-sharing

K-Sh is the result of two different socio-cognitive operations:

- passing or not-passing K (PassK);
- accepting or rejecting K (AccK).

Those moves determine the spreading of K in the social net (Castelfranchi, 2001) and their respective decisions are influenced by different factors, but both of them also depend on trust.

PassK is mainly influenced by centrifuge/outputting trust: the more X trusts Y the more s/he will be prone to pass her/his K to Y.

More precisely,

X should trust Y not generically, but for specific features relevant for passing K to Y:

1. X believes that Y is able to understand K, to understand the use of K;
2. X believes that Y will appropriately use K (for the Org purposes and advantage);
3. X trusts that Y will not make worse (and possibly improve) Y's attitude towards X (Y will reciprocate, or be grateful, or more friendly close, Y will increase trust towards X, etc.)

but also

4. X believes that Y trust him/her enough to AccK (belief about centripetal trust)

Plus other necessary beliefs:

5. X believes that Y needs K
6. The belief 1 – belief of competence – and also 2 often implies other two beliefs. If X doesn't experience Y's competence directly, it means that X relies on Y's reputation, that is X trusts other members of the organisation as sources of information about Y.
7. The belief 4 about Y's honesty (and so about his/her reciprocation too) implies that X believes that Y has an "Assumption of Normative Pertinence" and also a Normative Goal (that is Y knows the rules and believes that they regard him/her too, so s/he has the goal to adopt and respect them)
8. X relies on Organisation in general, because s/he believes that if Y has been employed it means that s/he has got the necessary competencies to work in that organisation or the necessary formation to understand k.
9. X trusts that Y has not k so that s/he depends on X to get it
10. X believes that if Y shows not to have k, it's true (s/he doesn't deceive).
11. X trusts (or better: x believes, but s/he actually has no experience to which refer, so s/he hopes) that Kshar is an advantage, improving his/her work (this will be a reciprocation, even though not immediate)
12. X trusts Organisation Authority, that is s/he adopts the rules of the Organisation, so s/he trusts other members because s/he believes that they also adopt them and trust (have fear of) Authority and her capability to check and sanction.

13. X trusts of course the Controller too, that is his/her capability to check and evaluate who respects or disobey rules.
14. X believes that Y would like to be well-evaluated by X (that is Y' s goal of good reputation).
15. X believes that Y has the goal to be trusted by X (that's why s/he will use correctly k, s/he will reciprocate...).
16. X is self-confident: he trusts his/her knowledge (or competence...).
17. X trusts that k is adequate, important or necessary to (solve) a given situation or to be transferred to Y. This is a question of self-confidence too, because X trusts his/her ability to evaluate how, when, how much and with whom sharing k.
18. Eventually X trusts the sources of information from which s/he received k.
19. X trusts that s/he will not be replaced by another worker (because of transferring his/her professional value, that is just k!) or at least to keep on being professionally acknowledged for his/her competencies, even though other people have them.
20. X trusts that s/he will receive a professional acknowledgement for his/her SharK, because s/he adopts the rule of K sharing.

AccK is mainly influenced by centrifuge trust too but in another way; it depends on how much X trusts Y as for being a competent and reliable source and as for being loyal and good-willing towards X (not having reasons for deceiving X or for inducing X in error; how much Y is in competition with X, etc.)

1. X trusts that Y is well informed and competent
2. X trusts that Y is trustworthy, not deceiving: it means that Y believes that if X gives k then X believes that k is true.
3. X trusts that Y is not hostile with X, that means also that X believes that Y trust him/her enough to PassK (BELIEF ABOUT CENTRIFUGAL TRUST)

these seem to be the three fundamental evaluations, the three specific aspects of X's trust in Y relevant for AccK. They influence X's trust in K passed by Y: K is a reliable K.

Moreover an additional belief is necessary for AccK:

4. X believes that K is useful, is pertinent for some of his/her goal (not irrelevant).

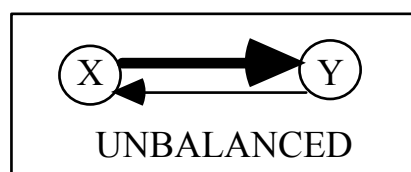
Let's now come back to the general characterisation of Trust Net for expanding our theory of links. They can be:

1. Unilateral: X trusts Y completely independent from Y's trust in X.
2. Bi-directional: X trusts Y and Y trusts X.

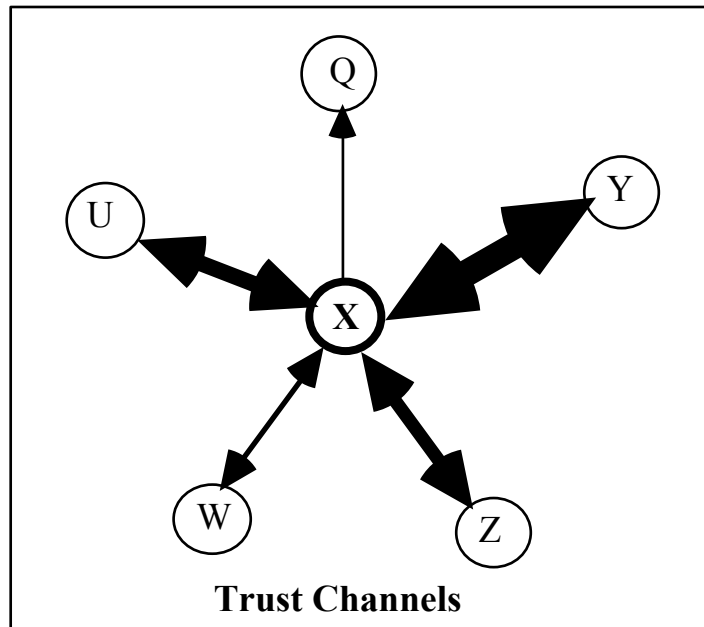
Bi-directional trust relationships can be distinguished in various kinds:

- Bilateral: X trusts Y and Y trusts X in a completely independent way; each of them might even ignore if and how the other trusts her/him.
- Reciprocal: X trusts Y also because (X believes that) Y trusts X.
- Mutual (bi-reciprocal): X trusts Y also because (X believes that) Y trusts X, and vice versa, and both assume this.

Unbalanced: A link is unbalanced when the trust of X for Y is (perceived as) quite broader or stronger than Y's trust in X. It's balanced when their trust is of similar force.



In case of Bilateral trust link (and especially for reciprocal and mutual one) we can also combine (add) the dimension of the two inverse arrows in a sort of broadness of a trust “channel” between X and Y.



Predictions

the Trust Net gives us a map of the important “channels” along which private or implicit knowledge becomes common and explicit, i.e. some of the main channels for knowledge circulation and sharing.

- First bronze prediction: the larger the channel the larger the flux of K and its rapidity.
- Second bronze prediction: the more channels are bilateral and balanced the more uniformly shared K is.

A poor net (few links), subtle channels, unilateral attitudes proportionally reduce K passing and accepting, thus the building of a collective capital.

**A *SOCIO-COGNITIVE VIEW* OF TRUST IS NECESSARY
FOR MODELLING TRUST ISSUES IN ORGANISATIONS**