SOME THOUGHTS ABOUT PERSONAL NETWORK MANAGEMENT

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Abstract

The success of human work depends on a number of power sources. Most frequently time, money, expertise and energy are paye attention to. We consider the individual's personal private network, too, such a power source. Our assertation is that with the help of informatics, information technology and computer technology such a network can be set up that supports the exploration, maintenance and the development — that is management — of the individuals private relationships. The means to accomplish the system, by the information it is holding, is capable to open up new prospects for the mankind changing from industrial society to informational one, on the most different domains of life.

The main objective of the authors is, with positive technocrat mentality and with the help of advanced technology, to be able to manage the the presumably more elaborate elements of social being — that is the private networks between individuals.

Keywords: informatics, network, personal network, network management.

Preface

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Introduction

Our investigation begins with the analyzation of practice. At all times particular applications (and their informatic projections) are kept in sight, so the research can only cover a certain field of the complex reality (perhaps disappointing those who are expecting deep and abstract social-psychology type analysis.

In reality in the actions of the individual the 'living' and the application of personal relationships are interwoven with conscious acts from the earliest stages of social being together. The information in connection with these has crucial importance in every field of life, though the recognition and valuation of this crucial role can be fatally extreme. For example, if someone takes his broken-down car to a mechanic he has known before, instead of taking it to the nearest garage, nobody says a word; but if someone had 'influential reference' at taking a new job, it becomes a talk in large circles, very likely with negative overtones.

The Meaning of the Word 'Relationship'. Its Interpretation and Relating Definitions

The word 'connection' in the natural language has broad meaning spectrum (not only the noun, but also the verbs 'connect' and 'be connected'), and the borders of the different meanings became blurred, even in identical contexts. With the phenomena between individuals the words 'relationship', 'connection' and 'nexus' are used alternating. For the characterization of relationships and connections the terms 'formal' and 'informal' are often used, which we, on the basis of the continuous, united and independent characteristics of 'relationship'-ness, consider as an unjustified limited categorization.

For the following analyzation — as operational category — let us differentiate human relationships in two concerns and let us term them *relationship* and *connection*.

Different from the relationship concept used by social psychology, where the attention is on the mutual effects of living together in a closer environment (and these are called relationships); our relationship concept is closer to the concept of 'network' (and 'networking', the activity forming it), a relationship-system used for some expedient act (eg.: social, familiar, official, business, etc.)

The network is a frame between individuals (organizations), in which the elements are arranged in a net-like pattern, where the segments between two persons (organizations) are interpretable sectionally, different claims

can be set up about the sections, *the relations*, and they have different qualities (eg.: direction, practicability, etc.).

We call *network capital* the temporally changing (it can decrease, grow etc.) power-source of an individual, originating in his relationships, which we at all times explain in connection with utilizability.

We call the relationships chosen by or connected to some problems, matters and objectives relevant or *utilizable relations.*

Connection is the stable mutual effect, conditioned by the foregoing between two persons, which always has some emotional charge, too. (This concept is standing the nearest to the everyday life's most frequently used 'relation').

In the following we approach our objectives from different directions demonstrating that there is a wide variety of ways to the setting up of a possible aid, which could be excessively useful in all of the cases described.

1. A Traditional English Example

Let us start our investigation by some thoughts of a book that hits the nail on the head with our work. Tim Heald's 'Networks' (HEALD, 1983) describes the networks of British society based on different relational bases, starting from relationships forming at boarding schools through university and college education to the different size and strength relational networks of the Anglo-Saxon club-type organization life.

The pupils of famous public schools form an informal community after finishing and leaving their schools. Since in Anglo-Saxon schools the use of uniform is compulsory, it is natural that single schools get associated with different pattern ties. Wherever one meets someone wearing his school's tie, even if they do not know each other personally, he can count on the help of the other in his problems, worries, inquiries, as if they had been confidential friends. The author cites specific examples to show where do these relationships work in war and peace, too. The accidental abuse of the tie (that is someone likes it in a shop and does not know the networks connected to it) can result in serious complications, since the offence of a tradition on Anglo-Saxon area can be a serious problem (one case ended up with a parliament speech!).

As a sample, here are some interesting definitions, made and introduced by Heald, of the issue from the book:
'*Personal Private Network* (PPN): The individual's network of friends and contacts.

Network (noun): Association of people with shared interest(s), background, aim or almost any bond imaginable which is prepared to make use of individual members.

Network (verb): To take advantage of or exploit friendship, contact or similar link in order to by-pass usual channels.

Old School Tie: Necktie with stripe or other recurring motif (heraldic device or monogram) to demonstrate wearer's educational background or (sometimes) other network membership.

Old Boy Network (OBN): Network of former public school boys and/or Oxbridge graduates (Foundation Branch); or of recognized success stories (Establishment Branch).

Hot Contact: Potential benefactor who you know at first-hand, member of your PPN.

Cold Contact: Potential benefactor with whom you have only second-hand personal relationship.

Horizontal Network: Network of contemporaries, often used of families, -brothers, sisters, cousins of the same generation.

Vertical Network(s): A historical network which encompasses different generations — most usually an expectation-generating family network of ancestors such as Hill-Nortons or Bickersteths.' (HEALD, 1983).

There are a number of problem types in life, where the one of the methods solving it could be the use and appliance of personal private network. One of the examples of the author describes job-seeking, where the job agency is not doing headhunting for employees, but a consulting company teaches people how to find jobs using their own private personal networks, in startling effective way.

2. *Social Psychological Theoretical Researches*

Following the school of Jacob Levy Moreno, the German Elisabeth Neumayer originated the act , where the sociometric depiction of a person's personal relationships was formed not by a group, but by one single persons connection system. (The act served as an aid to education advising).

Investigating the personal private network from this viewpoint, Ferenc Mérei (MÉREI, 1971, 1989) and Ilona Fonyó (FONYÓ, 1967) with the contactometrial exploration aimed to estimate the social factors of life-territory. They created the act called *contactometrics* by them, its essence is to record the social factors of private personal self-knowledge life-territory. From their investigations it came clear that 'the social relationships of the individuals form a describable system; and this system shows permanence, and even though persons change in the interpersonal relationship system of the

individual, the different sectors of the life-territory concerning the number, weight and temperature of interpersonal relationships, proportionally will remain permanent.' (MÉREI, 1971).

They pointed contactometrical autoregistration as the further development of the method :'... to teach the examined person to continuously record and valuate his social contacts in a defined scheme' (MÉREI, 1971).

3. Sociological Empirical Researches

Knowing the achievements of Mérei and Fonyó, Péter Gelléri conducted sociological empirical researches as a part of a complex investigation which started in the 70's, and reached the problem world of private personal networks on an undesigned way.

The aim of the major research was to clear up why do research and development programmes fail in such large numbers in Hungary. The investigations were carried out on two large fields, drug industry and heavy chemical industry. One of the results of the investigation was that the structure and operation of personal private networks of those working in the field of research was radically different from those of working in the field of development. The practical operational forms of the necessary work and other relations between them in many cases often hindered and prevented effective cooperation. The questions, how to estimate relational abilities and how to help in the acquisition of network skills needed for success, emerged.

During the first research the analyzation technique and the representational forms were set up, which made two further investigations possible. The overall concept after valuating results develops in many directions, the graph-theory model (GELLÉRI-DÉNES, 1976) of developing relationships within the interpersonal field has already been created, the development of system-description which is realizable in devices using the opportunities of informatics and computer science is under process.

4. Manager Training (Leader Training)

On the field of economy the network problems emerge mainly from the direction of leader and manager training. There is hardly any manager training course without contact keeping, contact development or any contact activity type subjects taught.

In practice, these terms occur exclusively in forms (we call them salesman-type ones) in which volunteers are taught how to deal with their

customers so that from the viewpoint of sale the salesman-customer contact would bring the most positive results. To the above mentioned belong the developing, earning, maintenance — that is management — techniques of this type networks.

The practice of sending polite and gallant invitations, delicately composed notes and not-to-forget minor-major gifts can easily be taught and learnt, as the methods are general (only in their appearance are culture-dependable), and they do not need to be 'custom-made'. Of course, there is a need for such uniformed training, but why does not it step (or has it stepped) forward? Very likely because there is no 'from what' and 'where to.' There is no theory for development, there are no schemes and acts formulated. People live their lives with their varying, individual concepts and abilities, which are laced with seemingly unperspicuous, in all directions branching worlds of personal private networks.

5. A Negative Tone Example

Taking advantage of the not too good financial situation and certain general cast of mind, some large network, distribution and commercial based economic companies formed, where for the formulation of the customer circle is based on the personal private networks of individuals. Individuals are taught (sometimes for fee) a defined operation of their personal private networks and that with using their relationships (and generally their contacts) the customer would buy certain products not only for their quality, but also because of the customer's relationship to the seller (deliberately not salesman), for example the sympathy he feels toward him, being committed to him, etc., these all 'help', sometimes even become dominant at decision.

For us the negative effect is that generally the products distributed this way do not survive on the markets, and their manufacturers (and dealers) do not mince their means to make potential customers to buy their products. Here, we are not going to talk about those not only commercial etics-wise, but also humanly dishonest methods, which are used by a number of such networks.

One can think of a number of examples, which click to our subject (eg.: crime investigation, organized crime, power and information, etc.) but we do not deal with them now.

A Network Concept and Its Realization

The first half of the next section is a description of a network concept (on the basis of the concept mentioned in (3)) which could help the formation of an informatical device, supporting the use of personal private networks as power sources. The second half is dealing with few basic problems of computer realization.

I. The concept defines the elements and the services of the network, based on the definitions of the first part of the essay.

A. The Elements of Network

Entities
Cases (case types): In reality, a process starts with a problem. There is a problem, and there is no aim. After recognizing the problem, ways of solution, possible aims, cures emerge, after analyzing these the objectives and the general type of solution can be defined. Actions can be carried out. Considering this process, the typical constellations of problems, their solutions, solution models and aims are called *cases (case types)*.
Persons: In the world of network natural persons are dominant. Fictitious person is also interpretable for example when it is known from some sources that someone has to be existing at a certain point.
Domains: In the personal network of an individual there are different problem areas, groupings and smaller units, which are identifiable by a word or picture (eg. scientific context, working environment, neighborhood, bringing up children, etc.). These domains contain case types, persons, organizations, actions, etc. There are rules and well defined rule systems which determine the particular 'playground'.

Characteristics of entities

Characteristics of cases

– acts to avoid	– suggested acts
– who can do what	– rules to be considered

Characteristics of individuals and the relationship with them

– events to be payed attention to	– possessions
– demographic data	– needs
– residence, accessibility	– family background

- group membership
- occupation, education

- human qualities of the individual
- potential danger points

- dependences

- personal qualities
- data about particular
  relationships
- transitivity
- the relationship of relationship-
  type informations

The characteristics of the domaines

- typical case types
- typical events
- typical meeting points
- typical forms of appreciation
-
- typical values
- hierarchy (the ace is who...)

- familiar customs
- recognition features
- critical features of being in and out
- features of entering
- (circumstances of initiation)
- rewards, punishments
- tolerance limits

Scripts, how to do something

For example: – the arrangement of a case type
- the management of any part of network
- etc.

Pieces of information

- datum bases
- event register
- remarks

- documents
- pictures (faces)

B. *Network Services*

The first charge of network
- the case list and previous self-evaluation
- connecting cases and persons
- the connection of domains to cases and persons
- the recording of the characteristics of the cases, persons and domains

Updating the database and network
The tuning, customizing of the network
The practical functions of the network

- network advice connected to given case
- searching (headhunting)
- self-diagnostics
- following events
- everyday orientation

II. What basic problems does the computer realization of the above described network concept have?

A. The Size of Network

From the very first step one has to consider that the frequency of information is very large. It is a general experience with information networks, that the well-applicable functions attract an unbelievably large number of data. The infiltration of pictures, drawings, voices, etc. into the network further grow the size of datum bases.

B. The Complexity of Network

The structure of the datum base is extremely elaborate, there are many referential, relational and connectional possibilities. The management of temporal originated, dynamic data is a separate problem. For the assurance of the flexibility of questioning such tabular organizing form and high standard questioning language is needed, that are also capable of realizing hypertext (hypermedia) functions.

C. The Number of Benefactors

The network must be applicable in first round in a boss-secretary system, and as a complement, in real group usage. The 'classic' network functions suiting to functions has to be assured, eg.: registration, stock defence, competence management, etc.

D. The Problem of Actualization

The freshness of data of networks can be achieved by two basic methods:
  - in given periods the network has to be checked generally
  - information connected to events, occurrences has to be recorded immediately.

Besides the above mentioned, scripts, which guide the user in the far-reaching system of data, are inevitable.

E. Customizing

As well as at the first charge of the network, during the continuous use of
it there must be opportunity offered for the user (with or without the help
of consultant) to alter the defined qualities and optional functions (or have
them altered) for his own needs.

F. Culture Dependence

On basic level the system has to be fairly general, to enable the developing
of different culture dependent use varieties.

G. Levels and Functions

The system can relate in different ways to user and vice versa. The system
can be operated with roles like master, consultant or slave. The relation
of the user to the computer informatical system depends on his experience
and abilities, he can be experienced expert user or absolute beginner hoping
for miracles.

H. Connection Possibilities

For keeping an eye on events, there is a need for creating connections with
external databases — such as electronic post, telegrams, address lists of
services, etc.

Summary

By describing a network concept we outlined the bases of such a device,
that enables the usage of personal private networks as an independent and
versatile power resource. We believe that the device could be able to solve
the problems described in the first part of the essay and that it will be a
useful everyday help for the members of the informational society.

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