

Firms of The New Economy and Their Workers Revisited: Back to Normality?

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¹ The paper sketches some insights we gained in a study on small tele-co-operation firms in Germany.

Abstract: Our contribution tries to draw an elaborate picture of the work reality in the core sectors of the German new economy: multimedia, internet, software. We argue that optimistic visions of a completely new way of working and living in the rise of the internet and the current “it was all fake” backlash miss the reality of start-up firms in these sectors.

Our conclusions derive from a 2001/2002 study on small networking firms. We observe a moderate impact of the start-up firms on the labour market. Tele-co-operation has specific instability factors. Assumptions about the virtual firm and the social figure of a new “Californian style” entrepreneur are close to wishful thinking. Characteristics of the classical small firm owner are dominant. We criticise the “small companies – large networks” thesis and the “free-lance- economy” (Pink 2001).

Visions of the “post-modern” employee underestimate the strong motivational role of togetherness and recognition. Moral values are important and constitute together with orientations of an alternative, non-alienated job a specific self-image. Entrants in the high-tech jobs are still, for the most part, highly qualified young males. Later in reference to the “women and technology” discussion, we provide possible explanations for exclusion.

Introduction

Young start-up companies of the ICT sector, especially during the dot.com and Internet boom a few years ago, served as an example for a new organisation of work in popular stories about the rise of the new economy. The “American dream” story was retold, signalling that everybody who had a good idea and sufficient computer equipment could successfully start his or her own e-business from the living-room table. Sociologists tried to trace the character of the “new” workforce of these “post-modern” firms (Senneth 1998, Bronson 1999, Borsook 2001), underpinning the differences between the new flexible individual working in his/her self-directed project work environment and the alienating conditions of the typical 9 to 5 mass employee, subjected to the constraints of the old “fordistic” mode of work in big industry and the service sector. Public debate and sociological analysis operated often with the notion of

radical change, referring to new business models, work organisation, and the impact on the individuals private life. Visions and vague concepts like the virtual firm, tele-co-operation, the network-, freelancer – and knowledge society inter alia were utilized to outline the traits of the “New Economy”. Economists, sociologists and other academics developed a plenitude of definitions and concepts. Of the virtual firm idea, for example, more than 20 different business examples could be delivered (Litmann/Jansen 2000, p. 99). However, it was often unclear to what extent these discourses were theoretically and practically anchored. It makes a difference whether the description of an existing problem is delivered or if one refers to reflections about future tendencies in the ICT sector or if one assesses the social impact of these tendencies. The social construct “New Economy” was accompanied by a surplus of expectations and visionary projections of the e-future. As for the organisation of work in the New Economy authors often projected trends of highly innovative IT firms: a strong flexibility in work-time, work place, work-overload and self-exploitation of totally committed employees, who regard themselves as “entrepreneurial thinking” very special employees (Menez/Töpsch 2003). The visionary expectations clearly were not met and after the dot.com crisis the public discourse expressed strong feelings of disappointment, referring either to the victory of the good old principles of the “old” economy and/or to a modest vision of the economic role of the Internet. In these interpretations - claiming a return to normality - two trends were expressed: a) a paradigmatic turn to discipline and order, hierarchy, division of work, regular work time and other characteristics of the work environment of the “classic” employee (Mair 2002) and b) a scepticism towards the profitability and the predicted diffusion rate of many internet-based business models and services (Hickel 2001).

In the next chapters we refer to some predicted developments of the New Economy’s workforce. We question the notion of a considerable increase of freelancers in these sectors. Then we refer to the employment generating role of these high-tech firms. In a next step we correct the image of a very unstable and fluid workforce (which in the case of the USA is the multimedia sector, see Batt et al. 2001), whose members are absorbed by excessive work, thus blurring the boundaries between work and the private sphere. In this context we spend some time discussing the difficulties of tele-co-operation. Our empirical findings highlight the perception of work and work related values among the employees of tele-co-operation firms. Finally, we make some critical remarks on the illusion that these branches are open to everyone.

Towards a freelance-society?

Malone and Laubacher (1998) promoted the “small business –large network” scenario, asserting that small firms and solo-entrepreneurs have a competitive advantage in Internet times because they can respond more flexibly than larger firms to customer demands serving them in ad-hoc networking configurations of specialists. They foreshadowed the “e-lance” economy, which is based on an increasing number of freelance entrepreneurs. Pink (2001) dreamt of a “Free-agent nation”, in which considerable parts of the workforce offered their service from their home-office. He presented statistical material showing that the number of interim workers is increasing and that there are “about 10 million unincorporated self-employed Americans, four million self-employed who have incorporated their solo operations, and about two million people who are self-employed in addition to holding a regular job” (Pink 2001, p. 35). This is very close to an estimate made by Aquent, of 16.5 million soloists (ibidem). He presented a prediction of the ICD business research group, saying that the number of home-based business in America would surpass 37 million by 2002 (p. 41). He also reported the observation that with the heavy use of information technology, the size of firms is shrinking, citing the example that ninety percent of all US engineering firms are small shops with an average of four employees each (p. 39).

In Germany the number of self-employed did not vary much (in 1985 11.8%, 1998 11.2%, Düren Wedemeyer 2000, p. 172). In the international “Global Entrepreneurship Monitor” Germany ranks 22 of 29 nations considered (VDI Nachrichten of 23.11.2001). One out of every two self-employed entrepreneurs has a one-man/women firm. In absolute figures, the solo entrepreneurs in Germany total 1.8 million people (Leicht 2000). However, a large number of these are members of traditional professions such as physicians or lawyers. Members of the media industry, the sector with the largest number of freelancers engaged, account for a considerable part of this population as well. Even in the media industry, the group of freelance journalist outnumbers by far the group of independent content-providers, PR specialists etc. offering their services to the multimedia sector. Estimates for freelance IT workers range between 10,000 and 20,000 people (Computerwoche, Sonderheft 3/1998, p. 34; this is more or less the range for independent IT service providers in France, see Le Monde, section Le Monde Employ, page VII of 02/07/2002). There are no reliable figures on the number of freelancers in the Internet sector of Germany, due to the lack of reliable statistical

data (most studies are online questionnaires), but there is some evidence that the numbers are more or less that of the IT freelancers.

This does not mean that freelancers are not important in the three sectors². Our own study (carried out in 2001), in which we conducted 1071 short telephone interviews with owners of small multimedia, software and internet services firms. Within this sample, 264 intensive semi-structured interviews with owners of tele-co-operating firms showed that a large majority of these firms work with freelancers, using them either for specialised tasks or for peaks in times of work overload. Most firm owners interviewed are ambivalent about contracting freelancers. On the one hand, they are regarded as highly achievement orientated and a complement to existing qualifications, giving advantages of cost-flexibility and a more flexible work-organisation. On the other hand, their loyalty is limited and they are not too reliable. They often have problems prioritising different tasks (especially if a customer is paying much better), as well as take the knowledge accumulated in a project with them. Firm owners know about the value of permanent employees and they are very cautious not to become dependent upon their specific supply of the freelancers. They rather design projects in such a way that failures of freelancers do not lead to a complete project abort. Regular employees executed the core business functions in our new economy firms.

A highly flexible workforce?

The base of software production, multimedia and internet services in Germany are small specialised niche production firms. Exit rates in 2001 and 2002 were below the average. Several regional start-up contests showed (VDI-Nachrichten No. 10 of 8/3/2002, p. 32) that the wish to set up ones own business in these sectors is still high. The small enterprises we interviewed were not as severely hit by the crisis in comparison to big firms like Pixelpark, which had devastating losses and numerous dismissals. Small firms were more flexible in their reaction. They stopped hiring freelancers and ran cost reduction programs, which often downgraded employees salaries and intensified acquisition activities, therefore, offering lower prices. What saved them were existing networks and the few but economically important core customers, who continued ordering albeit at lower levels. Some firms changed their portfolio

² Surprisingly, in a small preparatory study at the New York "Internet World" fair in fall 2000, we found that of the 100 American exhibiting firm representatives interviewed (in the homeland of the flexible work-force), only 45% of them did not work with free-lancers.

completely and offered other services, tailored to the needs of these customers. Even before the crisis, the firms in these sectors were not very strongly motivated by a rapid growth option – unlike their venture capital boosted American colleagues - but rather wished to stay small, thus profiting from the advantages of small firms such as a clear work arrangement, intensive social contacts and many possibilities for personal initiative and autonomy at work (A typical German obstacle to growth of these firms is the restrictive handling of loans by the banks).

While making on-site visits of more than 40 firms, we found that employees generally have unlimited work contracts. Their career is marked by few positional changes. Since there are little professional access barriers in these newly emerging professional fields, one might think that recruitment paths cover a rich variety of professional backgrounds and areas of study. Popular knowledge of the New Economy holds that everybody who is smart and young and has good computer knowledge can enter into the field. Our findings show that 83% of the tele-co-operating entrepreneurs and 78% of their employees had at least a kind of college degree (Abitur) and 59% of these firm owners and 60% of the employees studied a scientific subject, the majority in the natural sciences or in computer science. Although not all of them may have completed their studies, the quota of highly qualified personnel is very high and typical for science based industries. German entrepreneurial studies count on a moderate degree of academics, roughly around one third (Brüderl et al, 1998, p. 85, Utsch/Freese 1996, p. 49). We assume that a university degree, preferably in hard science, is generally the ticket into this type of work because the college graduate has proven that he/she can work autonomously and has acquired an active will to learn. Both skills are needed in a rapidly changing work environment in which independent-learning and abstract problem solving is a must.

The employees of the tele-co-operating firms have a strong loyalty towards it, working quite a long time in the same job and generally having no intention of changing their status such as perhaps becoming self-employed. Informal recruitment patterns in local networks are dominant and many of them stay in the same region all their working life. There is little evidence that these employees are typical examples of the often cited “job nomads”, whose major concern is the maximisation of their career, hopping from their current job to the next best offer (as Batt (2001) observed among New York multimedia workers). Most workers choose the small firm intentionally because of the mix of strong social cohesion and freedom at work. Firm owners and their employees are united by the negative image of the big,

alienating firm, in which, upon entering, one changes initiative and personality for loyalty and stereotyped behaviour. They are very certain that by no means do they want to go back to this kind of normality at work.

To a certain degree elements of the alternative values of work co-operatives in the '80s are still prevalent: the high value of being and working together, the importance of self-organised work with high degrees of freedom, a flat hierarchy and mutual respect for the co-worker, tolerance for the individual work- and life-style, similar cultural orientations and the wish to have fun at work. The mediocratic mantra of the modern high tech employee: more money, career opportunities, and promotions has little significance for them. What counts is having an interesting job, possibilities for personal growth, and a good social atmosphere. Firm owners, who very often (48%) started as a team, answered the question about their personal evaluation of the firm story in a very similar way which can be summarised by the sentence: "I did not become rich, but I learned a lot and had much fun at work." Arguably, the strong emphasis on autonomy, self-enhancement, and relatedness at work are common traits of all "modern" employees' values, but the possibility to live them and their reinforcement by the sub-cultural environment are much better in smaller than in bigger firms.

Contrary to popular characterisations of the dark and destructive sides of the new economy (Pickshaus et al. 2001), only very few of the employees we interviewed experienced blurring differences between work and the private life, be it because of an intensive work load or be it as a result of tight project planning, accompanied by extended working hours. On our site visits, we very rarely found compulsive workaholics. Most employees expressed a moderate workload and showed neither signs of a burnout syndrome nor of constant stress at work. Work satisfaction is very high. In many personal statements, the employees expressed high degrees of freedom at work. Work is seen as a professionally challenging and emotionally rewarding endeavour, and quite a lot (around half of them) of the employees interviewed have strong traits of the "self-starter" work personality, as described by Maccoby (1989) in the 80s. The average weekly working hours of full-time employees are 42.4 hours (the German standard is 38.5 hours) and, in most cases, there is a compensation for overtime.

Tele-co-operation as a new mode of high tech work?

The German discussion on new models of virtual cooperation predicted a rapid increase of all forms of tele-co-operation (Reichwald 1998). The underlying assumption was that the Internet brought along a breakthrough in the delivery of information based services. The main vision was that small, flexible firms work together temporarily in a variety of configurations via internet, thus combining their core competence for a world-wide market, which could be served “any time and any place.” When we started our field research, we realised that almost all firms practice some kind of co-operation, but only very few practised tele-co-operation, defined as the mutual provision of services of two or more partners, spatially separated and working together via internet in close interaction to make a specific product for third parties. Around half of the firms that practiced tele-co-operation in our sample were only tele-cooperating on a regional level, the other half used the national market as a field of action. The “any place” vision seems not to work. Almost all of them had long-standing partnerships. They only gradually incorporated new partners into their networks. Generally, firm owners insist on having a face to face meeting first, in which two things matter: a) the competence profile of the partner (which can be evaluated by his products and by calls to their former customers) and b) a gut-feeling that the other is on the same wave-length and has the same values and attitudes. As often discussed in business literature, these cultural elements enable the establishment of “swift trust” (Jarvenpaa 1999). They are a necessary but not sufficient counter-measures to prevent risks. An additional mechanism to avoid that one is deceived by a partner’s opportunistic behaviour is simply reputation. In relatively tight regional networks, people know each other well. Once the word of opportunistic behaviour is spread, this is the death of any further co-operation for the norm-infringing firm. The stable relation among partners has several shortcomings: once a relatively clear division of work is agreed upon, at least one partner will inevitably take the more profitable jobs; the emerging structure of the co-operation with its institutionalised procedures and rules decreases flexibility and limits the freedom of action; a good climate is not a guarantee for excellent performance of each partner. The social costs to quit or to alter roles within the network are high.

Women in the new economy

In our sample of the tele-co-operating firm owners, only 14 % were women. This is lower than the women's quota in the general service sector, which is reported in different sources to be between 23 % ("Impulse", Nr. 1/2002, p. 41) and 29% (Tschouvakhina 2002, p. 2). An increasing number of female firm owners are reported in traditional female occupations in the health care, education, and personal service sector (Leicht/Lauxen-Ulbricht 2002), but female jobs in industry related services or in technical and R&D jobs had almost no growth rate (Valerius 1996, p. 76, Lauxen-Ulbricht/Leicht 2002, p. 20). In our results, we found that 26% of workers in the tele-co-operating firms were women. Female owners tended to hire more female workers than male. The responses to the open questions gave little evidence of a women-specific view on work and entrepreneurship.

Why are there so few women in this field? This is a classic question of almost 25 years of research on women in technical jobs. The jobs in the software, multimedia and internet sector mostly require a high level of technological knowledge. Women still have a minority role in most "hard" technological subjects (Zwick et al 2000). Even if they graduated with a degree in computer science, math etc. they often work in jobs below their qualification level and rarely prefer self-employment as a career option (Minks 1996).

We believe that cultural impediments play a significant role, for example, the importance placed on the experience of pleasure and recreation in technology, in the case of engineers deriving sometimes from childhood experiences of tinkering with technology. Kleif and Faulkner (2003) have recently studied men's pleasure in technology. Contrasting robot-building hobbyist and professional software developers, they outlined three motives: a) the pleasure in creating, (expressed, for example, by a strong identification with the artifact) b) pleasures of skill and knowledge (hands-on competence in tinkering and abstract competence in logical and analytical problem solving) and c) pleasures in the intimacy (computer as a "friend") and comfort with technology (a sense of mastery, which often acts as a "form of symbolic compensation for a perceived or experienced lack of power in other realms" (Kleif/Faulkner 2003, p. 312). Of importance to taking pleasure in technology is also the promise to overcome uncertainty.

A few other cultural obstacles can also be mentioned (Glott & Paul 2003). Partly, the start-up business (especially in the U.S.A.) is full of competition and greed (Ferguson 1999), requiring a cold-blooded, instrumental behaviour and impression management. This seem not to be the type of atmosphere women founders prefer. A qualitative research project on female firm founders in Germany came to the following conclusions: These women “have difficulties to identify with the entrepreneurial role and to act accordingly in relation to collaborators and business-partners. The female firm founders describe their behaviour as consensus orientated and have problems in self-presentation and a self-conscious performance. All stress the importance of a team-orientated, good atmosphere among the colleagues at work, and they estimate harmony in co-operation with customers and business partners” (Mann, 1997: 127).

Women studying informatics often feel insecure about their choice of study in a subject which is dominated by hackers, influenced by their culture and which negatively affects their self-esteem as computer experts (Schinzel et al. 1998: 89). It is likely that this “nerd” image, which is part of the (male) scientist image still prevails in the communities of the web-programmers and thus prevents qualified women from joining.

A further exclusion mechanism may reside in social-psychological mechanisms. Johnson (1988) re-interpreted Kidders *Soul of a New Machine*, in which a heroic team with a strong senior engineer leader made the impossible, possible and developed a new computer under extreme stress. Johnson, who interpreted the emotional thrills and intense atmosphere of this development process, spoke of group regression and alluded to the picture of the herd of brothers competing for the attention of the mighty father. Women did not fit into this setting. There were some parallels with high-tech founders. A visionary man collects other gifted and very similar young men who develop Internet-tools, software, etc. under extreme circumstances, for example, locked in their rooms for long hours at a time in a kind of sensory deprivation and under time pressure.

As previously mentioned, the firm founders in the Internet and Multimedia sector that were interviewed, insisted that they would only recommend people whom they personally liked and with whom they had the same wave-length. We suspect that – apart from required technical and other skills - the main selection criteria is similarity, which to a certain extent makes sense because it decreases complexity and enables “swift trust” relations, assuming that there is a homogeneous way of thinking and problem solving. Nevertheless, it definitely does not

make it easier for women to participate in the inner circle or occupy an important or leading position.

Conclusion

We have presented some arguments to paint a realistic picture of the New Economy firms and their employees. The “e-lance vision” and the notion of a mobile “job nomad” have little significance in the German context. The survival rate of these high tech firms is above the average. Firm owners in our specific sample of small tele-co-operating firms in the Internet, software and multimedia sector fit more into the pattern of the typical small business owner than of the New Economy hero. What remains – even after the dot.com crisis - is a specific mix of people and technology-centred work attitudes in these firms which contradict all ideas of a rootless workforce, governed by selfish and materialistic motives. Yet, some of the dominating attitudes do not facilitate the inclusion of women.

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