

12 An overview of results and implications

The I-Cubed (Information, Intangibles, Innovation)

knowledge economy runs on talent and creativity.

www.athenaalliance.org

Self-employment is on the rise in The Netherlands. In 2003 there were 54.000 starting entrepreneurs in The Netherlands, in 2007 this number has grown to over 100.000 individuals and 2008 promises to top that figure as 57.000 new entrepreneurial firms started in the first 6 months of 2008. This self-employment growth is largely grounded in the growth of highly skilled independent professionals a.k.a. freelancers i.e., knowledge workers who earn a living by selling their tacit knowledge by the hour or day to various clients.

In Chapter 2 it was argued that freelance growth is caused by 4 structural factors. Firstly, the internet has decreased the transaction costs of searching, finding, and hiring specialist expertise. This makes it easier to hire experts for a specific assignment. Secondly, technology developments and the outsourcing trend of the last decades have increased process standardization. Where two decades ago most processes were firm specific, nowadays almost all firms use standard software solutions (Windows, SAP, Oracle, et cetera) and standardized processes (HRM, financial control, et cetera). This has enlarged the importance of industry, and professional knowledge over firm-specific knowledge. Thirdly, the miniaturization of technology solutions has given more power to the individual. Many activities can nowadays be performed by a single individual on a laptop, where once many men and financial capital was needed. Last, but not least, the advent of the knowledge sector has increased the need for innovation and flexibility. The much published rise of the creative class (Florida, 2002) cannot be separated from the growth in freelancing. Freelancing, with its emphasis on flexible project forms of organization, is irrevocably connected to creative production. It is in these projects where dynamic and new combinations of individuals result in higher levels of innovation, creativity and flexibility.

Other factors, such as: globalization (i.e. international specialization), government policy (e.g. promoting entrepreneurship), sociological (e.g. fostering higher education), cultural factors (e.g. the increasing importance of individualism and authenticity), and the age wave all play a supporting role in the increasing numbers of independent professionals. Looking at all these

factors, it is most likely that the growth in freelancing will continue in the next decades, alongside the growth in the creative knowledge economy.

The subject of this study is the career success of freelancers. What are the factors that determine whether a freelancer has a successful career? Is it *what you know* (human capital), *who you know* (social capital) or *who you are* (personality)? By focusing on the drivers of freelance career success, this study seeks to improve our understanding of the challenges and dilemmas that all professionals face in the modern knowledge economy.

The importance of this research goes beyond the phenomenon of freelancing. The freelancer of today is a model for all job-hopping knowledge workers of tomorrow. In an era where employees become more and more responsible for their own career, hop from one job to another and are rewarded based on their professional knowledge and entrepreneurial attitude, the difference between freelancers and regular employees is quickly disappearing. This study may therefore give us a glance of how a typical professional career will look like in, say, 2025.

12.1 Results of the study

In Chapter 3 an overview was given of the strange freelance world. A world in which individual knowledge is central to productivity and which is characterized by a tripartite labor market with important employment agents. In which opaque activities, such as: signaling and stretchwork, are important for obtaining success. But it was also shown that the freelance world is not a world, but rather a galaxy of different planets. Although there are plenty of similarities between the various freelance professions, there are also considerable differences between the professions, especially regarding market structure and competitive position. Our study on career success will reflect these differences between freelance worlds.

12.1.1 The success factors of the freelance career

In this study, 2 variables were used to measure freelance career success. Revenue was used to measure objective freelance career success, and career satisfaction was used to measure subjective freelance career success. This distinction was made because many freelancers choose a freelance career just because it offers more flexibility and opportunities to balance work-life issues. These individuals probably do not judge their career success based on monetary rewards, but assess their career based on its contribution to their quality of life. Revenue instead of income was used as our objective measure to judge the freelance career. There are 2 reasons for this. Firstly,

revenue is much easier to measure than income. Secondly, in the world of independent professionals, the cost structure of professionals is quite alike. All freelancers in The Netherlands basically need a car, a mobile phone, a laptop and social insurance. The cost structure is more determined by personal preferences (e.g. quality of car) and characteristics (e.g. age and health determine insurance costs) than by the profession.

Human capital has a strong positive impact on objective freelance career success, but almost no impact on freelance career satisfaction. Looking in more detail at the various human capital factors, it is clear that education and experience are very important drivers of success. Oddly enough, the impact of training days on current freelance revenue is negative. This is partly because attending training diminishes billable hours, and partly because freelancers without a current assignment are more likely to start training.

A remark on measurement has to be made here. Human capital is very hard to accurately measure across different professions. Where one profession requires the knowledge of programming languages, another profession requires technical skills or knowledge of the latest accounting standards. To facilitate comparison the measurement of human capital in this study was fairly general and hence simplistic, such as: general education levels, training effort, and experience. With more elaborate human capital measures, one might even see a stronger relationship between human capital and freelance career success.

Human capital (i.e. knowledge, skills and abilities) is positively related to objective career success.

Human capital (i.e. knowledge, skills and abilities) is not related to subjective career success.

Social capital is the only group of success factors which is positively associated with both freelance revenue and career satisfaction. Being an active networking person i.e., investing time and energy in building and maintaining your network by sending cards, emailing, phoning, visiting and, occasionally, bringing gifts to clients is very helpful. Being registered at employment agencies and actively visiting them is another variable which contributes significantly to revenue. Freelancers who actively use employment agencies have higher utilization rates, but somewhat lower professional fees (probably reflecting brokerage fees). But none of the other social capital variables, such as network size, membership of a business club (e.g. Rotary), and partner support does enhance freelance revenue.

Social capital is positively related to objective career success.

Social capital is positively related to subjective career success.

No relationship is found between **personality capital** and objective career success. There are 3 potential reasons why there is no link between personality capital and objective career success. Firstly, it may be because the effects of personality are moderated or mediated by other factors. Our data for instance shows that social capital and choice of strategy are impacted by personality: open and pro-active persons are more inclined to network and to choose an innovative business strategy, and less prone to choose a focused business strategy. A mediation study could help us understand how personality influences social and strategy capital. Secondly, our measures of personality capital are not sufficient. Thirdly, there is no link between personality capital and freelance revenue.

All personality capital variables demonstrate a strong impact on career satisfaction. Especially the career insight variable is very powerful. But also pro-activeness and openness to new experience add to career satisfaction.

Personality capital is not related to objective career success.

Personality capital is positively related to subjective career success.

Motivational capital is important for revenue. Freelancers who started freelancing because of flexibility and/or work-life balance motives have lower revenues, than professionals who started freelancing for other reasons. Motivational variables are also imperative for career satisfaction. Professionals who freelance because of flexibility and work-life balance reasons and professionals who freelance because of autonomy and professionalism have higher career satisfaction levels.

Individuals who are motivated by flexibility and work-life balance have lower objective career success.

Individuals who are motivated by flexibility and work-life balance have higher subjective career success.

Freelancers who focus on a single industry (or client) and freelancers who focus on a single product have higher revenues. Although we did not hypothesize on the relation between career satisfaction and **strategy capital**, business strategy is important for career satisfaction. Especially independent professionals who distinguish themselves through a strategy that is innovative and different, and independent professionals with a broad product range are more satisfied with their

career. It might be that being innovative provides intrinsic benefits to independent professionals, which increases career satisfaction.

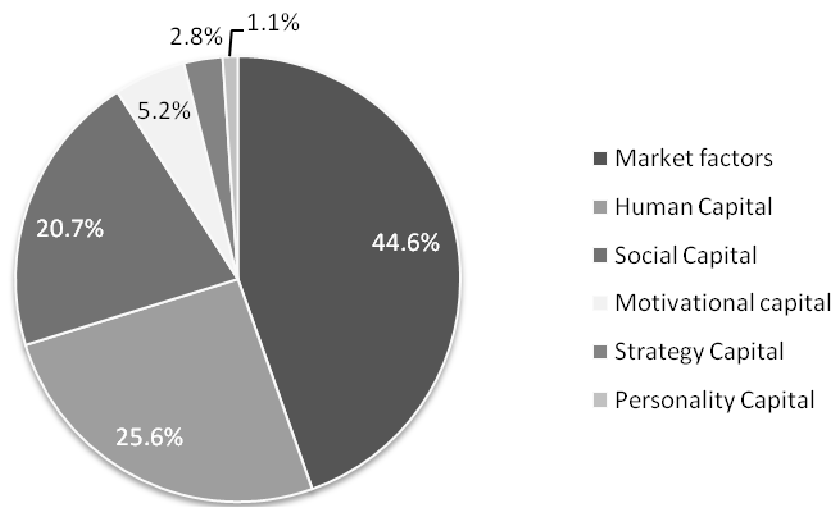
Strategy capital is related to objective career success.

Strategy capital is related to subjective career success.

The hypothesis that most conclusively can be answered with a strong yes, is the relationship between market factors and objective success. Market factors, above all the profession, determine a large part of someone’s revenue. A weakness of our research is that there is only information on the profession a freelancer performs, but no true market information, such as: number of freelancers, size of the market, barriers of entry, et cetera. It is nevertheless clear that market factors are a very important determinant of objective freelance career success.

Market factors are related to objective career success of independent professionals.

Figure 32: The market is the main driver of freelance revenue



Market factors (Figure 31) explain 45% of the objective career variance in our model, followed by human (26%), and social capital (21%). Motivational capital (5%), strategy capital (3%), and personality capital (1%) are almost not important in explaining objective career success.

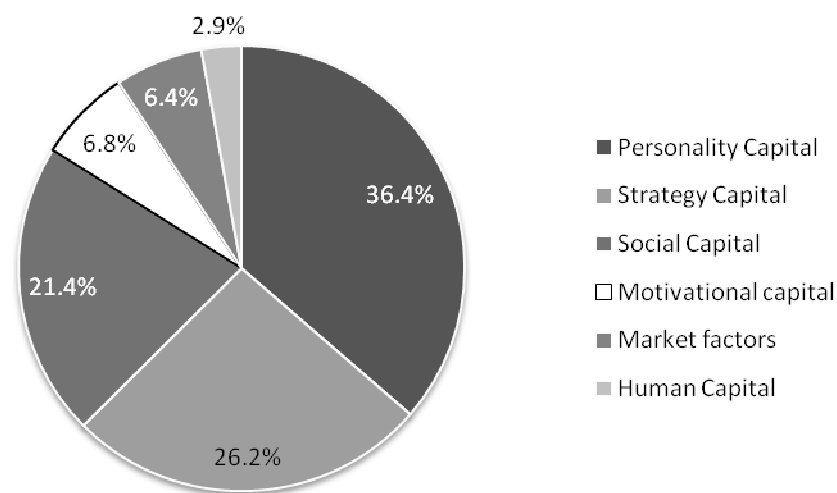
Market factors dominate other factors in explaining objective career success

The story regarding subjective career success is a totally different one (Figure 32). Personality variables dominate the explanation of career satisfaction (36%), followed by firm strategy (26%),

and social capital (21%). Motivational capital (7%), market factors (6%), and human capital (3%), are of limited importance to the career satisfaction of freelancers.

Psychological capital dominate other resources in explaining subjective career success

Figure 33: Personality capital is the main driver of freelance career satisfaction



The freelance career success factors are also estimated for a number of specific freelance occupations. These occupations are: interim managers, interim professionals (i.e. finance professionals, IT professionals, legal professionals, HRM professionals and management consultants), journalists, trainers and coaches, technical professionals, and other free agents (e.g. health care, facility professional, artist, translators, et cetera).

For interim managers and contrary to common wisdom, neither social nor personality capital are important drivers of **interim managers'** revenue. It is essential human capital that drives interim managers' revenue. For the revenue of **interim professionals** are human, social and strategy capital all relevant, but personality or motivational capital are not important. For **trainers and coaches** and all **other freelancers** the same variables drive revenue: human, social and strategy capital. The revenue of **journalists** seems only to be driven by social and strategy capital. The finding that human capital is not important for journalists' revenue is probably the most remarkable finding here. The revenue of **technical professionals** is hardest to predict. Almost none of the success factors are significant. This can be caused by the limited number of observations or by the fact that certain success factors for technical professionals are missing in our model. These findings point to the fact that the relative importance of the various success

drivers (human, social, personality, motivational, and strategy capital) varies from one occupation to another. More research is needed why in some occupations human capital is the most important driver, and social capital is imperative in other occupations.

Our results point to an important trade-off for freelancers between career satisfaction and revenue. Focused business strategies, such as focus: on a single product, single sponsor or single industry have a positive effect on freelance revenue. But freelancers who offer a broad range of services, and freelancers who develop innovative and different services have a higher level of career satisfaction. This trade-off between revenue and satisfaction is related to the largest dilemma for professionals: **the career progression paradox**. Professionals constantly need to balance the need for specialization with the need for differentiation. The need for specialization comes from the fact that both sponsor organizations and employment agencies prefer professionals with similar prior experience and a clear career path. The need for differentiation comes from the professional desire for self-development and the risk of skill obsolescence.

The differences between men and women in this study are interesting. On the one hand, there are significant differences between men and women. The revenue of men is higher, men work more hours, women are somewhat more satisfied with their career, and women and men tend to work in different freelance professions. But, on the other hand, the drivers of career success of men and women are practically the same.

Many employment agencies and freelancers reported in our interviews that networking and knowledge are complementary factors i.e., they strengthen each other. One without the other does not help you. The analysis suggests that this is not the case, and that knowledge (human capital) and networking (social capital) are independent drivers of career success. That is, you can be a successful freelancer if you have one without the other.

Human capital and social capital are independent factors in determining objective freelance career success.

Many employment agencies and freelancers told us that using an employment agency, something a freelancers rather does not as they charge hefty fees, is especially helpful for freelancers who have no network of their own. For these freelancers an employment agency is a very helpful partner. This relationship could not be established across all professions, but from the subgroup analysis it became clear that this substitution effect is indeed present for interim professionals (i.e.

IT professionals, finance professionals, legal professionals, HRM professionals, and management consultants). A similar analysis was done for the possible substitution between employment agency and personality traits, but no significant results are found here.

Agency support is a substitute for ones' own networking skills for interim professionals but not for other professionals. Agency support is no substitute for personality, whatever your profession.

12.1.2 The freelance career and aging

This study paid special attention to older freelancers for 2 main reasons. Firstly, we live in an aging society in which governments look at freelancing as an alternative to stimulate labor participation of older individuals. Secondly, earlier studies indicate that it becomes harder for older freelancers to remain productive until high age. This is because freelancers see their networks dwindle as valuable contacts retire early, and because older freelancers find it increasingly hard to keep up with the latest technology changes.

Contrary to common wisdom, anecdotic evidence, and research on older employees, no direct evidence for skill obsolescence for older freelancers is found. There is neither a significant relationship between age and training participation, nor between age and networking. However, there are strong and significant negative relationships between freelance experience and several human, social and personality capital variables. This suggests that skill obsolescence is not related to age, but perhaps to freelance experience. A possible explanation for this observation is that an independent professional invests much of his/her time and energy in the beginning of his/her entrepreneurship in developing skills and network, but when the knowledge professional has build-up a stable practice, the efforts invested in maintaining skills and networks are reduced, leading to diminishing skills and networks.

There is no direct evidence between age and skill obsolescence of independent professionals.

To test for experience concentration, training in new skills (human capital) and network refreshment (social capital) are measured. No relationship is found between training of new skills and age or freelance experience, but again a strong negative and significant relationship is found between age and network refreshment and between freelance experience and network refreshment. This suggests that there is an inclination for 'old boys networks' to emerge when freelancers become older.

Older and experienced freelancers invest less in network renewal. The aging freelancer's network has a tendency to concentrate and become 'an old boys network'.

There is an inverse U-shaped relationship between age and freelance revenue. The revenue of freelancers first grows with age, and then starts to drop after a certain age. This moment arises between the ages of 50 and 55, after which the positive effect of experience is dominated by the negative effects of aging. A closer look showed that freelance revenue does not decrease with age due to lower fees, but due to lower utilization rates. However, this inverse U-shaped relationship between age and utilization rate is not found for all freelancers. It is a male phenomenon and is especially strong in some occupations. It is not found for women. Women tend to increase their labor participation and entrepreneurial efforts in their 40s and 50s, when children need less care.

*For men an inverse U-shaped relationship between age and revenue and age and utilization rate exist
For women there is no relationship between age and revenue or utilization rate.*

The inverse U-shaped relationship between age and utilization rate is especially strong in occupations with a high demand on Fluid Intellect, such as: finance and IT professionals. In these occupations the constant innovation and renewal makes it harder for older individuals to stay in touch with the latest developments. For professions with a relatively low demand on Fluid Intellect, such as: interim managers, trainers and coaches, age does not seem to be a very important determinant of revenue.

The inverse U-shaped relationship between age and utilization rate is especially strong for occupations with a high demand on Fluid Intellect such as finance and IT professionals.

A long history of academic work shows positive relationships between satisfaction measures and age. However, in this study the coefficients of the age factor have the supposed signs, but are not significant. This is perhaps because some older individuals who cannot find a permanent job are forced into a freelance career.

There is no relationship between age and freelance career satisfaction.

Older freelancers are in general pretty positive about the consequences of aging. Older freelancers are especially self-confident about their professional skills and abilities, and they are often financially independent. Nevertheless, stereotyping, dwindling networks, and skill obsolescence are still potential problems for older freelancers. But, when these issues arise, most freelancers have the opportunity to withdraw from the profession and retire, or to reinvent themselves to adapt to the changing environment. In any case, in retro respect the freelancers report being happy with their decision. Much of the observed decrease in utilization may therefore be voluntary.

12.1.4 Estimating fit

The findings above are based on our estimates of our simple log-linear model. In Chapter 10 a more complex general interaction (GI) model with an emphasis on **fit** between the various success factors was estimated. From this, it became clear that complex matching effects are very important for objective career success. These results seem to indicate that more complex mechanisms are at work, and that the actual role of personality and social capital might be larger than what can be concluded from the simple log-linear model.

The following matches are particularly important: 1) fit between human capital and social capital, 2) the fit between social capital and strategy capital, 3) fit between personality capital and strategy capital, and 4) fit between personality capital and the market. This suggests that knowledge and network should be in balance, network should harmonize with firm strategy, and that personality has a complex relation with success. Personality per se is not that relevant for freelance revenue, but the fit between personality and firm strategy and the fit between a freelancer's personality and the market on which the freelancer operates is very important to freelance career success. All in all it is clear that the GI approach is an interesting avenue and theoretically superior approach. More research is however needed on the theoretical relationships between the various sources of capital of individuals.

12.1.5 Using freelancers within an organization

In this study we also shortly explored the impact of freelance growth on organizations. This was not the main of the study, but in order to understand the world of the freelancer, almost twenty interviews were held with various employment agencies and sponsor organization using structured interview lists. In Chapter 11 we discussed the existing body of literature and results of the interviews.

Starting with the strategic impact of freelance growth on firms by discussing the resource-based view of the firm, we concluded that this increased mobility of human resources is not positive for the profitability of larger firms. Human resources will demand a greater share of revenue versus capital and pressure may arise against the profits of shareholders. This increased mobility of labor will have the greatest impact on so-called knowledge-intensive firms.

There is a small body of literature discussing resourcing strategies of firms. Traditional models (i.e. Atkinson, Handy, and Lepak and Snell) predict that more and more organizations will consist out of a small core and a large, flexible shell. In these models the core is often made up of strategic, high value employees and freelancers work in the periphery of the organizations. More recent models (i.e. Matusik and Hill, Nesheim) argue that freelancers should also be used in the core of organizations, as they increase flexibility and innovation. A critique one may have on these resourcing models, is that their point of view is that of the organization, not that of the freelancer. Implicitly, in these models, it is the organization which determines the terms of employment. This seems inappropriate in the 21st century, where resources become increasingly scarce in Western economies and may opt for a freelance relationship to maximize learning experiences.

Our interviews showed that both traditional (i.e. strategic value of resources), and more modern theories (i.e. need for flexibility and innovation) are indeed reflected in practical arguments of organizations to hire freelancers. But an even bigger argument has been overlooked by these theories. That is the maturity and attractiveness of the freelance market. The latter seems to be the most crucial aspect for organizations in determining the optimal ratio between freelancers and permanent employees. This suggests that when freelance markets grow and become mature, perhaps when some of the main challenges of markets, such as reputation risk are solved, more and more organizations will use freelancers as a strategic resource.

The increased power of the individual implies that working within a firm is becoming an option of choice instead of a need in certain occupations. This increases the HR standards of knowledge-intensive firms. Professionals will only work for firms if they offer something extra, such as: interesting assignments, professional development, shared purpose, trust, or monetary rewards. To offer such a proposition to employees, knowledge-intensive organizations will have to provide a sense of common purpose, focus on their core capabilities, and create a business

proposition in areas where markets have disadvantages (e.g. high reputation risk, specific type of professionalism).

12.2 Plusses, minuses, and suggestions for further research

Before we discuss the drawbacks of this study and the suggestions for further research, it is perhaps good to stand still and ponder on the 3 major benefits of this study. Firstly, this study is one of the earliest large-scale quantitative studies into a fast growing phenomenon: independent professionals, i.e. individuals who operate on the frontier of entrepreneurship and employment. As such, this study embodies a lot of descriptive statistics that are new and which gives food for thought for institutional organizations, academics, practitioners, and their career coaches. It also convincingly demonstrates the importance of the market for the livelihood of independent professionals, and draws light to the fact that market circumstances and thus career success drivers differ greatly from one profession to the next.

Secondly, this study used career satisfaction as a success variable. As far as we know, career satisfaction is never used as a firm objective. Nevertheless, this has helped us understand that the factors which drive the career satisfaction of entrepreneurs are completely different than the drivers of revenue. There may even be a trade-off between revenue and satisfaction. This is most clear in the area of business strategy, where a focused business strategy leads to more revenue, but a differentiating business strategy leads to more career satisfaction.

Thirdly and last, this study points to complex interrelations between personality, business strategy, human, and social capital. There is not one entrepreneurial personality that will lead to success, but in reality there is a complex interaction between all variables which lead to success. How this complex set fits together may vary from one profession to the next.

As any study, this one suffers from some drawbacks, which give room to further study. Firstly, this study was based on cross-section, which implies that it does not give information on career changes across the lifetime. As the career becomes more fluid, individuals leap increasingly from one assignment to another and from freelance contract to traditional employment and back. This intertemporal behavior might tell us more on which professionals are more likely to become successful freelancers and about the possible selection effects ("the tickets to the game"). A natural extension of this research is therefore to repeat this study using the same sample in 2010, 2012, et cetera.

Secondly, this study was based on a broad set of independent professionals, who are active in different professions. It shows that success factors differ from one profession to another. But it is not exactly clear what ultimately causes the relative importance of the various success factors: are this human capital characteristics (e.g. tacitness, and decomposability of knowledge), or market characteristics (e.g. structure, barriers to entry, competition)? A comparative in depth study of 3 or 4 different professions and their markets, can teach us more about the specific relation between human capital, the market, and individual career success.

Such a study will need to open the black box relationship between the individual and the collective level. In the knowledge economy, the border between the collective and individual level is becoming fluid and multifaceted. We therefore warmly agree with Kilduff (2006) and Ibarra (2005), who call for a better understanding of organizational, economical and social phenomena, by improving our understanding of individual actors and developing ways to aggregate and disaggregate between individual and collective levels, or *zooming in and zooming out* as Ibarra calls this. Such a toolbox might help us not only to understand firms and individuals, but also to explore the subtle differences between emerging hybrid structures, such as: professional networks, communities of practice, partnerships, et cetera. For freelancers this zooming in and out is especially relevant as they operate in a tri-partite environment.

A follow-up study should address the high transaction costs and a lack of transparency in a lot of freelance markets. It is more than likely that these market characteristics determine freelance career success factors, the decision of organizations to hire freelancers, other organizational outcomes, such as: innovation and continuous learning decisions, and ultimately economic growth. Such a study should also address the potential of hybrid governance models to improve market effectiveness.

Thirdly, although this study acknowledged the importance of signaling and stretchwork, no effort has been done to study this. A future study might, for instance by studying CVs of freelancers, focus on signaling and stretchwork efforts, and determine how these behaviors impact the success rate of freelancers.

Fourthly, this study focuses on The Netherlands. A comparative international study of freelancers in general or a comparative international study of a number of freelance markets (e.g.

IT, media) to see whether our general findings are typically Dutch or are also applicable to other Western and non-Western economies.

Fifthly, as said this study was only exploratory regarding the impact of freelance markets on organizations. There is plenty of room to do more research into the organizational implications of freelance growth. For instance one of the interesting things here is the conflict of interest between employment agencies, and knowledge-intensive firms in certain sectors.

Sixthly, our research suggests that freelance personality is quite unimportant for freelance revenue. However we also know that 1) there are strong mediating relationships between personality and social networking skills and strategy preference, and 2) our fit model suggests that the impact of personality on career success is likely to be contingent on other factors. More study should be done into this complex relationship between personality and career success. In such a study the GI-approach could be instrumental in discovering complex fit factors.

Seventh and last, it would be interesting to study the relationship between freelancing and economic growth as freelancing influences economic growth in 2 major ways: 1) by promoting entrepreneurship and innovation, and 2) by providing a flexible labor market.

12.3 Freelancing and economic growth

As explained in Chapter 2, there is still a black-and-white view on the independent professional, with liberal views competing with the collectivist perspective. This dichotomy in views is not only seen within the sciences, but, much more important, within the institutional and political spheres as well. An important research question that is starting to emerge is whether the growth in independent professionals is good for the economy. In this section some light is shed on this discussion.

Western society seems to be slowly but steadily moving to a knowledge economy. The growth in freelancing is a direct consequence of the growth in the number of knowledge professionals. The research of Barley and Kunda (2004) gives us an idea about the strength of the relationship between knowledge work and freelancing. They show that US employment in managerial, service, sales, clerical, professional and technical occupations rose from 47% in 1950 to 72% in 1998. It is very interesting to notice that this enormous increase is not caused by the rise in managers (+1.5%), sales people (+4.0%) or low-skilled service employment (+4.0%), but by a vast increase in

professional and technical employment. Their employment share grew from 8% to 18% of the workforce in almost 50 years (about 0.2% market share growth per annum). It is in these professional and occupational professions, where the share of freelancing is highest.

The question whether freelancers fuel economic growth is a hard one to answer. Even the relationship between entrepreneurship and economic growth is not always convincingly established. But research is promising, showing increasingly strong relationships between entrepreneurship and growth. At firm level, cross-sectional regressions have revealed that smaller and newer enterprises tend to have systematically higher growth rates than the average (Hart and Oulton, 1996). At the industry level, there is evidence that industries with higher rates of entry by small firms, have above-average rates of productivity growth and innovation (Geroski and Pomroy, 1990). At the national level, the question is more difficult to answer, but also here research points to a positive relationship between economic growth and entrepreneurship. For instance, the economic literature shows that small firms grow faster than large firms (Gersoki, 1995). This suggests that a larger presence of small firms contributes positively to economic performance of a nation. In a meta-analysis of entrepreneurial studies, Van Praag and Versloot (2007) conclude that entrepreneurs have a very important and very specific role in the economy. They create employment, contribute to productivity growth, produce and commercialize innovations and, by doing so, generate positive regional spillovers.

But it is questionable whether this emerging positive relationship between economic growth and entrepreneurship can also be found for economic growth and freelancing. The main reason why entrepreneurs are believed to be so important for economic performance is that their firms are supposed to grow into the multinationals of tomorrow, indeed, the very thing a freelancer will (almost) never do.

One of the biggest claims of the positive influence of freelancers on the economy can be found in the work of Saxenian (1994). In a comparison of the Boston Route 128 area with Silicon Valley, Saxenian argues that the stronger economic vitality of Silicon Valley is based on Silicon Valley's dynamic networks, where professionals move frequently from one organization to another. This implies that industries with dynamic networks, high job mobility and boundary less careers are more likely to grow in the knowledge economy than industries based on the old employment model with firm-based careers. But Saxenian (1996) also acknowledged that increased employee mobility has two opposite effects on organizational performance. One the

one hand, increased job mobility may have harmful effects on group functioning and organizational performance. On the other hand, a lack of employee mobility might also slow down the rate of diffusion of new knowledge across organizational and industry boundaries. Another famous study is Florida (2002), claiming that great economic power and growth will be brought to cities and countries, which are able to attract and retain the creative class.

Porter, Cornelius and Sachs (2002) argue that economic development implies increasingly sophisticated ways of producing and competing, and thus entails the evolution from a resource-based to a knowledge-based economy. They see 3 stages of development. At the lowest stage, factor-based production, creation is based upon the mobilization of primary factors of production. Countries may move to the second stage i.e., that of industrialization: then economic growth becomes more capital intensive and thus investment-driven. In this stage, countries have proper labor and capital markets, and educate their workforce well. Competitiveness is primarily based upon high rates of production efficiency in manufacturing. The third stage is that of a technology-generating economy (knowledge economy). This stage requires the ability to generate and commercialize new knowledge, and implies cooperation between knowledge centers such as universities, private businesses and government. Once a critical mass of knowledge, technologies, skills and purchasing power has been built up, innovation achieves increasing returns. These will fuel a self-perpetuating process of continuing innovation and economic growth. The question therefore is not whether freelancing contributes to economic growth per se, but whether freelancing contributes to economic growth within the complex knowledge society.

According to Mokyr's theory of economic growth (1999, 2002), there are 2 forms of knowledge: 1) propositional knowledge, and 2) prescriptive knowledge. Propositional or Omega knowledge (Ω) refers to generalized principles, such as natural laws, but also extends to engineering and socially constructed beliefs. Improvements in Omega knowledge are due to discoveries of facts that had always existed, but were previously unknown, providing the epistemic base for prescriptive knowledge. Prescriptive or Lambda knowledge (Λ) consists of techniques, prescriptions and instructions, which reside in human memory, artifacts or storage devices. Based on his detailed observations of Western economies and the process of industrial revolution, which might or might not be accurate in the knowledge economy, Mokyr claims that economic growth is driven by: 1) expansions in the base of propositional knowledge, and 2) a positive feedback mechanism between propositional and prescriptive knowledge. One cannot generate growth without the other: for new mappings from Omega to Lambda to occur, the economically

active have to converse with the intellectually informed. Today, Mokyr argues, modern innovations in communication and information technology decrease the comparative advantage of the workplace relative to the household, offering some workers the prospect of a return to household production.

There are several theoretical reasons why freelancing might be the most beneficial way of contracting in a knowledge society. Firstly, as knowledge specialization becomes increasingly important, the market is better equipped than a firm to accommodate and allocate the large variety in knowledge. According to Nickerson and Zenger's theory, the market is the preferred method of allocation and control when problems (and thus knowledge) can be decomposed in smaller questions. Secondly, in a competitive and innovative environment, using freelancers can expand the resource frontier of organizations, leading to more innovations and economic growth. Thirdly, in the knowledge era, projects are increasingly the main vehicle for organizing and learning for organizations and individuals (Arthur, DeFillippi and Jones 2001). Indeed, producing creative and cultural goods (e.g. theatre plays, movies), works of art (painting, sculpting), real estate (construction and architecture), marketing (advertising campaigns), software development (IT), academic research, and many other activities imply project management. As project work is per definition temporary, it is relatively easy to hire outside experts and terminate the employment relationship after the project is completed. In a project organization, there are no succession problems. Fourthly, in the knowledge economy almost all costs are variable (i.e. personnel costs). The lack of fixed costs of other resources (e.g. distribution, equipment) implies that any change in product demand strongly influences profitability. In such a knowledge environment, an employer has a large incentive to translate diminishing demand immediately into lay-offs. Long-term employment is less feasible in a knowledge economy where fixed capital does not act as a buffer. The promise of long-term employment cannot be held or convincingly made within the knowledge economy. Traditional employment relationships will cause failures of smaller firms, which would be viable without them.

There are also arguments suggesting that freelancing is detrimental to economic growth. To begin with, it is questionable who will invest in developing new knowledge. In areas where knowledge is asset specific or the outcome is unclear, the investments of freelancers might be lower than optimal. A second shortcoming has to do with team dynamics. In a freelance economy, some time is lost to meet and value each others' capabilities. Although this process of *storming, norming and performing*, will be optimized in a freelance economy, transferring jobs will always lead to some

friction losses. A third potential drawback of freelancing is the risk of increasing inequality between individuals. Some freelancers may be in high demand and others not, resulting in large differences in fees and utilization rates. Although freelance professions are not scalable, a set of winners and losers will arise. Last, because of the ambiguity of the required skill set of some knowledge professions, there is a risk that a sponsor choose freelancers based on their status and reputation instead of their real knowledge, which will not advance economic growth.

It should also be noticed that freelancing is not the ideal method of organizing in all sectors of the economy. Particularly in organizations with a significant role for firm-specific knowledge, or in sectors with shallow markets, long-term employment will always be a significant part of the core of the organization. These industries and organizations are collectively a large part of the economy. Moreover, there is a strong tendency for sponsor organizations to focus on short-term results. They typically hire freelancers with the necessary experience and do not invest in the development of new human capital. This means that freelancers themselves have to invest in the development of their knowledge, which increases the risk of underinvestment. Last, market conditions largely determine the behavior of freelancers and the impact of freelancing on economic performance. These market conditions are not always optimal. Some freelance markets are characterized by a limited number of sponsor organizations, leading to the potential abuse of monopoly powers in these markets. Number of players, size of players, intellectual capital protection, transparency of market, importance of reputation risk, and continuing education efforts, are all crucial in determining market effectiveness and therefore the impact of freelancing on organizations and economies. There is a responsibility for governments and professional associations to promote effective market functioning.

Overseeing the evidence, it is not possible to determine whether freelancing will or will not lead to extra economic growth, if any. More in-depth analyses on firm, industry and national level are needed to determine this. It is, however, likely that freelancing may promote economic growth in certain economic sectors. In an environment with a high need of innovation and competitiveness, freelancing enables an economy to continually refresh and expand the available resource set.

Compelling evidence on the relationship between economic growth and freelancing might be lacking, but there is abundant and compelling evidence that the growth in freelancing may indeed increase the well-being in society. Independent professionals are in general much happier with their lives than regular employees. This positive relationship is found in all studies on self-

employment and satisfaction (see Anderson, 2008; Blanchflower and Oswald, 1998; Benz and Frey, 2008; Blanchflower, 2004), and career mobility and satisfaction (see Feldman and Ng, 2007). Benz and Frey (2008) identified the factors that explained higher levels of job satisfaction: 1) being independent and one's own boss, 2) the absence of hierarchy, and 3) control over one's own working hours and effort.

Comparable outcomes are present in this study. It convincingly shows that high-killed freelancers are primarily motivated by pull factors: these professionals want to freelance because of motivations of autonomy, professionalism, work-life balance, and flexibility. Less than % desires a traditional job. This study does not deny that some freelancers are indeed forced into freelancing, but rather argues that these push factors are mainly present in the weaker areas of the labor market, such as: older employees, and low-skilled employees. Especially those organizations with abundant labor supply are likely to misuse their strong labor market position. But it is clear that the great majority of independent professionals are consciously choosing freelancing for professional or flexibility reasons. Although this study focused on high-skilled professionals, based on interviews we have had with low skilled freelancers it is not unlikely that comparable results will be found for low-skilled workers (i.e. construction, transportation, health care, et cetera).

12.4 Implications and recommendations

12.4.1 Implications of this study for professionals

The implications of this study for professionals are clear. The top three success factors are: 1) the market, 2) professional knowledge, skills and abilities, and 3) networking efforts. There is a striking difference between these findings and the tips and recommendations to freelancers that can be found in the more popular literature. Here titles such as "*Six Figure Freelancing*", "*The Secret to Creating and Sustaining a Successful Business*" and "*Awakening the Entrepreneur Within: How Ordinary People Can Create Extraordinary Companies*" are common. According to these books, anyone can be a successful freelancer or entrepreneur. In line with this there are the popular personality tests on the internet. Many websites, such as: forbes.com, entrepreneur.com and bbc.co.uk offer trouble-free personality tests to see whether one has "*what it takes to be an entrepreneur*". Our analysis unmistakably shows that an entrepreneurial personality and a clear firm strategy are helpful, but are certainly not of crucial importance.

When you want to become a successful independent professional, you first need to select a profession with favorable market conditions in terms of demand and supply, barriers of entry, and competitiveness. It is, for example, very hard to become a successful actor. Although this is perhaps obvious, in practice many individuals tend to ignore this important step. Secondly, make sure that you are a true professional, and keep your knowledge, skills and abilities up to date throughout your career. Knowledge is crucial for freelancers who base their livelihood on it and the risk of skill obsolescence is always just around the corner. Personal development is product development for freelancers.

Lifelong learning and obtaining stretchwork assignments (i.e. assignments which largely fit with your previous experience, but introduce a small novel element which extends your skills in a new direction) are essential to professional livelihood. Thirdly, make sure you invest in your network. Let sponsors, prospects, and employment agencies know what you do. Make sure that you refresh your network all the way through your career. This is not always easy and takes some courage. Feeling rejected and disappointed is sometimes part of the job. That not all freelancers have this essential courage can be seen from the fact that less than half of all freelancers are proactively visiting prospects. But as the slogan of Nike says: "*Just do it*".

12.4.2 Implications for organizations

As professionals become more mobile an organization can no longer base its competitive position solely on his human capital. This increased mobility will have the greatest strategic impact on small firms, and so-called knowledge-intensive firms. The impact of freelance growth will be much less on large firms, with a combination of human and non-human resources.

Knowledge-intensive organizations must clearly define which knowledge resources are vital for its competitive position. The organization must bond with these vital professionals. These professionals will only accept such an offer if they get something extra: an aspect which they cannot get as a self-employed person. This can be very interesting complex tasks, professional development, a social context, or higher financial rewards (i.e. in the form of shares, options, and bonuses).

In the last two decades many organizations focused on managing the process, and disregarded the craft. Organizational professionals were harassed with cumbersome forms, reports, and rules which were not related to the genuine profession. This has led to a large outflow of professionals in organizations. In the future, if an organization wants to hold on to its professionals, the

organization has to minimize the administrative burden, and give more attention to craftsmanship.

In knowledge-intensive firms a larger part of the profit will go to professionals, as they own the source of all profit: knowledge. Passive shareholders will see their proceeds fall as shareholder value is nice and logical in the industrial era, but is beside the point in the knowledge-based economy.

Freelance markets will become an increasingly mighty competitor of knowledge-intensive organizations. These organizations are left with 2 possibilities. Firstly, an organization can escape from the market by focusing on areas where markets have comparative disadvantages (e.g. in areas with high reputation risk or in niches with specific knowledge). Secondly, an organization can use the increase of the freelance markets by investing in its capabilities to form and manage dynamic teams.

With the growth of freelancing, more and more organizations will use freelancers as a strategic resource in their sourcing model. The exact impact on organizational strategy, governance, and processes remains difficult to foresee. Organizational understanding on how to work with freelancers is still very much developing. But it is obvious that organizations have to adapt their policies and procedures to make the best use of these resources. Among other things, a sponsor organization needs: 1) strengthening of the knowledge management and team dynamics, 2) measures to protect their intellectual capital and customer ownership, and 3) changes in procurement and administrative procedures. In some circumstances, the role of HRM transforms completely to that of a casting bureau responsible for spotting, and selecting talent in the marketplace.

12.4.3 Implications for government, employers associations and worker unions

Overseeing the evidence, it is clear that there is a role for freelancing in Western society. Freelancing is irretrievably connected to the knowledge economy and creative production. As research has consistently shown that self-employment makes individuals happier, because it gives them more autonomy, more flexibility, and enables them to make better use of their skills, it seems only natural that governments should actively promote freelancing. It is an easy and cheap way to increase both the happiness of individuals, and the performance of the economy.

This however does not mean the freelancing will become the natural norm in the whole economy. It is more likely that freelancing will be the norm in certain occupations and industries (e.g. knowledge-intensive sectors where professional knowledge is key), but permanent employment will remain the standard in other occupations and industries (e.g. complex capital-intensive industries where specific firm knowledge is key). Currently, there are still thresholds which prevent freelance growth. The ineffectiveness of many freelance markets with its high transaction costs is one of those thresholds. Another threshold is the lack of social security, which prevents many individuals to become freelancers.

Unfortunately, the current European social security systems are still based on notions from the industrial era. In The Netherlands, a large part of the social security system is based on the difference between employers and employees. But in the Western knowledge economy, with individual knowledge as the main production factor, the difference between employers, and employees and entrepreneurs and workers is quickly disappearing. It is quite telling that one of the two large associations which represent independent professionals in The Netherlands (PZO) is associated with the employers association (VNO-NCW), and the other association with the trade union (FNV). Independent professionals are both entrepreneurs and employees. These professionals are themselves responsible for updating their knowledge and finding productive uses for it. Finding new assignments, carrying out their profession and innovation are all part of their daily routine. This independent professional will also increasingly shift from freelance assignments to traditional jobs and vice versa. These choices depend on professional, commercial and social reasons. It will even become much more common for employees to become employers, and have shares in firms or networks. Even large firms may operate without employees, but with hundreds of freelancers in contracting relationships.

The implications of this for the government are threefold. Firstly, the government should ensure that the social security of entrepreneurs, freelancers, and employees become more in line with each other. By providing collective benefits to freelancers, the government can decrease the current barriers of freelance growth, thereby promoting entrepreneurship. The current premium levels of social insurances on the private market are much too high for many individuals. This implies that only high-earning independent professionals are able to protect themselves against market circumstances, disability, and old age. Moreover, because there always will be a next recession, the government should provide some kind of unemployment benefit for freelancers.

There is a significant risk that large groups will see their income drop enormously when a next recession hits the market, thus increasing the severity of a next recession.

Secondly, establishing a level playing field in freelance markets is becoming an even more important task. From our research, it is clear that market factors are by far the most determining factor driving both freelance income, and organizational hiring decisions. Of course, a freelancer has his/her own responsibility in finding work, but the government should play a more active role in ensuring that market excesses are prevented. For instance, some freelance markets are characterized by only a couple of hiring organizations and many freelancers. In these markets, abuse of monopsony power is just around the corner. Maybe the antitrust authorities should actively provide level playing field conditions here. The government may also promote productive exchange conditions by improving market transparency and minimizing transaction costs. There are various instruments that governments can use here, ranging from giving information about freelance markets to setting prices.

Thirdly, the government as a large employer should understand that freelancing is here to stay. As more and more occupations are dominated by high-skilled freelancers, it becomes more natural for the government to hire freelancers for certain professions (e.g. IT skills). The share of freelancers will therefore probably increase in the coming years. A cap on external consultancy services seems unreasonable. The government can also benefit if it is able to create a transparent market for government assignments. Both government and freelancers will profit of low transaction costs.

Employer associations, labor unions and professional associations should also play a role in promoting market effectiveness. They can do this by providing internet-based exchanges with standardized profiles, but also by mandatory continuous education efforts, by creating a shared professionals culture and by promoting reputation mechanisms. Safe and trusted markets are necessary for freelancers and organizations to blossom and, considering the enormous economies of scale in networks, one wonders whether these activities can be performed effectively by the market. Perhaps a more active role of all parties is necessary for markets to blossom.

Some professional associations are already transforming themselves into modern versions of the medieval guild. Governments should not be too afraid that these new guilds will immediately lead to monopolized markets. New research into the traditional craft guilds finds that traditional

assertions of monopoly power have been exaggerated (Richardson, 2004; Erpstein, 2008). A large body of literature suggests that the traditional guilds responded to information asymmetries in thin markets with high transaction costs, just as their modern counterparts do. Craft guilds mediated between members with market power and negotiated with more powerful merchants; they supplied members with financial support and cheap credit; they enforced quality standards and fixed prices to reduce information asymmetries, particularly on foreign markets; and they protected members from exploitation by opportunistic urban elites. And last but not least, they sustained systems for the transmission of skills and technical innovation. Perhaps a thoughtful revival of the traditional guild may help freelancers, sponsors and the greater society by safeguarding and coordinating exchanges.