Motivation and Knowledge Workers

Ludmila Mládková\textsuperscript{a}\textsuperscript{*}, Jarmila Zouharová\textsuperscript{b}, Jindřich Nový\textsuperscript{c}

\textsuperscript{a,b,c}Unicorn College, s.r.o., V Kapslovně 2767/2, 130 00 Praha 3, Czech Republic

Abstract

Knowledge workers are growing group of employees in both advanced and emerging economies. The major tool and resource of their work is knowledge. Due to its tacit dimension, knowledge is of intangible character. Knowledge work is done in heads of knowledge workers, it is non linear, difficult to capture. Even though knowledge workers are usually responsible professionals, wrong motivation can negatively influence their performance. Our previous researches on knowledge workers and their management show that managers of knowledge workers very often do not understand importance of proper motivation when working with this group of employees. The paper focuses on problematic of motivation of knowledge workers and represents first results of preliminary research we did in this field.

© 2015 The Authors. Published by Elsevier Ltd.

Peer-review under responsibility of the International Strategic Management Conference.

Keywords: Knowledge worker; knowledge; knowledge work; motivation; negative motivation.

1. Introduction

Knowledge workers are growing group of employees in both advanced and emerging economies. Their specifics come from specifics of knowledge and knowledge work. Knowledge consists of so called explicit and tacit dimensions. Explicit dimension is the part of knowledge that can be formally expressed through some code, e.g. can be converted to data. The code differs based on the character of knowledge; language, script, pictures, formulas, notes represent typical examples of such scripts. These days we share explicit knowledge via ICT. Tacit dimension is partly or fully subconscious. It is the part of knowledge we develop through learning by doing and it is responsible

\textsuperscript{*} Corresponding author. Tel. +90-262-605-1426 fax. +90-262-654-3224

Email address: ludmila.mladkova@unicorncollege.cz
for our practical activity. E.g. every practical activity has its own tacit knowledge behind. Tacit knowledge is
difficult to separate from its human owner. Attempts to externalize it damage it.

Due to tacit knowledge, knowledge as a whole is of intangible character and makes management of knowledge
workers difficult. The first trouble is that manager cannot control how knowledge worker works; e.g. he cannot
control the process of work with knowledge as it is hidden in the brain of the knowledge worker and may be partly
or fully subconscious. Looking at the surgeon operating on the patient, you can see that he made the cut. But you do
not see why he did it and which knowledge, thinking processes and decisions the surgeon used to do that cut. If there
was a mistake, when the cut is done, it is too late. Second, knowledge work may not be linear. It does not follow
simple rules and individual solutions and ideas may come up to knowledge worker accidentally, usually when he is
relaxed. Such “aha moments” that solve big problems often happen out of organization and cannot be controlled and
managed intentionally. Third, as every knowledge worker knows, results of knowledge work may differ in short and
long term period. What looked perfect in short term perspective becomes the problem in long term perspective and
opposite. Fourth, many knowledge jobs are done under the stress and pressure, in lack of time. These and many
other specifics of knowledge and knowledge work complicate management of knowledge workers.

Some organizations promote so called HSPALTA approach; e.g. hire smart people and leave them alone. This
approach may work with some knowledge workers, but it may be dangerous with others. If nothing, manager of
knowledge worker should control whether knowledge workers who work independently know what corporate
objectives are if they and follow this direction.

Motivation of knowledge workers is a very specific topic. Literature says that knowledge workers are people who
are usually highly motivated to perform well (Drucker, 1954, Davenport, 2005, Reboul et al., 2006), that they are
able to decide themselves and manage their own activities (Suff & Reilly, 2005, Gummesson, 2002). But as different
theories on motivation show that different people are motivated by different incentives. The same is applicable to
knowledge workers. Taking into account specifics of knowledge work, motivation of knowledge workers is an
important topic. Our previous researches on knowledge workers and their management show that managers of
knowledge workers very often do not understand importance of proper motivation when working with this group of
employees (Mládková, 2012a, b, Mládková, 2013).

The paper gives the theoretical background to the field of motivation and knowledge workers and offers analysis
of the most interesting answers we got from our respondents, knowledge workers, in the first survey on this topic.
This survey, though small and not representative, identifies interesting aspects of motivation of knowledge workers
and helps us specify ideas on future research of this topic.

2. Literature Review And Hypotheses

2.1. Knowledge Workers

Literature on knowledge workers offers different definitions, concepts, classifications and ideas on who
knowledge workers are. These ideas can be simplified to three approaches; conceptual approaches, job content
approaches and data (industry) driven approaches. Conceptual approaches explain the term knowledge worker from
the complex point of view. Employees’ importance for an organization, his style of work with knowledge, education
(industry) driven approaches see knowledge workers as all those who work in particular organizations or in
particular sectors or institutions (Brinkley, Fauth, Mahdon & Theodoropoulou, 2009, Sveiby 1997). Job content
approaches see knowledge workers as people who do a certain type of job (Toffler, 1990, Spira, 2008, Reich,
1992,Kidd, 1994). The classification to the approach is not exact. For example Reboul et al (2006) adopts conceptual
approach but at the same time classifies knowledge workers to different groups by the nature of their work.

All across different approaches, authors see knowledge workers as people who:

• Are highly committed to what they do.
• Create, apply, and distribute knowledge.
• Appear more in some professions.
• Work in an autonomous fashion within fluid leadership structures.
• Are normally ambitious and upwardly mobile, and their key focus is the development of their careers.
• Highly mobile and quick to change jobs.
• Driven by accomplishment.
• Sensitive to peer-group assessment and praise.
• Responsive to being ‘pulled’ rather than being ‘pushed’.
• Part of a network of peers, both inside and outside the organization.
• A knowledge worker’s position requires continuous learning and improving.
• The productivity and quality of a knowledge worker’s work is hard to measure.
• Knowledge workers manage their days. Their positions require creativity, innovation and problem solving skills.


As such, definitions, concepts, classifications and ideas on who knowledge workers are depend on the background and preferences of individual authors and of course on needs of organizations in which knowledge workers work.

When managing knowledge workers, managers are advised to be careful about specifics of knowledge workers:

• Knowledge workers may know about the work they do more than their managers.
• Tacit knowledge is partly or fully subconscious, even knowledge worker may not know about it or may underestimate its importance for organization.
• Knowledge workers important for the organization may also work in support jobs.
• It is a knowledge worker, who owns the knowledge, not the company.
• When knowledge worker leaves the company, his knowledge leaves with him (Mládková, 2012a).

As for definitions, our team understands knowledge workers from the complex point of view and our paper reflects the conceptual approach.

2.2. Motivation and Knowledge Workers

In management we use the term motivation to describe forces within the individual that account for the level, direction, and persistence of effort expended at work (Schermherhorn, 2012). Motivation represents those psychological processes that cause the arousal, direction, and persistence of voluntary actions that are goal oriented (Mitchell, 1982). Robbins (1993) defines motivation as the willingness to exert high levels of effort toward organizational goals, conditioned by the effort’s ability to satisfy some individual need. An unsatisfied need creates tension that stimulates drives within the individual (Ramlall, 2004). Stimulation is than external incentive that addresses certain factors of motivation (Veber, 2000).

Literature offers two different approaches on motivation – theories on factors of motivation and general-process theories on motivation. Among theories of factors of motivation leading theories are Maslow theory of needs (Maslow, 1943), Herzberg’s theory of two factors (Herzberg et al, 1959), Alderfer’s theory of three needs; existence, relatedness and growth needs (Alderfer, 1972), McGregor’s theory X and Y (McGregor, 1960), McClelland’s need theory (McClelland, 1961). General-process theories on motivation explain the process of motivation. They are represented by Vroom expectancy theory (Vroom, 1964), Adams theory of equity (Adams, 1963 ) and Skinner’s theory on operant conditioning (Skinner, 1953).


The most conceptual work in the field of motivation of knowledge workers was done by Buckingham and Coffman (2005). They summarized researches of the Gallup Organization on motivation and management of so called talented employees. The term talented employee is fully compatible with the term knowledge worker as we understand it in this paper. Research lasted for over 25 years and was focused on employees’ performance and
loyalty to their organizations. Analysis of the huge amount of data identified twelve key motivating factors that influence the behavior of an employee in an organization. These factors are needed to attract, focus and keep knowledge workers in the company, e.g., they are crucial for their labor productivity. Aspects are formed as the questions employees ask themselves and are listed from basic ones to the more advanced:

- Do I know what is expected of me at work?
- Do I have the materials and equipment I need to do my work correctly?
- At work, do I have the opportunity to do what I do best every day?
- In the last seven days, have I received recognition or praise for good work?
- Does my supervisor, or someone at work, seem to care about me as a person?
- Is there someone at work who encourages my development?
- At work, do my opinions seem to count?
- Does the mission and purpose of my company make me feel like my work is important?
- Are my co-workers committed to doing quality work?
- Do I have a best friend at work?
- In the last six months, have I talked with someone about my progress?
- At work, have I had opportunities to learn and grow? (Buckingham & Coffman, 2005).

Researchers tested twelve factors in 24 different organizations from 12 industries. Organizations were divided into 2500 “business units” (industry x factory, banking x branch). Interviewed employees evaluated each question on the Likert’s scale from 1 (strongly disagree) to 5 (strongly agree), 105 thousand employees participated. The analysis of the research showed strong links between the answers of employees and the success of the “business unit.” Units where employees responded more positively were more successful. Many companies accommodated both successful and non-successful units, e.g. employee performance and loyalty did not depend on corporate human resource policy. Researchers developed the hypothesis that the major factor influencing productivity and the loyalty of employees is the employee’s direct manager and how he manages and motivates his subordinates. To verify it they undertook additional research in an extremely successful retailer employing about thirty-seven thousand people in three hundred stores, seventy-five percent of employees participated in the research. The differences among stores turned out to be enormous. The research verified the hypothesis. Whatever the corporate policy and rules, the behavior and performance of knowledge workers influences the person who is above them, their direct manager (Buckingham & Coffman, 2005, Kelemen, 2010, Mládková, 2012a).

2.3. Negative Motivation and Demotivation of Knowledge Workers

Up till now, the paper covered the topic of positive motivation, e.g. how to motivate people. But motivation has also its dark side, negative motivation. There are not many works directly on negative motivation (motivation, impact of which on employee was opposite to intentions of manager). Veber (2009) mentions typical factors that work as negative motivation. There are:

- Wrong motivation tools.
- Wrong managerial practices.
- Missing managerial activities.
- Disillusion.
- Conflict between what manager says and what he does.
- Lack of information.
- Subjectivism.
- Secretiveness. Rumors.
- Unclear orders, tasks.
- Unclear evaluation of work.
- Bad working morals.
• Unethical behavior of managers.

The topic of negative motivation is partly discussed in the field of dysfunctional leadership or toxic leaders. Negative motivation is researched as a by effect of dysfunctional behavior of manager but it is not directly addressed (Goldman, 2005, Frost, 2003, Lipman-Blumen, 2005). More topic focused are works on abusive supervision, one of symptoms of dysfunctional leadership (Tepper, Carr, Breaux, Geider, Hu, & Hua, 2009, Wu, & Hu, 2009).

Factors that have negative impact on knowledge workers and their performance (demotivating factors) are not discusses in the literature at all.

2.4. Development of Hypothesis

Based on literature review, our previous researches and the methodology we use for the research on motivating factors of knowledge workers (grounded theory) we decided not to form precise hypotheses but to identify substantive areas (our area of interest). Substantive areas for our research are motivation and demotivation of knowledge workers. Still we have some expectations and ideas (let’s call them hypothesis) on motivation and demotivation of knowledge workers. They are:

\[ H1: \] Knowledge workers are highly committed to their profession.

\[ H2: \] Knowledge workers are driven by accomplishment.

\[ H3: \] Knowledge workers are sensitive about their freedom.

\[ H4: \] Knowledge workers are sensitive on micromanagement.

\[ H5: \] Knowledge workers are sensitive on how their manager treats them.

3. Methodology

3.1. Research Goal

The research has two objectives. The first objective is to find out which motivation factors motivate knowledge workers. The second goal is to find out which factors works against motivation of knowledge workers (demotivate) and why.

In our previous researches we paid attention to various factors of management of knowledge workers. For example factors that positively influence the performance of knowledge workers, how they prefer to be managed (Mládková, 2012a) and factors negatively influence their performance (Mládková, 2012b) were examined.

We also researched how managers see their knowledge workers (Mládková, 2013) and how they prefer to manage them. These researchers were not primarily focused on factors of motivation and demotivation but some of their results indicate important motivating factors. To verify them, we decided for qualitative research based on interviews.

3.2. Sample and Data Collection

The theoretical part of the research is based on the review of the literature. The methodology used for this part was as usual for this type of theoretical research. We collected, described and evaluated different approaches and different ideas on knowledge workers and their motivation and other related topics. The data used are secondary data collected from traditional and electronic media. The article pays attention to both historical approaches and the latest approaches in the field. Methods used for the review of the literature include typical methods of theoretical work, e.g., methods that allow interlinking separated pieces of knowledge like analysis and synthesis, comparison, induction, deduction, abstraction, generalization and critical thinking. The theoretical part of the paper offers different options on how to understand knowledge workers and their motivation.

Interviews and their evaluation by grounded theory (Glaser, & Strauss, 1967) were used as a methodology for the empirical part of the paper. Interviews enable us to capture ideas of respondent without biasing them by our own ideas. Grounded theory is a systematic methodology that enables to search for and conceptualize social patterns and
structures. It is based on collection of qualitative data in which repeated ideas, concepts and structures are searched for. The more data is collected, the more structures and patterns are obvious. Grounded theory may lead to identification of new concepts and theories. The substantive area, motivation and demotivation of knowledge workers, was identified. The first collection of data was done by a qualitative research via structured interview. After explaining the reason of the survey and getting basic characteristics of the respondent (age, gender, education and profession), interviewed knowledge workers were asked following questions:

- What internally motivates you to do your profession?
- Have you experienced negative motivation during your carrier (motivation, impact of which on respondent was opposite to intentions of manager)?
- Which incentives (activities) of your manager have negative impact on your motivation (demotivate you)?
- Why.

We decided on structured interview intentionally. Structured interview allows asking all respondents same, previously decided open questions and at the same time it gives the respondents the space to formulate their ideas freely. Results of structured interviews are immediately open coded. This process will go on till we identify core categories and move to the phase of selective coding and theoretical sampling.

Even though grounded theory approach is more complicated in evaluation, we decided for it as we want to capture the reality as it is without influencing respondents by guidelines and our own mental images. The survey though with small number of respondents helps us to capture important patterns concerning motivation of knowledge workers and develop the foundations for the future research which we intend to do as quantitative empiric research by the questionnaire.

Up till now, the interview was done with 12 knowledge workers. Percentages were rounded off. The author of this article does not provide any statistical analysis. At the moment it would not make sense.

<table>
<thead>
<tr>
<th>Table 1. Characteristics of respondents.</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>26-45</td>
<td>7</td>
<td>58</td>
</tr>
<tr>
<td>46-65</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>66-75</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>76-older</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>42</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>58</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only primary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vocational</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Secondary</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>University</td>
<td>9</td>
<td>75</td>
</tr>
<tr>
<td>Scientific title</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pedagogical title</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

As table 1 shows, majority of interviewed respondents (58%) were in age group 26-45 years old, 42% of them were females, 58% males. Majority of respondents reported university education (75%).

3.3. Analyses and Results

The character of the survey does not allow us to do the statistical analysis. Grounded theory application on interviews started with open coding. Table 2 lists the results of open coding of motivating and demotivating factors from interview of twelve knowledge workers. The column Mentioned Total means how many times the factor was mentioned by our respondents.
Table 2. Results of open coding.

<table>
<thead>
<tr>
<th>Motivating factors</th>
<th>Mentioned</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement of objectives</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Character of work</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Freedom</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Non-monetary benefits</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The work is meaningful</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Good colleagues</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Personal development</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demotivating factors</th>
<th>Mentioned</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inefficient use of my energy (senseless work, bad decisions)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Moral qualities of manager are low</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>My work is not appreciated</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Favourism</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Manager is incompetent</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Lack of trust</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Manager intervene into my responsibilities</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Manager moves his responsibilities on others</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Reluctance to cooperate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Incompetence and reluctance of subordinates</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Open coding on motivating factors identified four important categories; achievement of objectives (mentioned 8x), satisfaction (mentioned 7x), character of work (mentioned 6x) and freedom (mentioned 5x). Non-monetary benefits, work meaningfulness (both mentioned 4x), good colleagues (mentioned 3x) and salary and personal development (mentioned 2x) seems to be less important. This result supports the belief that knowledge workers are autonomous professionals who are highly motivated by the character of their work (Drucker, 1954; Reboul et al., 2006).

Open coding on demotivating factors identified two important categories; inefficient use of knowledge worker energy (mentioned 8x), low moral qualities of manager (mentioned 7x). Other categories turn out to be less important; the work of knowledge worker is not appreciated (mentioned 4x), favourism, incompetent manager and lack of trust (mentioned 3x), manager intervenes into my responsibilities, reluctance of cooperate and incompetence and reluctance of subordinates (all mentioned 1x). This result supports the belief that doing what they are good in is important for knowledge workers (Buckingham, Coffman, 2005; Davenport, 2005). The stress of interviewed knowledge workers on moral qualities of managers was surprising for us.

The results show that grounded theory methodology has huge potential. After the interview with only 12 respondents we have four visible categories of motivators and two visible categories for demotivators.

The results of question on negative motivation are as follows:

<table>
<thead>
<tr>
<th>Have you experienced negative motivation during your carrier?</th>
<th>Yes</th>
<th>No</th>
<th>More than once</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Seven of our respondents experienced negative motivation (motivation, impact of which on respondent was opposite to intentions of manager), three did not and two experienced it more than once. As the question on negative motivation was closed one, eleven responses are not enough to make conclusions and more answers must be obtained.

Although the sample (number of respondents) is too small, results of interviews support findings of our previous researches that indicate importance of achievement, character of work, freedom and overall satisfaction for motivation of knowledge workers (Mládková, 2012a,b; Mládková, 2013).
Of course, the research must continue to get more precise results and see whether they support our hypothesis or no.

Four of twelve interviews were very interesting. Let’s look at them in more detail. The most interesting interview out of all was the interview with respondent “I” (Respondents were given codes by the alphabet. The real names are not recorded). “I” belongs to the age group 26-45, she has the university education and works as an assistant lecturer at the university. She is internally motivated to do her profession by meaningfulness of work of academician (teaching, research), challenges and freedom to solve new things and cooperation with clever and highly motivated colleagues. She experienced negative motivation during her carrier. As for incentives that demotivate her she puts unethical behavior on the top of all the other incentives. Follows low tricks, taking success as granted, failure as a mistake of subordinate, politicizing, blaming others for own mistakes, focus on negatives, pretending interest in ideas of subordinates. “I” explained why she has problem with previously mentioned demotivating incentives as: “the ethics influences what I can or cannot stand. In case of unethical behavior I tend to fight for true. At work I need people who are reliable partners around me (including the boss). My relation with the boss must be based on reciprocal relationship, on discussion. Mistakes are accepted or solved. Trust, ethical principles, legibility and competence are important. I want to cooperate.”

Respondent “A” belongs to the age group 46-65 years, he has university education and works as a geophysicist and statistician. He is motivated to do his job by satisfaction of people who ask him for information, variability of work and time flexibility he gets. He has never been negatively motivated. He is demotivated by criticism and cut down of salary. Why? Salary cut down leads to search for different job and he is able to accept only limited level of criticism.

Respondent “K” belongs to the youngest group (25 and younger). He has university education and works as consultant – internal auditor. He is motivated to do his job by its meaningfulness – to help organizations, he also enjoys that it allows him to improve. The last factor is freedom. He has experience with negative motivation. He is demotivated when manager evaluates his subordinates based on his personal relationship to them. He sees the labeling of people based on the relationship to manager as subjective and wrong.

The last example of interview is the interview with “L”. He is in the age group 26-45 years, he has university education and pedagogical title; he works as an academician and he is associated professor and a vice dean. As a motivating factor of his profession, he mentioned: good feeling from achieving the objective, good feeling that subordinates feel sense of what they do, good feeling that things he does with his colleagues have sense. He has been negatively motivated several times. He is demotivated when his manager does not trust him, interfere into his responsibilities and the work is unnecessarily duplicated. The main reason is that he hates his potential to be used ineffectively.

We see the major benefit of methodology we used (interviews, grounded theory) in their potential to capture real ideas and standpoints of real knowledge workers, people who know about their motivation the most.

4. Conclusion

Knowledge workers are specific group of employees. Their numbers are growing in organizations. The objective of our research is to find which motivation factors motivate knowledge workers and which factors works against their motivation and why. Literature lack researches on the topic of motivation of knowledge workers. The starting survey of the research is made by the methodology of interviews and grounded theory. Structured interviews allow us to ask all respondents same, previously decided open questions and at the same time get respondents the space to formulate their ideas freely. Results of structured interviews are immediately open coded. The paper covers results of 12 interviews. The survey though with small number of respondents, e.g. still not adequate for definite statements, helps us to capture important patterns concerning motivation of knowledge workers and develop the foundations for the future research which empiric part we intend to do as quantitative survey by the questionnaire.

The open coding of first 12 interviews identified four important categories on motivating factors; achievement of objectives, satisfaction, character of work, and freedom and two important categories on demotivating factors inefficient use of knowledge worker energy and low moral qualities of manager. The research will go on till we identify core categories and move to the phase of selective coding and theoretical sampling. Recommendations to managers will be done after the research is finished.
References


