

## Poster presentation

# Importance of Human Will Power on Successful Water Loss Management

Jurica Kovac\*

\*Aqua Libera Ltd., Ribnica 146c, 10415 Novo Cice, Croatia, [jurica.kovac@mail.com](mailto:jurica.kovac@mail.com)

## KEY WORDS:

Water loss management, holistic approach, education, will power

## Introduction

This paper reflects my thoughts and experiences regarding influences of positive human will power on successful WLM (not specifically but appropriate for our conference) in public water utilities.

Resolving problems in Water Loss Management (WLM) involves holistic approach, and I came to a point of understanding that despite available knowledge and technology is still evident slow and harder then expected integration of advanced WLM partly due to continuing reduction of positive and constructive will power among water utility personnel to make necessary changes and improvements.

Aim of this discussion is to present you following; how to define will power, what influences will power, how to get it, and why use it in positive way, because will power is related with all aspects of successful WLM; education, management, cooperation, continuity, adaptation, focus, innovation, ect.

All point of observation are related with psychological aspects regarding peoples will to make changes and physical manifestations - successful WLM, but also satisfaction with ourselves not only in our profession or job but in life generally.

*“As the water you touch in rivers is the last (...) of that which went,  
and the first of that is arriving, so is the present time”*

*Leonardo da Vinci*

## Problems - Challenges

People are of critical importance in successful WLM and these are main problems related with them; managing level with too many obligations and has no time and understanding for needed changes (too deep in old style of management and habits) and technical level without basic skills needed in modern maintenance and low interest/motivation to take over new tasks under same working conditions. In general both levels have same problem related with lack of will power to make changes. Exceptions are sometimes utilities where is evident insufficient quantity of available water for needed consumption demand or involvement of private contractors. Here we have people with will power for change and later will be explained reason why.

But still large majority of water utilities are struggling with water losses and low efficiency in operation and management and this paper (and poster presentation) is prepared with intention to present author's experience and advice how to resolve existing challenges with or without outsourced professional assistance.

## Obstacles and Causes

Here is selection of many manifestations of obstacles regarding successful WLM; low level of awareness, will to change habits almost nonexistent (resistance to change), money and power became main matters of interest and motivation, current education system turned

people in pure repeaters without skeptical point of view (do not question authorities), rigid companies structure and organization leaves no room for free thinking and innovation, existential problems and economic crisis makes people less willing to make risky moves or to defend own values and concepts, political and lobbyist influences, and many more.

Regarding lack of will power, besides above mentioned obstacles, main problem lies in fact that most of the people do not understand (and have no time and opportunity to reach this conclusion) what is will power and how to control it, but also questions like how we think, why we feel, what we believe, what defines our behavior, etc.

## What is will power and how to get it?

I was puzzled with the fact that some exceptional individuals had strong will power (and due to it successful life) and majority of others were without this ability. My personal challenges and problems pushed me to research this subject and following definition first came to my knowledge; the will plays a more important part o human life then any other quality, and, will power can be developed by training. If we analyze the will, we find it consists of three factors: thought, feeling and action. The most vital and important factor is action. When we do a thing, there is always a feeling behind the act. Action is result of a sentiment, not of thought. In order to produce right actions, we must therefore cultivate right feelings. But unfortunately we are not masters of our feelings; we are only the masters of our thoughts. While we may think what we wish, we cannot feel what we wish. The key to the problem of the will is how to connect our thoughts with our feelings in such a way that the latter will create the action witch we wish to perform.

Further seeking for answers led to new knowledge and understanding of human nature and our mind.

Importance of will power as part of human nature is crucial for success of any individual person or organization (as a group of individuals) an as such was in focus of interest of man throughout history, and in the last century in particular regarding business development.

It is still popular reasoning in separating human nature on mind (rational) and emotion (irrational), and which emphasized conscious reason over subconscious intuition based on teaching by French philosopher Descartes. We are good and confident when talking about things that are rational, material, conscious and process based and avoiding or limiting exposure when talking about emotional side (later excludes some men and majority of women). Next important milestone was encounter with work of Antonio Damasio, researcher in several areas of neurology and neuroscience who showed that emotions and their biological underpinnings are involved in decision-making (both positively and negatively, and often non-consciously).

Will power is part of complex human behavior and in the last century human intellect and all its components and manifestations have been under research by diverse fields like neuroscience, psychology, sociology, behavioral economics, neuro-lingvistic programming (NLP), etc. Accumulated knowledge through all these research fields provided many insights but I like particularly these two; first, subconscious parts of the mind are most of the mind that is real driving force of our life (imagine a huge iceberg – the tip sticking out of the water is equivalent to you conscious thinking mind, so who is in charged here) and second, subconscious mind (often in contradiction to our conscious mind) can be analyzed and programmed to function in harmony with conscious mind (this is main purpose of NLP technique).

Here are some basic differences between conscious and subconscious mind (Economakis 2011):

**Table 1.** Basic differences between conscious and subconscious mind

The Conscious Mind	The Subconscious Mind
is about doing	is about being
is a time-keeper, keeping its eye on the	wants to enjoy and spend time on something

endless “to do” list	that feels good in the now
feels the need to strive and do and achieve	likes to play, be stimulated and entertained
aims to be disciplined and responsible and prepare for the future	can get absorbed in the here and now and forget all about the future
is all about thought and tackles a problem with formal logic and reason	is all about feelings and uses intuition and creativity
tend to consider the subconscious mind as immature, irresponsible, disorganized, undisciplined and fickle	sees the conscious mind as overly serious, overly responsible, boring and unimaginative

Today, after few years of learning about this subject I think that understanding our subconscious mind is essential if we want to take control of our will power.

## Existing practice in WLM improvements measures

Typical approach we see today regarding need for improvement in WLM is related with knowledge and skills transfer from an experts toward employees in water utilities. Prevailing type of knowledge transfer is related with self-learning (individual interested in subject can use available written materials or attend conferences). Particular trainings are still rare and developed with aim to educate people considering these two specifics; first, training are one-off events and second, all trainees are approached equally as individuals (distinct only by the level of knowledge) without understanding of complex human behavior and necessary adjustments.

Acquiring new knowledge by one or few individuals is not enough and if we want to witness long-lasting improvements in one water utility. So, it is necessary to implement change management programs within whole water utility company. Majority of experts in WLM are people with knowledge and experience in technical aspects, but without same level of expertise in change management issues (or even general business management issues). This gap in approach (emphasizing technical knowledge transfer and neglecting all other issues) for outcome has slow and below expectation successful implementation of WLM.

Change management has become major issue in world’s business as important adaptation tool due to market changes, expansion, competition, efficiency rise, cost reduction, economic crisis or other influencing factors. Today we can state that all industries are continually in a state of change. But change remains a challenge knowing that about 70% of change initiatives still fails with more then 60% of change projects problems as people related due to fact that human behavior nature was neglected or unrecognized as important.

Witnessing this struggle in large private companies it is no surprise to see what is happening in (largely public) water utility companies. Recognition of this situation sheds new light on numerous cases of failed adaptation of WLM among different utilities. People are the problem. Rare successful WLM programs in most cases had strong involvement of private contractors who are more efficient and with motivated and highly educated personnel.

Evidently we need to modify our approach regarding WLM and involving new knowledge about human behavior must be a part of it.

## How to speed-up needed change?

Introducing new knowledge and expertise in water utilities management change projects is possible and it is just a matter of time when it can become part of common practice.

But, do we have time to wait? What can be done to speed-up needed change? Can we count on ourselves?

We must develop certain qualities among key managers in water utilities but together with as many as possible other employees (who will be informed and trained directly or indirectly) in a following way;

### ***First phase – understand yourself (head)***

As I mentioned above, first important step is understanding importance of human behavior, how it can be controlled and used in our benefit. Main tool for help is knowledge about NLP that anyone can learn and apply.

This phase will have following outcomes (selection):

- Becoming more confident and motivated
- Feeling happy, more fulfilled and in control
- Banishing bad habits, phobias and addictions
- Getting more out of life and work

### ***Second phase – get inspired and improve yourself (left arm)***

After you get control of your behavior you will be ready for the next phase. This involves boosting up your imagination and motivation. You will need these qualities for dealing with new challenges. I propose you to research life and work of some great individuals from our past. My favorite is Leonardo da Vinci. Main tool for help can be found in one great book “How to think like Leonardo da Vinci” by Michael J. Gelb

This phase will have following outcomes described in 7 da Vinci principles:

- Curiosita’ – an insatiable curiosity
- Dimostrazione – testing knowledge through experience
- Sensazione – continued refinement of the senses
- Sfumato – a willingness to embrace ambiguity
- Arte/Scienza – developing a balance between art and science
- Corporalita’ – cultivating fitness and poise
- Connessione – recognizing and appreciating that all phenomena are connected.

### ***Third phase – get amazed and use yourself (right hand)***

You will need these additional capabilities for further upgrade yourself particularly when facing everyday multitasking approach with WLM and change management implementation in parallel. Learn about unlimited potentials of our brain, mind and body. Then just use yourself and enjoy. For this phase I am proposing you to explore books of Tony Buzan, great motivator and promoter of mind development.

This phase will have following outcomes (selection):

- Knowing how thinking works
- Knowing how imagination works
- Knowing how to improvise, understand problems and find solutions
- Knowing how to remember (memorize)
- Knowing how to use imagination
- Knowing how to use inspiration
- Knowing how to use your mind and body

### ***Forth phase – learn and apply WLM knowledge (left leg)***

Regarding this phase additional explanation is not needed. Clearly most important part will be accumulated experience. More you try (even with errors), more you will master your skills and sharpen reflexes.

### ***Fifth phase – learn and apply business management knowledge (right leg)***

This is final element of successful planning of WLM and management change activities and their subsequent implementation. We must acquire knowledge and skills in areas such as, project management, time management, document management, human and technical resources management, change management, etc. Among numerous standard business management literature here I will draw your attention to these titles; The ISO Project Management Standard 21500, Project Management Body of Knowledge (PMBOK), Projects in Controlled Environments (PRINCE2) and ISO Standard 24512 Activities relating to drinking water and wastewater services – Guidelines for the management of drinking water utilities and for the assessment of drinking water services, management-oriented. In addition

to presented I would like to mention also techniques like Lean management and Six Sigma as very interesting and beneficial.

Anyone able to reach this level of knowledge will be in excellent position to drive the needed change and successful WLM in positive direction.

## Conclusion

Intention with this paper (poster presentation) is to present my point of view on this challenge of successful implementation of WLM with hope that it can be inspiring for others. This paper aims to present another (higher) dimension of a holistic approach, that expands our understanding beyond technical and managerial level in many direction and all of them will end up in ourselves, magnificent human beings. You may follow this path, or find new one but Important is to keep on moving.

QuickTime™ and a  
decompressor  
are needed to see this picture.

**Figure 1** Keep on moving

For the end, whole discussion can be simplified to following conclusion; people have only two modes of functioning: in fear, or, in love. There is no middle way, maybe only sometimes mixture of these two, but is up to you to decided which path to follow.

## References

- Vermersch, M. and Rizzo, A . (2009) Change Management as an indispensable Component when Planning for NRW Control, CapeTown, Soth Africa, WaterLoss2009 conference proceedings
- Kovac J. (2011) Water Leakage Control – Management Skills, Sofia, Bulgaria, Water Leakage Conference, conference proceedings
- Economacis F. (2011) Take charge of your life with NLP, Vermilion, UK, ISBN 9780091939731
- Gelb M.J. (1998) How To think like Leonardo da Vinci, VBC, HR, ISBN 978-953-201-735-9
- Prosci Research, (2009) Best Practices in Change Management, [www.prosci.com](http://www.prosci.com) , [www.change-management.com](http://www.change-management.com)
- The Standish Group, (2011) CHAOS Survey, [www.standishgroup.com](http://www.standishgroup.com)