

This project has been funded with support from the European Commission under the Lifelong Learning Programme. Presented materials reflect the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



PROJECT CONSORTIUM:













Knowledge Mediator Manual was developed by the Project Consortium:

Fundacja Obserwatorium Zarządzania

Prestin – Preparação de Estudos e Investimentos, Lda.

ZEUS Consulting S.A.

Instituto Tecnológico de Aragón

Nowoczesna Firma S.A.

Under directory of:

Filipe Carrera, PRESTIN

August, 2011

Knowledge Mediator Manual

TABLE OF CONTENTS



EXECUTIVE SUMMARY	
Knowledge Pills Methodology Project (KPMFRAMEWORK	
Goals and Intended Users	
Challenges	
Opportunities	
Social Learning	
500.4. 2040	
KNOWLEDGE PILLS - KP	17
Formal and Informal Training	
Knowledge Pill Formats	21
Forms of Distribution	
Learners	26
PRACTICAL APPLICATIONS OF KNOWLEDGE PILLS	
Internal Applications	
External Applications	29
KNOWLEDGE PILLS METHODOLOGY - KPM	
Micro Skills	
Phases of the Method	
Benefits and Challenges	30
THE CREATION OF KNOWLEDGE PILLS	37
Framework	
Audio Knowledge Pills	
Video Knowledge Pills	
Multimedia – Knowledge Pills	
DISTRIBUTION SOLUTIONS	58
Framework	58
For Inside the Organisations	
For Outside the Organisations	
SUCCESS CASES-STUDIES	/
SUCCESS CASES-STUDIES	70
Framework	
Collaborative Problems	
Capturing Our Best	
A New Approach in Public Administration University TV	
INDEX	80

EXECUTIVE SUMMARY



Knowledge Pills Methodology Project (KPM)

About the The main aim of the project is the transfer of the Knowledge Pills Metho**project** dology (KPM) for use by knowledge moderators in SMEs of Poland, Spain and Greece. It will enable the efficient education of employees to be conducted in-company.

> The next goal is to conduct the pilot phase of KPM use for Polish and Spanish companies, gathering feedback from knowledge moderators and participating SMEs.

> The project will also foster understanding of the use of the innovative learning processes and introduce learning exchange mechanisms between the project partners, beneficiaries and training institutions.

> KPM consultations will also be held with stakeholders of adult education in participating countries and SMEs.

> The last objective is to disseminate results of the project towards SMEs, training institutions, educational bodies and all organizations and institutions supporting development of SMEs, allowing them to use it for the efficient development of SMEs and their employees.

> By the end of the project, the SMEs will shift their way of learning to a more "just-in-time" learning framework, more connected to the fast changes that are occurring nowadays.

> KPM project aims and objectives are fulfilling the priority of Developing the skills and competencies of VET teachers, trainers and tutors (LEO-Tralnno-3) by:

- Training 14 knowledge moderators able to use KPM.
- Preparation and promotion of KPM, the manual and set of content related materials.
- Participation of stakeholders (trainers, educators, educational bodies, SMEs ...) in the project.
- Implementation of the KPM after the LdV co-financing.

This project has been funded with the support from the European Commission under the Lifelong Learning Programme.



Knowledge Pills Methodology Project (KPM), Continued

Target groups This project has as its main targets the following:

- Small and Medium Enterprises.
- Trainers.
- Consultants.

Although the methodology works in any kind of organization, for this project SMEs were specifically chosen as the primary target.

Partnership The partnership established for the KPM project implementation consists of 5 partners who have already collaborated in educational – international projects.

> Our intention is to capitalize on our experience in project management, especially in the transnational context, and planned diversity will bring substantial value to the project.

The next table lists the partners, with their country and web address:

PARTNER	COUNTRY	WEBSITE
Management Observatory Foundation	Poland	www.obserwatorium. pl/en
Prestin, Lda.	Portugal	www.prestin.com
Technological Institute of Aragon	Spain	<u>www.ita.es</u>
ZEUS Consulting S.A	Greece	www.zeusnet.gr
Nowoczesna Firma S.A.	Poland	www.nf.pl



Knowledge Pills Methodology Project (KPM), Continued

Knowledge Pills Knowledge Pills Methodology is a new method of education that strength-**Methodology** ens professional competences by using short pieces of multimedia advice (knowledge pills). The main tool of KPM is a short instructional movie - presenting how to conduct certain activities in the work station, by reproducing day-to-day tasks in an appealing format.

> The Knowledge Pills Methodology (KPM) is the framework of efficient education and knowledge sharing in the company. It uses a set of tools designed to easily and effectively share knowledge and skills among employees. KPM consists of the short pieces of advice on video, templates, guidelines ...

> Activities recorded as the Knowledge Pill, can be easily understood and imitated by employees, whether they are less qualified or highly qualified. The electronic format allows easy distribution. If needed, it can be made available on-line for access by people with physical disabilities and become a part of efficient distance learning.

KPM The Knowledge Pills Methodology brings a new approach to training that **innovations** has the following main innovations:

- It follows the Social Learning theory, according to which people can learn with others, now using the social tools available.
- It delivers training according to the specific need of each person in a "just-in-time" manner.
- It empowers people to be trainers and coaches at all times.
- It uses multimedia as the way to create Knowledge Pills.
- It creates true learning organizations by using knowledge shared across the organizations, big or small.

About this This document is intended to give an explanation of the Knowledge Pills **document** Methodology, based on seven years of accumulated experience in its implementation in various types of organisations, as a way to create a platform for sharing tacit knowledge within organisations and outside of

FRAMEWORK



Goals and Intended Users

Goal of this The goal of this manual is to provide support for the training of Knowledge Manual Mediators to facilitate the implementation of the Knowledge Pills Methodology (KPM) as a way to efficiently capture and share the tacit knowledge of organisations, specifically Small and Medium Enterprises.

What a A Knowledge Mediator is understood to be the person who was trained **Knowledge** under the Knowledge Pills Methodology with the goal of sharing and fa-**Mediator is** cilitating the sharing of the organisational knowledge, which he may or may not have.

Mediators •

Types of Considering the previous definition, we can say that there are two types **Knowledge** of Knowledge Mediators:

- Internal.
- External.

Internal The Internal Knowledge Mediator is someone who captures his tacit **Knowledge** knowledge or that of other colleagues of the same organisation who have **Mediators** relevant knowledge

External The External Knowledge Mediator is a consultant who supports as organi-**Knowledge** sation in capturing organisational knowledge that is distributed among **Mediator** various persons.

> Generally, the External Knowledge Mediator is not knowledgeable in the area, so that it is essential that he clearly identify his interlocutors in the organisation.



Challenges

Needs Every organisation needs to train human resources to reach its organisational goals. However, we are living in a time of constant change where technical training has an increasingly shorter period of validity, due to the changes introduced in products and services.

> Furthermore, with the international financial crisis, on the average, the resources available for training activities were reduced and simultaneously there was an increased need to guarantee a return on investments made in training actions.

> We are facing a paradox, in which the training of human resources is more necessary than ever, and at the same time the financial resources available for this area have been greatly reduced.

> This paradox created an opportunity to rethink the format of the training solutions and even question whether we can continue to use the traditional training solutions.

Traditional In dealing with a problem at the level of human resources, the traditional **Solutions** solution has been to send the employees to a room where they receive training.

> When the goals for training are at the level of know-how, the habitual scenario of the training is as follows:

- Room.
- Trainer.
- Group of participants oftentimes brought together around logistical questions, rather than by their degree of knowledge, thus creating training groups that are very asymmetrical.
- Equipment. On this point, the new technologies have had wide acceptance, so that we are now used to finding the training rooms equipped with:
 - -Video projector.
 - -Computers for the participants.
 - -Interactive boards.

It is easy to see that significant progress has been made in the improvement of the training conditions in a room, but are the people actually learning better?



the traditions of the traditional training solutions

Limitations of Traditional training solutions at the level of know-how have various limitational tations that are important to analyse:

- The fact that participants entering the training are not at the same level of knowledge means that the trainer will be forced to use repetition as a means of reinforcing the learning of the less knowledgeable participants, running the risk of losing the participants who are more knowledgeable from the start.
- Any technical training covers a number of steps and procedures that are impossible to memorise completely in a short period of time, and therefore supplementary didactic materials are produced so that the people can use them later in their work context.
- The usual practice of school desks for taking notes of everything the professor says in the classroom without a critical eye is suitable for a system in which memorisation is promoted or when one has the feeling that at the moment we take notes this is one of the last chances we have to have all the steps of a procedure. However, in technical training, the attempt to gather all the steps and procedures in this form may result in this gathering of information becoming an end in itself, resulting in the loss of vital information.
- Traditional training actions do not have a "just-in-time" logic, which
 is to say, that the content chosen for a training action seeks to meet
 present and future needs, in the hope that the people will retain the
 knowledge transmitted until the moment they need it in their duties.
- The use of computers by participants in an attempt to reproduce procedures outside the context of the workplace creates various problems:
 - -The participants tend to try to not lose sight of what the trainer is doing, that is, the priority of the participant is to not fall behind, even if that means not reflecting on the underlying reason for carrying out a certain procedure, turning the training activity into a mechanical, rather than reflexive, process.
 - -Computers may distract participants, if other applications are available.
 - -A computer, whether desktop or laptop, in front of each participant automatically creates a psychological barrier to the contact and exchange of impressions that one wants to flow in a training room.



didactic materials •

Limitations of Didactic material, especially manuals produced for traditional training so**the traditional** lutions have very specific limitations:

- The materials are produced with the goal of filling in the gaps found in any traditional action, because all those involved in a training action of a technical nature are aware that it will never be possible for the participants to internalise all the steps and procedures covered, so the manual enters into play as a fundamental piece to be consulted later.
- Generally, manuals are written by people who do not like to write and written for people who do not like to read, creating all the conditions to guarantee that this sort of material will never leave the bookshelf. A glaring example of this can be obtained by asking any group of people how many of them read the instruction manual of their mobile phone before they began using it.
- The knowledge in the manual is not in line with the level of knowledge of the reader, that is, the producer of the content tends to not leave out that which is obvious to him, but which may not be so obvious at all to the reader. This leads us to the incomprehensible gaps we find in many descriptions of procedures that create a blockage.
- The creation of quality technical manuals requires spending time and resources that have no counterpart in the attention of the reader because this content tends to be extensive and tedious.
- This type of content does not take into account the levels and literacy of those it is designed for. This is a serious problem, because despite the fact that the rates of illiteracy are going down a little all around the world, illiteracy, meaning the inability to correctly interpret a text, is still very high, so that we have a lot of people in the work place who can read, but they have great difficulty in interpreting texts.



What's new We can say that training is one of the oldest activities of mankind. Even **in training** before there was any language, our ancestors were showing each other how to make a spear or hunt.

> Meanwhile, with the possibility of creating manuscripts and later, with the appearance of Gutenberg's printing press, training and education reached new heights in terms of their diffusion.

> Only in the last centuries has the model for the transmission of knowledge been perfected. However, in the last 20 years, the changes have been more than remarkable:

- The life cycle of the product has been dramatically shortened, creating situations in which the training of human resources is completed after the product has become obsolete.
- Long-term planning for training actions has become impossible.
- The level of knowledge that each employee has to master in his dayto-day life has increased exponentially.
- The memorisation of all the information needed to perform a professional activity has become unfeasible.
- Organisations increasingly depend on knowledge as a competitive advantage.
- New duties have arisen in the organisations, creating new training
- During the time they are in the workforce, on average workers are changing duties more than before.
- The rotation of workers has been on the increase, so that training has been transformed into an on-going, and many times repetitive, process.
- The time available for training actions of medium and long duration is decreasing steadily.



Specific The training process in the SMEs does not differ substantially from that in **features of the** the large companies, the major differences being what we find in all that **SMEs** surrounds the process, that is to say:

- When an employee leaves an SME, a very significant percentage of the organisational knowledge (10, 20 or even 50%) can go with him.
- The majority of the time it is very difficult to organise groups of participants in homogeneous training actions that are sufficiently large enough to justify the investment.
- The cost of the absence of an employee for an opportunity to participate in training actions is higher, and may even prohibit its being carried out, because in some circumstances it could mean closing the company during the time of the action, completely or in sections.
- The SMEs are, by definition, more flexible organisations, this flexibility being one of their competitive advantages, but this feature has to be accompanied with "just-in-time" doses of training.
- Budgets for training are particularly small.
- Training is seen as an interesting activity from the point of view of the socialisation of the employees, but one having little impact on the results of the company.
- Under the pretext of not being available, the managers of the SMEs do not participate in the training actions.
- Despite its being small, the transfer of knowledge between employees takes place on a daily basis, in a chaotic and non-systematised way.



Opportunities

New The challenges facing all organisations and in particular the SMEs call for **approaches to** the use of new approaches, because it is not acceptable to increase in**training** vestment in solutions that are out of touch with the new realities.

These new approaches have to take into account:

- The need to provide fast and efficient responses.
- The fact that the persons who make up the organisations are the carriers of knowledge that should be shared and not compartmentalised.

Explicit and tacit knowledge

In a simplified way there are two major types of knowledge:

- **Explicit Knowledge** is the knowledge that is in the form of manuals, documents, procedures, videos or any other kind of media.
- Tacit knowledge is all the knowledge we carry as human beings, but which is not spelled out in any other media than our brain.

knowledge knowledge:

Sharing tacit According to Shibata and Takeuchi, there are two ways to share the tacit

FORM OF SHARING	EXAMPLE	CHALLENGES
Socialisation	One colleague explains a procedure to another colleague around the coffee machine.	Although this is the most widely used form of spreading best practices, this form of sharing is not validated and can disseminate bad practices.
Externalization	The possessor of the knowledge prepares a manual for use inside the organisation	It enables a validated dissemination of good practices, but the possessors of the knowledge do not see the preparation of the manuals as a part of their duties, so there will be many barriers to the creation of manuals with quality.



Opportunities, Continued

Conjugating By nature, tacit knowledge needs to be shared and that sharing happens Socialisation every day in any organisation, basically through socialisation, which and makes the organisational knowledge volatile and very dependent on the **Externalization** continuation of certain persons in the organisation.

> The ideal would be the conjugation of socialisation and externalization in a form of sharing that would include in itself, the pleasure of socialisation for the individuals and the advantages of capturing the knowledge of the organisation that is obtained through externalization.

> This happy union exists; it is called Informal Training and it permits a continuous transfer of knowledge within the organisation.

Social networks

Social networks have always existed; what is new about them in the last few years is their transposition to the online environment. Today we can even say that there is a merger between online and offline.

New platforms such as Facebook, Twitter, Linkedin and YouTube have facilitated the sharing of ideas, emotions, information and knowledge.

Examples of Networks

Although the sites referred to are seen as a recreational extension of our personalities, **usage of Social** we see more and more examples that this idea is changing, such as:

- Groups dedicated to various themes are being created every day on Facebook, with the goal of strengthening the knowledge of each of their components.
- Twitter is an excellent way to reference the availability of new content on a certain subject.
- On Linkedin, more and more users ask questions that are answered
- On YouTube we find an unlimited amount of content with a didactic nature.

However, to think that the impact of the social online networks is restricted just to the creation of new platforms for the distribution of content is to ignore the greatest change of all.

Never in the history of humanity have we been so interconnected and never has the co-creation of content reached such a dimension; every day we are creating content with our friends, colleagues or even strangers.

This change in attitude must be considered a turning point, and it is an opportunity that we are impelled to take advantage of.



Social Learning

KPM and Social Knowledge Pills Methodology is based on the Social Learning theory, be-**Learning** cause of that is important to understand the fundamentals of this learning theory.

What is Social Social learning is what it sounds like—learning with and from others. It **Learning?** has been around for a long time and naturally occurs at conferences, in groups, and among old friends in a café as easily as it does in classroom exercises or among colleagues online who might have never met in person.

> We experience it when we go down the hall to ask a question and when we post that same question on Twitter anticipating that someone will respond.

Why Social Learning?

Training often gives people solutions to problems already solved. Collaboration addresses challenges no one has overcome before.

The social learning makes that immediate, enabling people to easily interact with those with whom they share a workplace, a passion, a curiosity, a skill, or a need.

The theory A "social learning theory" was first put forward in 1954, standing on the behind shoulders of John Dewey and drawing on the budding fields of sociology, behaviour modification, and psychology applied to understanding and changing conduct.

> Ideas from social learning theory informed the thinking of later learning theorists, including Albert Bandura who wrote in 1977: "Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do".

> Fortunately, most human behaviour is learned observationally through modelling."



Social Learning, Continued

Social Social constructivism is the theory of knowledge that seems to best describe **constructivism** how people learn together, whether in person or online.

> When you engage with people, you build your own insight into what's being discussed. Someone else's understanding complements yours, and together you start to weave an informed interpretation.

First approach of social constructivism

Swiss psychologist Jean Piaget laid the groundwork for this approach by challenging the behaviourist notion popular in the 1950s that people were passive recipients of external stimuli that shaped how they behaved.

Instead, Piaget conducted many experiments to demonstrate that people are active participants in their learning. They interpret what's around them based on their unique current understanding of the world, and then they continually modify their understanding as they encounter new information.

Piaget's discoveries eventually led to the concept and practice of discovery learning for children and the use of role-play and simulation for adults. Active participation is the key in both cases.

Today's needs

In a world of rapid change, we each need to garner as much useful information as possible, sort through it in a way that meets our unique circumstances, calibrate it with what we already know, and re-circulate it with others who share our goals.

The new social learning leverages online communities, media sharing, microsharing, content collaboration, and immersive environments to introduce people to ideas in quick bursts, when it suits their workflow, without a big learning curve, and in a way that more closely mirrors how groups interact in person.

Social constructivism has become timely because work has for so long focused on what's known. To triumph today, we must now understand new information and complex concepts—what hasn't been known before and is often more complicated than one person can figure out alone.

The 21st century mind is a collective mind where we access what we know in our friends' and colleagues' brains. Together we can be smarter and can address ever more challenging problems. What we store in our heads may not be as important as all that we can tap in our networks. Together we are better.

KNOWLEDGE PILLS - KP



Formal and Informal Training

Formal training Formal training is based on the use of traditional training techniques, with a focus on the process that takes place in the training room, which is supplemented with the creation of various didactic resources (manual, slides, models, etc...).

> As we have seen, formal training today has a vast set of limitations, which become more evident at a time when the only constant we have is change.

> Training in a classroom will certainly not disappear; it needs to be reinvented, specifically in three phases:

- **Before the classroom training** There must be a levelling of the knowledge of the participants before they enter the training room.
- **During the classroom training** Emphasis must be given to the creation of an environment that is favourable to change, because the ultimate goal of any training action should be to create conditions for a positive change.
- **Post-classroom training** The participants should take with them the motivation for change and the support of didactic materials that can aid them in an efficient manner.

It is not about choosing between formal and informal training; rather, it is finding a balance between these two forms of training, according to the training needs, the goals and the profile of the participants.

Informal Informal training is every form of knowledge transfer that is a normal part **training** of a workday, non-systematised and without defined goals.

> For example: A worker explains to his colleague how to do a certain internal procedure.



Formal and Informal Training, Continued

Weight of Considering the definition of informal training, it is easy to see that informal **informal** training is predominant in any organisation, and from this perspective, we **training** are all trainers, coaches and mentors.

> Authors, such as Marc Rosenberg, go so far as to say that the weight of informal training in the total training of any employee surpasses 90%.

> This brings up an interesting point in the light of the Pareto principle: about 100% of the training budgets are allocated for a training component that represents less than 10% of the training received by any one employee.

> That is to say, if we invest in the creation of conditions for the existence of quality informal training, we will have an impact on more than 90% of the training process of our employees.

of informal training

4 Phases In the informal training process, we can say that there are 4 major phases:

- 1. **Need for knowledge** During the performance of a job, we reach a point at which we cannot go on because we lack specific knowledge.
- 2. Transfer of knowledge There is a colleague or friend who has this knowledge and we resort to his help, and he explains to us the best way to resolve our problem.
- **3.** Application of the acquired knowledge Because this is a pressing need, we immediately apply the knowledge that was transferred.
- **4. Consolidation of the knowledge** When we have completed the work, thanks to this transfer of knowledge, we are satisfied and we create the conditions for consolidating this knowledge the another person had, assimilating it as ours.



Formal and Informal Training, Continued

training

Limitations The process described above appears to be simple, effective and surely all **of informal** professionals try it out periodically, although it has some limitations:

- If there is too much availability to share knowledge on the part of those who have it, a situation of dependency may arise, in which those who do not have the knowledge have no incentive to consolidate it.
- If the transfer of knowledge is always made by resorting to socialisation, that is, without creating any type of content that could be useful for the next time or for other persons, one runs the risk of repeating the process needlessly.
- If those who have the knowledge feel that they are a sort of "brain in continuous out-sourcing", they will lose some of their motivation for sharing knowledge.
- Just as the one who is unknowledgeable consolidates his new knowledge through the satisfaction gained from successfully completing a task, the knowledgeable person also gains satisfaction if he feels that he is contributing to a positive change that has transverse effects in the organisation and not just a momentary effect on an individual.

Knowledge Pill

It becomes necessary to create a tool that enables the capturing of tacit knowledge in the organisation, placing it at the disposal of all the employees.

This tool is the Knowledge Pill, a small unit of explicit knowledge in a multimedia format to be used from the "just-in-time" training perspective.

The idea underlying the name Knowledge Pill is that, like pills we take for the immediate relief of some state of illness, Knowledge Pills enable the user to immediately overcome a situation in which there was a lack of knowledge that needed to be supplied immediately.



Formal and Informal Training, Continued

Key elements of As already mentioned, a Knowledge Pill is a piece of knowledge packed **Knowledge Pills** in multimedia format and made available to everybody that needs it, but some key elements should be respected:

- The use of multimedia format.
- Simplicity, easy to create and to distribute.
- Short, the average Knowledge Pill should not take more than 3 minutes to watch.
- The person who has the tacit knowledge should be directly in-
- There should be management support for the use of this methodology, so people in charge of knowledge management, human resources and training should be involved.

Advantages of Knowledge Pills

The main advantages of using Knowledge Pills in organisations are:

- It facilitates know-how.
- It transforms each employee into a training agent inside the organisation to which he belongs.
- It enables the designing of training tailored to the needs of a duty.
- It consolidates the knowledge already existing in the organisation.
- It avoids the permanent repetition of informal training processes.
- It reduces the costs of traditional training.
- It enables the training of employees, customers and partners.
- It enables having training when it is necessary and as many times as it is necessary.
- People learn better by seeing than they do by reading.
- It is particularly effective in environments where there is a rotation of personnel.
- No previous knowledge is necessary to be trained through the use of this method.
- The speed of training content creation is unbeatable.



Knowledge Pill Formats

formats

Possible There are various possible formats for Knowledge Pills:

- Audio.
- Video.
- Multimedia Presentation.

Choice of format The choice of a format will always depend on:

- The goals of the learning.
- The profile of the learners.
- The moment at which the learners are most disposed to use the Knowledge Pills.
- The equipment available for the use of the Knowledge Pills.

Audio A Knowledge Pill can have the format of an mp3 (or other) audio file, enabling more portable usage, because it can be listened to on small mp3 players, car radios and mobile phones.

It can be well suited for explaining the reason for a procedure and even the steps of the procedure, if, for example, the listener has to do the various steps while in movement.

The quality of the sound and the script have a fundamental role in this format.

Audio: example An employee has to perform a substantial and ordered set of steps in a **of use** safety procedure, which requires him to go to various points in a building.

> The employee, with an mp3 player can listen to each of the steps and follow them in the order given on the recording, eliminating the possibility of misinterpreting a written text.

Video A Knowledge Pill can have the format of a video file (mp4, wmv, mpeg...).

This format is very well suited for cases in which the learner has to see how to do a certain procedure, needing an explanation at each step.



Knowledge Pill Formats, Continued

Video: example On a production line, the way to use the machines and tools is difficult to of use explain in a manual, and for that reason, most of the time the training is given on the assembly line, with more experienced workers explaining the procedures to be followed to other less experienced colleagues.

> If this explanation is recorded using a video camera, we will have a teaching resource that is highly useful and that can serve as material for consultation or even training of new employees.

Multimedia presentation

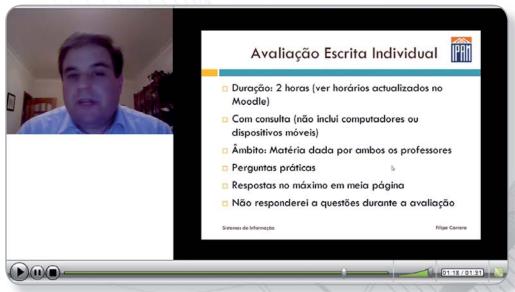
A multimedia presentation can take many different formats:

- **Slide presentation in Powerpoint** This can be a presentation with narration, which may, or may not, include a video of the narrator.
- **Screen capture** This is a form of presentation that enables the performance of a set of steps using any computer application and explaining the steps as they are being performed.

For this type of multimedia presentation, various programmes can be used:

- Camtasia Studio (www.techsmith.com).
- Captivate (www.adobe.com).
- Camstudio (http://camstudio.org/).
- Wink (www.debugmode.com/wink/).

The files created can be video files (mp4, wmv, mpeg...) or flash, which makes it easy to publish them on Web pages.



Example of slide presentation in Powerpoint using Camtasia Studio

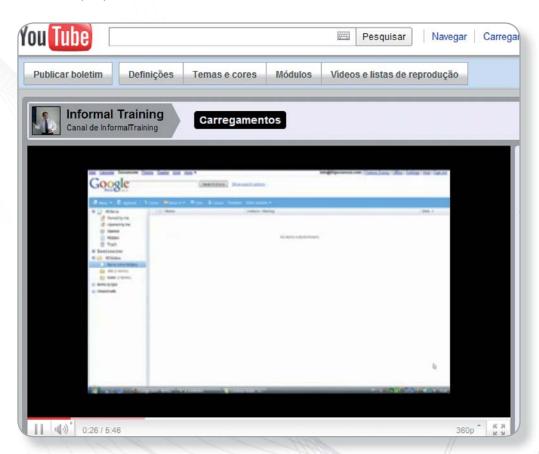


Knowledge Pill Formats, Continued

Multimedia In any office there are dozens of computer programmes that are used by **presentation:** all or some of the employees; the level of use is not homogeneous, so that **example of use** we have persons who master the programmes and others who are mastered by the programmes.

> The employees who are the most efficient in the use of such programmes lose a lot of time explaining to others how to do certain operations or may even end up having to do the tasks themselves.

> The sharing of their knowledge is much more effective and lasting if at the moment they share it, there is a recording of the steps they are doing, because this can be made available later for consultation or for training of other employees.



Example of a Knowledge Pill using screen capture. Available at www.youtube.com/InformalTraining



Forms of Distribution

Open or Closed We can say that there are two major forms of distribution of Knowledge Pills, depending on the learners:

- Closed distribution The content created is only available to the employees of the organisation.
- Open distribution The content can be accessed by any person inside or outside the organisation.

The choice of the form of distribution of the Knowledge Pills will depend on whether we want the content being made available for access only by persons within the organisation or if we see an advantage to having persons outside the organisation be able to access the Knowledge Pills.

One of the advantages of the content being accessible to persons outside the organisation is to be able to create a perception in the market that the organisation is a leader in this field.

Whatever the form of distribution chosen, we can use different means of distribution, which are described below.

Intranet The Intranet, by being a network that is accessible only to internal employees, is an optimal means of closed distribution for Knowledge Pills.

Internet The Internet can be used for an open distribution, but it can also be used for a closed distribution, by resorting to reserved areas.

Extranet The Extranet, by definition, is a private network of interlinked computers that uses Internet protocols to share information between companies. It is almost always an extension of the Intranet, which requires the use of passwords.

> The Extranet enables the relationship with partners of the organisation, being the ideal platform for training them.



Forms of Distribution, Continued

Physical Given their versatility, Knowledge Pills can also use physical supports for **supports** their distribution.

By physical supports, the following are meant:

- Pen Drive.
- CD-ROM.
- DVD.
- Memory Card.
- Hard Drive.

The use of this type of support makes it possible to use other types of equipment besides the computer, such as:

- DVD player.
- Television.
- Video projector.

Mobile Knowledge Pills can be used through mobile devices, such as:

- iPod.
- iPhone.
- iPad.
- Tablets.
- Portable DVD player.
- Smartphones.

Devices of this type enable Knowledge Pills to be used in a very flexible manner and in any environment, avoiding the need to resort to computers.

Social Learning

With the emergence of online social networks, we can say that we are facing a new reality that is enabling the creation of spaces of co-creation and co-learning.

Platforms such as Facebook, Linkedin, Slideshare, YouTube, and Twitter make it easy to share contents in closed or open groups.



Learners

Framework Knowledge Pills have a very broad target audience, because we can say that any employee of any organisation can benefit from this methodology.

> However, it is also possible to said that there are specific benefits, depending on the individual's position in relation to the organisation.

Employees

The employees of an organisation may be creators and recipients of Knowledge Pills, in this way enabling the creation of a genuine Learning Organization.

Subcontractors

When someone or another company is subcontracted, there is always the risk of the subcontractor not understanding clearly what is required of him because he is not steeped in the vision and mission of the company.

For example, to explain to a Web design company what changes need to be made on the organisation's site, the usual process is to hold a meeting where notes are taken and an extensive e-mail is sent with the intention of giving an exhaustive explanation of all the alterations.

Anyone who has been through a similar process knows very well that there is an enormous margin for misunderstandings.

A Knowledge Pill in the format of a narrated screen capture sent to the subcontractor can prevent misunderstandings, besides being produced much more quickly.

Customers

One of the most common problems in the relationship with customers or potential customers is to ensure that they clearly understand the potentialities of the product and how to use it correctly.

Normally, the attempt is made to give written information that is as detailed as possible, with the use of an occasional diagram to facilitate understanding. However, all of us as consumers know that this is not entirely effective.

An organisation that adopts this methodology will certainly use Knowledge Pills to relate to its customers, providing them with an excellent pre- and post-sales service.



Learners, Continued

Partners Partners are all those who relate to each other as an organisation; we are talking about:

- Business partners.
- Suppliers.
- Other entities that have relations with the organisation.

Knowledge Pills can make a decisive contribution to a more fluid relationship, with less potential for conflict.

investors Pills.

Potential Even potential investors can be better informed through Knowledge

An investor does not analyse only the business plan of a company or a project; he needs to have a good understanding of the applications of the products and services of a company.

The problem is that this information is given in a format that forces the investor to use his imagination to arrive at a conclusion, and it is not possible to control his imagination.

Knowledge Pills can make it possible to give better direction to the investor, through an explanation and demonstration, available 24 hours a day and the number of times that are necessary for a full understanding.

PRACTICAL APPLICATIONS OF **KNOWLEDGE PILLS**



Internal Applications

applications •

Examples Knowledge Pills can be used in very diverse situations within the of internal organisations, for example:

- An employee coming from outside training.
- Employee to employee.
- Receiving of new employees.
- New procedures.

An employee An employee has received outside training on how to use a computer coming from programme. The knowledge acquired is useful for his team, and he **outside training** therefore produces a Knowledge Pill with the crucial aspects of the training received.

employee

Employee to An employee has to do a procedure every three months, and as he does not master the procedure well, he always asks for the help of another employee, who loses time every three months.

> The alternative is for the knowledgeable employee to produce a Knowledge Pill that can be consulted by any employee whenever needed.

new employees

Receiving of When a new employee arrives at a company, he is overwhelmed with information that he is in no condition to absorb.

> With Knowledge Pills, a new employee can measure out in doses the information received in the amount that is necessary, in this way ensuring the consolidation of the acquired knowledge.

New procedures

In an organisation new procedures for computer security are defined, and the sending out of the typical circulars has proven to be ineffective, because the instructions cannot conveniently simulate the new procedures.

A Knowledge Pill that fully reproduces the procedure in the environment the user is used to will prevent people from having alternative interpretations.



External Applications

applications

Examples Knowledge Pills can be used in the relationship with persons outside the of external organisation:

- Pre-sales.
- Post-sales.
- For partners.

Pre-sales The potential customer needs to understand the usefulness and functions of a product or service in order to make the decision to buy.

> A Knowledge Pill can be created according to the specific information needed by a potential customer, and it can be used by other potential customers with similar needs.

Post-sales To have customers who are satisfied with the products and services, it is necessary for them to know how to use them in the best way.

> Knowledge Pills can help customers in this use, creating an attractive and efficient support that works 24 hours a day.

For partners

To avoid errors and needless wastes of time, the partners of a company need to know the procedures for interacting with the company.

Knowledge Pills can prevent the need for many meetings to repeat the procedures already defined previously.

KNOWLEDGE PILL METHODOLOGY - KPM



Micro Skills

What are Micro Micro Skills refers to all the small units of knowledge needed for the good **Skills?** performance of a duty within an organisation.

These Micro Skills can be transferred to other employees through:

- Externalisation Training actions and didactic resources.
- Socialisation Colleagues explain to one another how to carry out certain procedures.

Training

Micro Skills in The training duty in any organisation is fundamentally focused on the creation of diverse skills.

> In technical training, an attempt is made to group a set of Micro Skills into training actions that last a minimum of a few hours, only as a question of logistics, because it is easier in this way to get a group together in a room in front of a trainer.

> What we say in Knowledge Pills Methodology is that each person has his own pace for internalising Micro Skills and that getting a group together and inundating them with information merely for logistical reasons is not effective.

Types of Micro The approach of this methodology is based on the detection of two types **Skills** of Micro Skills in the organisations:

- Critical.
- Transverse.

Critical Micro Critical Micro Skills are considered to be those units of knowledge of great **Skills** importance to the good performance of a concrete duty.

Transverse Transverse Micro Skills are those units of knowledge required in a trans-Micro Skills verse manner in the organisation and that are necessary for a good performance of various duties.



Micro Skills, Continued

Critical vs The big difference between critical and transverse Micro Skills has to do **Transverse** with whom that Micro Skill is important to.

- If it is important only to the work of one person, we are talking about a critical Micro Skill.
- If it is important for the work of several people inside the organization who share the same type of work, we are talking about a transverse Micro Skill.

No matter whether we are talking about a critical or a transverse Micro Skill, the process of creation will be identical, the only difference perhaps being in the way the Knowledge Pills created are disseminated:

- Critical Micro Skill Dissemination will be directed more towards the people who need that skill.
- Transverse Micro Skill Dissemination will be across the organization.

Micro Skills Skills:

Examples of The following table presents examples of critical and transverse Micro

MICRO SKILL	ТҮРЕ
Do mailings using Microsoft Word	Critical
Use collaborative programmes to schedule meetings	Transverse
Correctly use a part on an assembly line	Critical
Enter the record of documents on a workflow programme	Transverse
Use a project management programme	Critical
Communicate using a web-based platform	Transverse
Correctly use a payment terminal	Critical



Phases of the Method

Training The Knowledge Pills Methodology will have distinct phases depending on scenarios whether it is being applied by Internal or External Knowledge Mediators, and we will therefore give special attention to each one of them.

Mediators

External If the methodology is applied by External Knowledge Mediators, we will **Knowledge** have the following phases:

PHASE	ACTION
1	 Diagnosis: Identify the subjects that the persons need to know but do not know. Select the knowledge that is the most relevant to the duties performed. Select the employees who have the tacit knowledge to be disseminated.
2	Creation of content:Creation of multimedia content.Validation of the content created.
3	Dissemination: Training sessions using the Knowledge Pills. Design and creation of an Organisational Knowledge Centre (Online and Offline).
4	Assessment: Results of the assessment. Preparation of new relevant content. Expansion of the scope of the project.



Phases of the Method, Continued

Mediators

Internal If the methodology is applied by Internal Knowledge Mediators, we will **Knowledge** have the following phases:

PHASE	ACTION
	Preparation and Diagnosis:
1	 Identify the potential Internal Knowledge Mediators. Select the Internal Knowledge Mediators. Train the Internal Knowledge Mediators. Make the direct supervisors aware of the need to validate the Knowledge Pills created by the Internal Knowledge Mediators.
	Creation of content:
2	 Creation of the Knowledge Pills by the Internal Knowledge Mediators, based on their own tacit knowledge. Validation of the Knowledge Pills by other employees of the organisation with the same tacit knowledge or the ability to evaluate whether the Knowledge Pills created correspond to the good practices that are to be disseminated.
	Dissemination:
3	 Using the possible technological supports (Intranet, Internet, DVD, CD, etc), creating an Organisational Knowledge Centre (OKC). Training and/or awareness actions for the use of the Knowledge Pills.
	Assessment:
4	 Assessment of the application of the methodology, for which external consultants may or may not be used. Expansion of the methodology to other areas of the organisation, with the goal of training other Knowledge Mediators and creating an ever larger base.

The Regardless of whether Internal or External Knowledge Mediators are **Organisational** used at the end of the process, we will have a very appreciable quantity of **Knowledge** Knowledge Pills, and under normal circumstances, this quantity will tend **Centre (OKC)** to grow exponentially.

> It is therefore import to establish, depending on the support used, what format the repository of the organisation's knowledge will have, which we call the Organisational Knowledge Centre (OKC).



Phases of the Method, Continued

Knowledge Centre (OKC)

Features of Regardless of the support and the technology chosen, in order for this **Organisational** Organisational Knowledge Centre to fulfil its mission, it must have the following features:

- Be accessible to all those it is intended for.
- Be accessible at the time and place it is justifiably needed. For example, on an assembly line or at a workstation in an office.
- The Knowledge Pills must be classified in a way that makes searching for them easy. That is:
 - -All the content created must have Tags to facilitate search for them by internal and external search engines.
 - -The content must be organised in directories and sub-directories that enable an easy search by subject.
 - -The form of classification must allow for growth to an infinite number of Knowledge Pills.
- Under some circumstances, specifically when wishing to share knowledge with persons outside the organisation (customers, suppliers, partners, etc.) the Knowledge Pills must be easy to share using e-mail, instant messaging and online social networks (Facebook, Twitter, Linkedin and others), having:
 - -Specific buttons for sharing content through the various social networks.
 - -Direct link for e-mail and instant messaging.
 - -Code for uploading to Web pages.



Benefits and Challenges

Advantages This methodology has as its main advantages:

- It creates a rapid and accessible platform to capture and redistribute the tacit knowledge of the employees of an organisation.
- It changes the attitude of the employees in relation to sharing knowledge, because it makes this a fast and easy task.
- It increases the level of the technological literacy of the employees, through a more active use of technology.
- It reduces the costs for the area of training, while increasing its efficiency at the same time.
- It creates a Learning Organisation.
- It facilitates dialogue with all the external agents (customers, suppliers and partners) who have a relationship with the organisation.
- It helps people with special learning difficulties.



Benefits and Challenges, Continued

Barriers to Although this is a method with proven efficiency that is easy to under**implementation** stand, there are many barriers to its implementation, which many times have nothing to do with the methodology itself, but with structural issues of the organisation and the attitudes of the people.

> In the following table, we list the main visible and invisible barriers encountered in the implementation of this methodology in different organisations and some possible solutions.

BARRIER	POSSIBLE SOLUTION
The resources for training may be reduced, because this methodology needs fewer resources. The power of training department is reduced.	Make those in charge of training aware of the fact that the power of a training department comes from the results obtained and not from the amount of human and material resources managed.
The methodology is too innovative, because we do not know other organisations that use it.	Make those in charge of training aware of the competitive advantage represented by adopting an innovative methodology for sharing knowledge.
The methodology has clear advantages for large companies, but for SMEs, it is too complex.	Give a demonstration to the heads of the company, showing the creation of a Knowledge Pill
The employees that have relevant tacit knowledge have little or no technological culture.	Propose using External Knowledge Mediators.
The tacit knowledge is disseminated throughout many employees.	Propose the training of Internal Knowledge Mediators and initial follow-up by external consultants.
There is a lot of knowledge to be shared and there is no clear vision about how this methodology could help the organisation share it.	Propose moving ahead with a pilot action, selecting an area of the organisation in which to work, resorting to External Knowledge Mediators.
The use of multimedia requires a lot of resources, in terms of manpower, materials and time.	Give a demonstration of the creation of a Knowledge Pill for the heads of the company.
The persons having tacit knowledge have difficulty in explaining what they know to a camera or a microphone.	Propose using External Knowledge Mediators to facilitate the process in the beginning, creating an atmosphere of recorded conversation between the holders of tacit knowledge and the External Knowledge Mediators.

THE CREATION OF KNOWLEDGE PILLS.



Framework

Who creates The Knowledge Pills can be created by anyone who has access to the **the KP** software, equipment and knowledge necessary for its creation.

> However, under the scope of this methodology, we are going to consider two types of Knowledge Pill creators:

- **Internal Knowledge Mediators** Holders of tacit knowledge they will capture using this methodology.
- **External Knowledge Mediators** Consultants who will capture the tacit knowledge of others using the KPM.

General rules A basic element of this methodology is its simplicity, so that the decision **for creating KPs** on the technologies to be used should take this premise into account.

> Knowledge Mediators, whether Internal or External, should test the various technologies at their disposal before starting the actual work of capturing tacit knowledge.

> A good prior understanding of the knowledge to be disseminated is the basis for a successful implementation of this methodology in any organisation, because it is very important to gain defenders of the methodology in the first phase.

> These defenders will be the drivers of an unstoppable process of change, and they will not necessarily be part of the management staff.



Framework, Continued

Typical content The typical content of a Knowledge Pill is composed of the following parts:

- **Title** A title should clearly identify the goal of the Knowledge Pill, so that whoever reads it immediately understands whether this is the content that is needed.
- **A question** A question to be answered that can be introduced orally or in a written format, and in some formats it is desirable to present the two forms.
- A reply The person who has the knowledge responds to the question asked in a clear, direct and succinct manner.
- A list of credits The relevant information about who produced and supported the creation of the Knowledge Pill is given here.
- **Tags** By tags, we mean key words that will enable a better search of this type of multimedia content, so it is very important to define them along with the created content.

Formats Within the scope of the Knowledge Pills Methodology, we will consider considered three formats of Knowledge Pills:

- Audio.
- Video.
- Multimedia.



Audio Knowledge Pills

Scope A Knowledge Pill can have the format of an mp3 (or other) audio file, enabling more portable usage, because it can be listened to on small mp3 players, car radios and mobile phones.

This form can be well suited for explaining the reason for a procedure and even the steps of the procedure, if, for example, the listener has to do the various steps while on the move and have his hands and eyes free for the task.

Equipment For the production of Knowledge Pills in audio format, various types of equipment can be used:

- Microphone, connected to the computer with or without an external sound card. The advantage of a microphone with its own sound card is that it does not depend on the sound card of the computer, which in many cases does not have the quality needed to record sound through simple microphones.
- Computer for editing audio.
- Portable mp3 recorder, such as an iPod Nano.



Example of a Microphone with a sound card and a USB connection www.plantronics.com



Software There is a wide variety of software for editing audio, but for the sake of simplicity, we will touch on two programmes:

- **Audacity** (http://audacity.sourceforge.net) This is a free programme with many possibilities for editing, and it is perfect for a user who does not know much about editing audio.
- **Camtasia Studio** (www.techsmith.com/camtasia) This is a video editing programme (not free) that also allows the user to edit audio. In this way, we only need one tool for various types of Knowledge Pills.

Creation

The Process of The process of creating a Knowledge Pill in audio format passes through the following phases:

- 1. Preparing the script.
- 2. Recording the content.
- 3. Validating.
- Editing the audio.
- 5. Final result.

Preparing the script

In the preparation of the script, there are two possibilities:

- When there are steps that are perfectly identified, it is better to prepare a detailed script that is validated in advance before being read and recorded.
- When the script is based on an interview with the knowledge holder at his place of work, it is better to just clearly identify the goal of the Knowledge Pill. We are going to consider this last case as the most commonly used form in the scope of the KPM.

audio content phase:

Recording the The form of the recording will depend on the option made in the previous

- When the recording is made using a written document that has already been validated, a computer with a good microphone can be used, or any other mp3 portable recording device.
- When the recording is made in the workplace, it may be more convenient to use a portable recording device to gather the audio from the holder of the knowledge we want to capture.



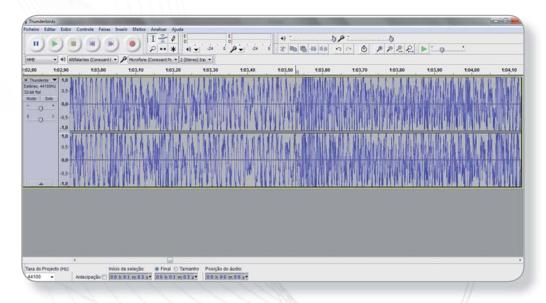
Validating After the audio has been gathered, its content should be validated even before it is edited, because if the entire content is not validated, the recording will have to be repeated. If there are only occasional problems, it may be possible to resolve them during the editing.

Editing the audio

For the editing of the audio, the audio editing programmes such as the ones mentioned in the previous point will be used. The main work to be done in this phase should be:

- To eliminate periods of silence at the start, in the middle and at the
- To eliminate unnecessary content.
- To raise or lower the volume when necessary.

Cuts that are audible should be avoided, because they may give the listener the sensation that perhaps there was a skip in the steps to be performed.



View of audio editing using Audacity (http://audacity.sourceforge.net)

Final result As a result of the foregoing phases, we will have Knowledge Pills in audio files that can assume various formats, mp3 being the most common, due to its ease of use in multiple supports.



Tutorial Videos Under this point, we give links to tutorial videos that may be useful in the creation of Knowledge Pills in audio format.

GOAL OF THE VIDEO	LINK
Making Podcasts with Audacity	www.youtube.com/watch?v=IC3VZkfdgV8
Introduction to Audacity	www.youtube.com/watch?v=9w5L3gy9lJl&feature=related
Camtasia Studio Tutorials	www.techsmith.com/learn/camtasia/7/

Advice and precautions

In creating Knowledge Pills in audio format, the main precautions to take should be:

- To preserve quality when capturing the sound, paying special attention to the ambient sounds, moving away from sources of noise.
- To test the equipment and be sure you have extra batteries before beginning the recording.
- To ensure a proper diction and that the person speaking into the microphone does not speak too fast.
- To prevent nervousness on the part of the knowledge holder, by creating a scenario of tranquil conversation in which the consultant asks questions to the knowledge holder and he answers,
- To check to see if the quality of the sound is acceptable immediately after the first recording, and if so, proceed with the other record-
- To reduce to a minimum the cuts in the editing; it is preferable to repeat the whole recording than to leave it for the editing phase.
- To ensure that the validation of the content is always done by someone who was not directly involved in the creation of the Knowledge Pills being validated.
- To prevent loss of concentration in the listener, by limiting the duration of this type of Knowledge Pill to no more than 3 minutes.



Video Knowledge Pills

Scope A Knowledge Pill in video is a video capture of the performance of a task or of someone sharing his/her knowledge.

This type of Knowledge Pill is extremely well-suited for three kinds of situations:

- When we want to capture each of the steps of a task, such as the assembly of a piece of equipment, for example.
- When we want to capture the knowledge of someone with a lot of experience. Someone giving advice on how to make an effective public presentation would be an example.
- It can also be useful for motivating people to change, because they can see the image of the person responsible for the project as he/she explains each of the steps and the results to be obtained.

A video without narration or sound that has only subtitles can also be considered as a Knowledge Pill in video format. This format, however, is not a natural format. The effectiveness of this type of format comes from the fact that it is very close to the reality of any human being.



Equipment

For the production of Knowledge Pills in video format, various types of equipment can be used:

- **Video camera** There is a great variety of formats (HD, 3D), and the choice of this type of equipment should always take into consideration how the sound is going to be captured, which is the essential element in a Knowledge Pill video.
- **WebCam** This can be useful in giving a quick explanation of a procedure or sharing knowledge, but the quality of the image and the sound may not be the best.
- **Mobile phone with video function** The advantage of this type of equipment is its dissemination. At the moment we can say that they are found in any part of the world, so that the capturing and sending of video has become something very simple. The disadvantage may be the quality of the image and especially sound.
- **Photographic camera with video function** The dissemination of these cameras is not quite as great as that of the mobile phones with video function, but they generally have a somewhat better quality and memory storage capacity.
- **iPad** Also has the possibility of recording video.
- **Computer for video editing** With software for doing editing.
- **Tripod** There are various sizes and formats and their purpose is to facilitate obtaining a stable image, but there are video cameras on the market now that ensure a very stable image even when filming without a tripod. Small flexible tripods can also be used, which allow the camera to be set up in any location.
- **Microphone** Given the importance of sound in the production of Knowledge Pills in video format, we will deal with this equipment in greater detail in the following point.



Microphone When necessary, we can go beyond the microphone that comes with the equipment and use an external microphone, especially if we are recording outdoors or we want to make wide angle shots that enable us to see the movements made by the persons being filmed.

There are various types of microphones we can use:

- **Directional** These are sometimes incorporated in the cameras, but they can be a separate accessory. This type of microphone captures the sound in the direction the camera is pointed, but it is not well suited for distances greater than 2 to 3 metres, because it begins to capture sounds in the background. It does, however, give the person who is being filmed certain mobility.
- **Wired** This type of microphone is connected to the camera and placed next to the interviewees or even attached to their clothing. The quality of sound is very good as background sounds are eliminated, but it limits the mobility of the interviewees, which can create complications when they have to perform tasks for the recording.
- Wireless This type of microphone gives interviewees total mobility and enables the filming of wide angles and shoots that are not directed towards the person speaking, because the camera can capture the sound through its receiver over a distance of over 10 metres. There are two types of solutions:
 - Adapted using traditional wireless microphones that are used in conferences and that are connected directly to the camera through the audio input port.
 - There are video camera makers who already offer a wireless microphone as an accessory. The following figure shows a microphone that uses Bluetooth technology, which allows making recordings of high quality at distances of up to 15 metres, even when filming outdoors.



Example of a Sony wireless microphone that uses Bluetooth technology (www.sony.com)



Software

Normally Webcams, cameras and video cameras come with software furnished by their manufacturer for editing video and for conversion of files into formats that allow them to be edited by other programmes that are more suitable for video editing.

There is a wide variety of software for editing video, but for the sake of simplicity, we will touch on three programmes that are accessible to any user:

- **Windows Live Movie Maker** (www.microsoft.com) This programme is aimed at users of Windows applications and offers the possibility of quick and very intuitive editing of video content, permitting the user to do the following, for example:
 - Record content directly from the Webcam.
 - Add a title and list of credits
 - Cut portions of the video.
 - Create automatic films.
 - Record to multiple supports, DVD, disc, mobile devices, YouTube.
- **iMovie** (www.apple.com): This programme has the same functions as the previous one, but it is more sophisticated, as is habitual with these types of programmes that work on the Apple operating system
- **Camtasia Studio** (www.techsmith.com/camtasia): This video editing programme (not free) is a tool that can be used for various types of Knowledge Pills, and besides having the usual functions found on video editing programmes, it enables the user to create files in various formats and easily integrate them into Web pages.

The Process of Creation

The process of creating a Knowledge Pill in video format passes through the following phases:

- 1. Preparing the script.
- 2. Choosing the location and clothing.
- 3. Recording the video.
- 4. Validating.
- 5. Editing the video.
- 6. Final result.



Preparing the To make the process quicker and simpler, the script should not follow the **script** filmmakers' model, because we are not working with professional actors, but with professionals who are used to sharing their knowledge.

> For this reason, the script should be limited to the questions that are to be answered and preferably, one video should be made for each question.

> However, these questions should be validated in advance by the persons in charge of the organisation to be certain that the content being created is in line with the goals of the organisation and that the right people are being interviewed.

Choosing the location and clothing

The location and clothing are important logistical questions because of the following factors:

La localización puede ser la misma en la que se ejecutan las operaciones que se han de capturar en vídeo.

- Si la localización no constituye una cuestión fundamental, se puede elegir una localización con buenas condiciones de iluminación, con poco ruido de fondo y con un fondo que no distraiga la atención de las personas que vean el vídeo.
- Por lo que respecta a la vestimenta, esta puede resultar importante para reforzar el mensaje; es decir:
 - Si el vídeo es de un técnico de la empresa que explica las funciones de un producto, será más interesante que el técnico vaya vestido en su ropa de trabajo.
 - Por otra parte, si se trata de un administrador que explica los avances de un proyecto de cambio, tendría más sentido elegir una vestimenta más formal.



Recording the video

For the recording of a video, a location with good lighting and no background noise should be chosen. Care should be taken to avoid placing the knowledge holder in a position of speaking directly into the camera.

The easiest way to create a Knowledge Pill in video format is for the consultant to ask questions of the knowledge holder in the format of an informal conversation. Care should be taken to be slightly turned to one side in relation to the camera, so that expressions and body movements can be seen.



Example of recording a Knowledge Pill on video based on a model of informal conversation, using a wireless microphone (see arrow)



Conversation This conversation can take place in the format shown in the following fig**model** ure, that is, face-to-face (seated or standing), with the camera placed over the shoulder of the interviewer and focused on the interviewee, so that the interviewer does not appear in the image.



Example of recording a Knowledge Pill on video using a model of informal conversation with the camera positioned over the shoulder of the interviewer

Note that the interviewee will tend to speak to the interviewer, thus avoiding the habitual constraint people feel when speaking directly into a camera.

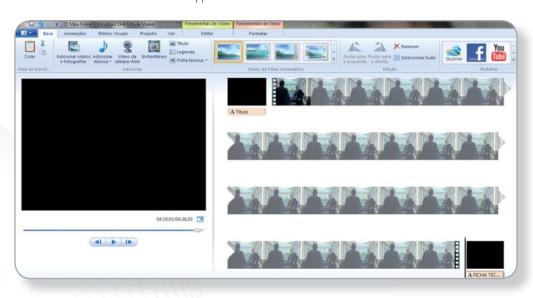
Validating Even before starting on the edition of the content created, these should be validated by third parties not directly involved in their production, to be certain that the content corresponds to the correct practices.



Editing the video

The editing of the video uses the video recordings that have been validated:

- Cutting out periods of silence and portions having no connection with the content.
- Adding titles, logos and other mandatory references.
- Raising or lowering the volume.
- Reducing background noise.
- Inserting subtitles and call-outs (arrows, text balloons) that facilitate the use of this type of content.



View of video auditing using Windows Live Movie Maker (www.microsoft.com)



Final result Depending on the programme for editing video that is used, we will have files of different formats:

- WMV Windows Media Video.
- MP4/FLV/SWF Flash Outputs.
- MOV QuickTime Movie.
- AVI Audio Video Interleave video file.
- M4V iPod, iPhone, iTunes compatible video.
- RM RealMedia streaming video.
- GIF animation file.

Normally the programmes for editing video have help files that offer a choice of the type of support for which the video file is best suited, that is:

- DVD.
- \bigcap
- Mobile devices, iPod, iPhone, iPAD and others.
- YouTube.
- Hard Drive.
- Web.

This versatility of formats makes it possible to view Knowledge Pills on video in a variety of supports, enabling them to be viewed even when the target audience does not have access to the Internet, because what is important is that the target audience be able to watch this content where and when they need them.

Tutorial Under this point, we give links to tutorial videos that may be useful in the **Videos** creation of Knowledge Pills in video format.

GOAL OF THE VIDEO	ENLACE
Introduction to Windows Live Movie Maker	http://www.youtube.com/watch?v=94lYVLPBXpg
iMovie Functionalities	http://www.youtube.com/watch?v=9p0AIPQWhuA &feature=fvsr
Camtasia Studio Tutorialss	www.techsmith.com/learn/camtasia/7/



Advice and precautions

In creating Knowledge Pills in video format, the main precautions to take should be with:

- Sound.
- Preparation.
- Capturing the image.
- Editing.

Caring about sound

In creating Knowledge Pills in video format, the main precautions with the sound should be:

- To preserve quality when capturing the sound, paying special attention to the ambient sounds, moving away from sources of noise and locations that echo.
- When wireless microphones are used, one must check to see that the range of the receptor installed in the camera is not exceeded and that the camera is not capturing the sound of its own microphone, as well.
- To ensure that the microphone is well positioned and does not move whenever the interviewee moves.

Caring about preparation

In creating Knowledge Pills in video format, the main precautions with the preparation of video should be:

- To test the equipment and be sure there are extra batteries for the equipment being used before beginning the recording.
- To choose a location with good lighting, preferably with natural light.
 In the event there is no other alternative for the location, a light source should be used, which may be a powerful lamp or even a projector.
- Before beginning the filming, a check should be made to see that that there are no shadows that cover part of the faces of the persons participating in the video.
- From the outset, a check should be made to see if there are elements that would create a distraction, for example:
 - Clothing that is not in line with the goal of the video, such as comic ties, for example.
 - Backgrounds with well-defined images and/or movement, or even live images with passing cars and pedestrians.
 - Presentations or posters that are too visible.



image

Caring about In creating Knowledge Pills in video format, the main precautions with **capturing the** capturing image should be:

- Whenever possible, a tripod should be used to prevent shaking or sudden changes in the plane of view, which cause distractions.
- To ensure a proper diction and that the person speaking into the microphone does not speak too fast.
- To use the widest possible angle of view, in order to present a general view of the non-verbal language of the participants in the video.
- The use of zoom should be kept to an absolute minimum, but it can be very useful when we want to show a detail of a document, piece of equipment, part, etc.
- To prevent nervousness on the part of the knowledge holder, by creating a scenario of tranquil conversation in which the consultant asks questions of the knowledge holder.
- To check to see if the quality of the sound is acceptable immediately after the first recording, and if so, proceed with the other recordings.

Caring about In creating Knowledge Pills in video format, the main precautions with the **editing** editing should be:

- To reduce to a minimum the cuts in the editing; it is preferable to repeat the whole recording than to leave it for the editing phase.
- To ensure that the validation of the content is always done by someone who was not directly involved in the creation of the Knowledge Pills being validated.
- To prevent loss of concentration in the listener, by limiting the duration of this type of Knowledge Pill to no more than 5 minutes.
- The file format should allow the videos to be properly viewed on the selected supports.



Multimedia – Knowledge Pills

Scope

There are two types of Knowledge Pills in multimedia format:

- Recording of the presentation in Powerpoint.
- Screen capture.

Recording of the presentation in Powerpoint

The recording of a presentation in Powerpoint is basically a set of Powerpoint slides, which are narrated and to which a video of the presenter can also be added.

This type of Knowledge Pill may be very useful, specifically in the following cases:

- To present a theoretical framework.
- If you want the target audience to be able to see it as many times as needed.
- When presentations are made and there are members of the target audience who are absent and who need to see the presentation to be able to continue their learning.

Screen capture

Screen capture is the recording of a navigation in any application, with narration (with or without video from the presenter).

This type of Knowledge Pill may be very useful, specifically in the following cases:

- In explaining procedures to be used in any computer programme.
- In presenting the functionalities of a programme.
- To explain alterations to be made at a site.
- To make clear to a customer what the process is for inserting data on a certain site.



Multimedia - Knowledge Pills, Continued

Equipment For the production of Knowledge Pills in multimedia format, the following equipment can be used:

- Computer To capture images (Powerpoint or screen) and edit them.
- **Microphone** Connected to the computer with an external sound card or not. The advantage of a microphone with a sound card included is that it does not depend on the computer sound card, which in many cases does not have the quality needed to record sound using simple microphones.
- **Webcam** when you wish to capture images of the presenter to insert in the Knowledge Pill.

Software For the creation of Knowledge Pills in multimedia format, various types of software can be used, such as:

- Camtasia Studio (www.techsmith.com).
- **Captivate** (www.adobe.com).
- **Camstudio** (http://camstudio.org/).
- **Wink** (www.debugmode.com/wink/).

creating a Powerpoint presentation

The process of creating a Knowledge Pill in multimedia format in a Powerpoint presentation passes through the following phases:

PHASE	DESCRIPTION
1	Create presentation in Powerpoint, keeping in mind that it will be a presentation with narration.
2	Use one of the software programmes listed to narrate the presentation, with video of the narrator included or not.
3	Edit the content created so that it can be used on the selected support.



Multimedia – Knowledge Pills, Continued

Process of creation of screen capture

The process of creating a Knowledge Pill in multimedia format as a screen capture passes through the following phases:

PHASE	DESCRIPTION
1	Define the process that you wish to record.
2	Open the programmes that you intend to record to avoid wasting time waiting for the programmes to open.
3	Record and narrate the steps that you wish to share.
4	 Edit the content by performing the following tasks: Eliminate periods of silence and unnecessary content. Place subtitles and call-outs. If the programme allows it, add zoom in and zoom out in cases where this is relevant. Add titles and list of credits. Add a watermark to guarantee that the content produced is not able to be used by other entities. Record the files so that they can be used on the selected supports.

Tutorial Videos

Under this point, we give links to tutorial videos that may be useful in the creation of Knowledge Pills in multimedia format.

GOAL OF THE VIDEO	LINK
Camtasia Studio Tutorials	www.techsmith.com/learn/camtasia/7/
Adobe Captivate Channel	www.youtube.com/user/adobecaptivate
Introduction to Camstudio	www.youtube.com/watch?v=Kiug3H3c4gk
Introduction to Wink	www.youtube.com/watch?v=Ta1VnYOyxas&feature =related



Multimedia - Knowledge Pills, Continued

Advice and In creating Knowledge Pills in multimedia format, the main precautions to **precautions** take should be:

- The sound should be clear and very audible.
- The use of a video of the narrator should be made only when it is strictly necessary, to avoid large files and unnecessary distractions.
- All the written texts should take into consideration the fact that the Knowledge Pills will not always be viewed in full screen and that the screen may vary from an iPod to a projection screen.
- Before starting the recording, have a very clear idea of what you want to explain, why, and who it is intended for.
- To reduce to a minimum the cuts in the editing; it is preferable to repeat the whole recording than to leave it for the editing.
- To ensure that the validation of the content is always done by someone who was not directly involved in the creation of the Knowledge Pills being validated.
- To prevent loss of concentration in the listener, by limiting the duration of this type of Knowledge Pill to no more than 5 minutes.
- The file format should allow the videos to be properly viewed on the selected supports.

DISTRIBUTION SOLUTIONS



Framework

How to reach those who need the knowledge

In choosing the form of distribution of Knowledge Pills, various questions must be considered, such as:

- Does the content created have any degree of confidentiality?
- Does the target audience have access to computers in their workplace?
- Does the target audience have to watch the Knowledge Pills while on the move?

Target audience

The target audiences for the Knowledge Pills may be highly differentiated, but for the purposes of distribution, we will consider two main types:

- Inside the organisation Such as workers, but also customers, suppliers, partners and potential investors, when dealing with information with some degree of confidentiality.
- Outside the organisation Customers in the first place, but also suppliers, partners and potential investors, when dealing with information with no degree of confidentiality.

Forms of Communication

For each of the target audiences identified, we have to guarantee that the following conditions are met in relation to the content made available through the Knowledge Pills:

- It should be accessible at the moment it is needed.
- It should be made available through the support that is most suited to the possibilities of use by each of the target audiences.
- It should be accessible at the location most suited for its use, either a fixed or mobile location.



For Inside the Organisations

Framework The following are the main channels of distribution for Knowledge Pills, when the content created by this methodology is aimed towards internal audiences or to external audiences when the content has some degree of confidentiality.

Intranet The Intranet is a private network of interconnected computers, restricted to just one entity, based on a Web platform, and it is very well suited for the creation of an Organisational Knowledge Centre (OKC).

> In this area, all the employees can share their knowledge with other employees in a secure and centralised form, at the same time enabling a quick validation of the content created.

Extranet

The Extranet is a private network of interlinked computers that uses Internet protocols to share information between companies.

It is almost always an extension of the Intranet, which requires the use of passwords.

This type of platform is very appropriate when you wish to share content with entities outside the organisation (customers, suppliers, partners), but whose access to information has some reservations.

on a site

Reserved area A reserved area on a site is a private area on a public site, for which the use of passwords is always necessary to gain access.

> To a certain degree, a reserved area on a site is a kind of simplified Intranet or Extranet, so that what was said for those two types of platforms also applies to this case.



Physical supports

By physical supports, the following are meant:

- Pen Drive.
- CD-ROM.
- DVD.
- Memory Card.
- Hard Drive.

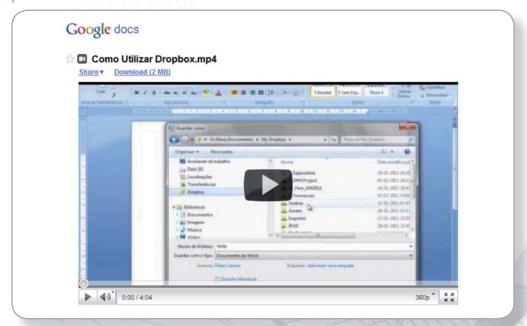
This type of support makes installation possible in the workplace, specifically on:

- Computers.
- DVD players, fixed or portable.
- Televisions, when using multimedia external hard drives.

Google docs

When we want a Knowledge Pill to be accessible only to certain authorised persons, regardless of the software used or their location in the world, Google docs is the right platform.

All that is required is an account on Google (having Gmail is not necessary) to be able to place videos and then make them available to the persons you wish, thus ensuring that the videos are not accessible to the general public.



Example of a video made available through Google docs www.docs.google.com



Dropbox Dropbox is a service for the storage of files. It is based on the concept of cloud computing.

> The company that developed the platform makes available enormous and powerful servers that are able to store the files of its customers from all around the world. Once the files have been duly copied onto the servers of the company, they will be accessible from any location with Internet access.

> The files may be synchronised between various computers that have Dropbox installed and the Web server, which acts as a backup copy.

The service offers up to 2Gb of free storage.

Given its simplicity, this can be a very useful tool in making Knowledge Pills available in a format that enables fast sharing with duly identified persons, through their e-mail address.



Partial view of the Web interface of the Dropbox service (www.dropbox.com)



For Outside the Organisations

Framework

The following are the main channels of distribution for Knowledge Pills, when the content created by this methodology is aimed towards external audiences or to internal audiences when the content has no degree of confidentiality.

Site

The placement of Knowledge Pills can be very useful in situations such as these:

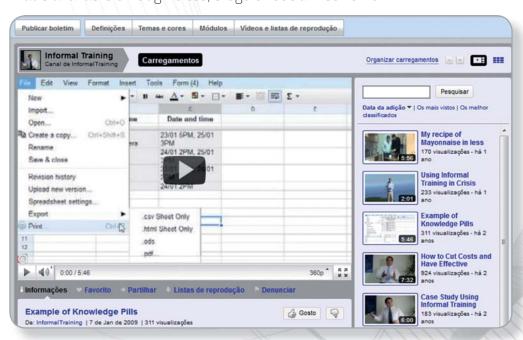
- Providing information on how products work.
- Presenting new ideas and concepts.
- Helping external entities use the functionalities of the site itself, such as forms.

YouTube

YouTube is, without a doubt, the largest multimedia platform available to any person with a computer, portable device or television set up for the purpose.

One of the facilities of YouTube is the possibility of creating a channel to bring together a set of videos by the same author.

This is a very interesting platform when you wish to make videos available to the general public, as the videos can be stored on YouTube and also made available through sites, blogs or social networks.

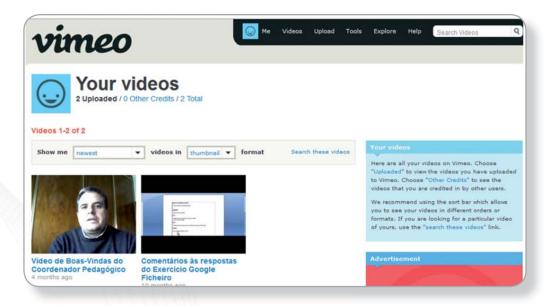


Example of the Informal Training channel on YouTube (www.youtube.com/InformalTraining)



Vimeo Vímeo is an alternative platform to YouTube and can be used in the same way, because its functionalities are very similar.

The great competition between YouTube and services such as Vímeo centres on factors such as the compression and the quality of the videos after they are loaded.



Example of a channel on Vimeo (www.vimeo.com)



iTunes

iTunes is an audio and video player developed by Apple to play and organise digital music, video files, and for the purchase of digital media files, specifically podcasts and vodcasts.

The iTunes Store is the component of iTunes through which users can buy and download digital media files into the programme itself. Note that Podcasts and Vodcasts are free.

At the iTunes Store it is possible to place Podcasts and Vodcasts for free distribution at no cost.

This is an interesting channel for distributing Knowledge Pills in any of the formats considered (audio, video or multimedia), making it possible to use them on various pieces of equipment:

- Computers.
- iPad.
- iPod.
- iPhone.

Another advantage has to do with the subscription of content. By subscribing to a Podcast or Vodcast channel, we begin receiving updated content whenever it is updated on the original site, making it useable on any of the equipment mentioned.



Example of a channel on iTunes Store (www.apple.com)



Facebook Facebook is undoubtedly the largest online social network in the world, with more that 700 million users; it is a meeting point and a place for social experimenting, that is, Facebook is being transformed according to the use made of it by each one of its users.

> For these reasons, Facebook has become a space that is propitious for sharing knowledge and is an example of a platform to support so-called Social Learning.

> The sharing of information on this platform may be done through two options:

- **Page** The page is equivalent to having a site within Facebook, using a template and pre-defined functionalities. This option is visible to everyone even if they are not a Facebook user.
- **Group** The groups may be open, in which all Facebook users can enter. Or closed, in which Facebook users who want to enter have to receive authorisation from the administrator of the group.

The following functionalities are available on pages as well as in the groups:

- Placement of messages on the mural.
- Video Sharing.
- Photo Sharing.
- Discussion Forum.
- Sharing Links



Example of Facebook page with available videos (http://www.facebook.com/pages/Networking-Your-Professional-Survival-Guide/132242700123375)



Yahoo Groups

Yahoo Groups is an evolution of a service that existed already in the 90s, called Geocities, and we can say that it is the forerunner of the Social Internet we have today.

Yahoo Groups allows users to create groups that are closed or open to the participation of any person, having the following main functionalities:

- Discussion Forum.
- Chat.
- Repository of files.
- Sharing Links.
- Surveys.
- Calendar.

One interesting detail is that the messages placed on the forums are received by all the group participants by e-mail, so that the participants do not have to check for new messages on the online forum.



View of a closed group on Yahoo Groups (www.yahoo.com)



Google Groups Up until January 2011, Google Groups functioned in much the same way as Yahoo Groups, but currently it serves only as discussion forums.

> As is the case with Yahoo Groups, all the messages placed in the Google Groups discussion forums are received by e-mail by all the members of the group.

File sharing was transferred to Google docs and Google Sites.

Google Sites is a free service of Google that enables the creation of sites, which can be personalised without the need to know HTML, and which allows the sharing of content in open or closed form, for example through the creation of an Intranet based on this service.



View of the discussion forums on Google Groups (www.google.com)

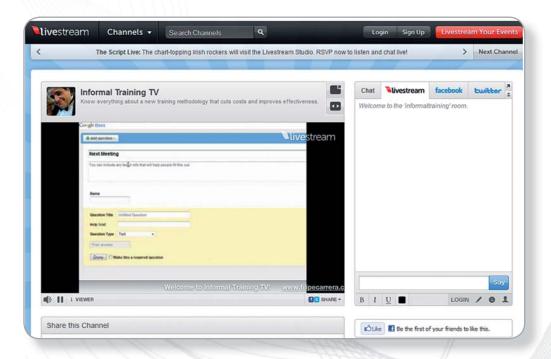


Livestream

Livestream is a platform for disseminating video content in a 24-hr. television channel format.

There are various functionalities available on Livestream that are very interesting, such as:

- Compiling and sorting of videos for online broadcast.
- Creation of programming schedules for the videos.
- Personalisation of the channel with a logo.
- Placing of written messages during the emission.
- Interruption for live transmission, which can be recorded for broadcasting at a later time.
- Possibility of sharing the link or the HTML code of the broadcast for placing on a page.
- Promotion and sharing of the broadcast through social networks.
- Chat available simultaneously with the broadcast.
- Widgets that can be added to the pages of sites to facilitate access to the broadcasts.

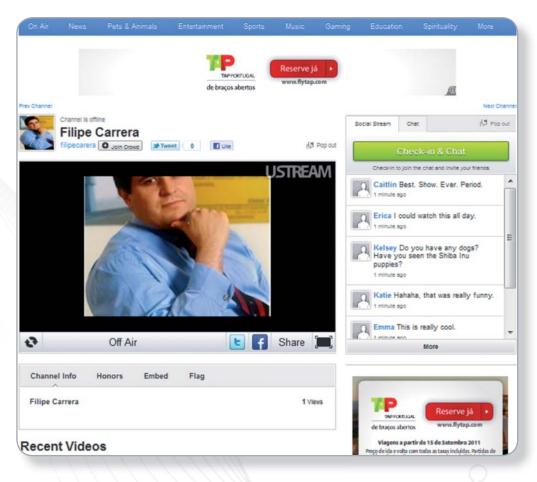


Example of the Informal Training TV on Livestream (http://livestre.am/Gbz)



Ustream Ustream is a service for making content available in an online channel format, very similar to Livestream, having similar functionalities.

> For these reasons, we can say that both Livestream and Ustream are good options when we wish to make content available online in continuous video format, 24 hours a day, 7 days a week.



Example of a channel on Ustream (www.ustream.tv)

SUCCESS CASES-STUDIES



Framework

Cases In the following points we present various success stories in the applica**considered** tion of Knowledge Pills Methodology.

> The cases chosen were implemented in different types of organisations, such as:

- A large Portuguese company.
- A world-wide Non-Governmental Organisation.
- A Portuguese governmental agency.
- A Portuguese university.

choice

Reasons for The cases presented were chosen for the following generic reasons:

- They are organisations of differing scopes and cultures.
- Their stakeholders are very diversified.
- The needs of each of the organisations are completely different.
- They involve aspects of internal and external communication.
- The persons they are intended for are very diversified.

implementation

Interval All the cases presented were begun and concluded between 2008 and 2011, **of time of** but their results, Continued to have repercussions for various years.



Collaborative Problems

Type of This is one of the largest Portuguese companies, with branch offices in **Organisation** various countries around the world.

> This company has thousands of employees distributed throughout various production units.

Challenge This company made large investments in equipment, software and training with the goal of creating a genuine collaborative atmosphere between its employees, through collaborative tools to support:

- Project management.
- Workflow.
- Management of calendar and meetings.
- Specific business support applications.

Despite the volume of investment made, the situation did not improve due to the failure to use or the poor use of collaborative tools, some of which had been created for the company.

Furthermore the collaborative tools used had been customised for the company or had been even created internally, so that the setting up of additional traditional training actions would be complicated, because the knowledge about these tools was found only within the organisation.



Collaborative Problems, Continued

Actions carried The following table gives a summary of the actions carried out:

STEP	ACTION
1	Awareness-raising meeting with the heads of the human resources department and with the internal customer, to demonstrate the suitability of the Knowledge Pills Methodology to the needs of the company.
2	Identification by the company of about 30 procedures that are critical in the use of collaborative tools that hindered the proper use of these tools, which made this a source of lack of productivity.
3	Identification of the employees of the company having knowledge about these tools.
4	Creation of Knowledge Pills, using the recording of the procedures within the work environment of the employees. About 30 videos were created, one for each of the procedures identified in step 2.
5	Validation of the content created by the other employees identified as having the knowledge in step 3.
6	Publication of the Knowledge Pills created and placed on CD-ROM support.
7	Dissemination of the Knowledge Pills created through 15 training actions in a classroom for 10 employees at a time. These actions were focused on the reasons for the correct use of the collaborative tools, using the Knowledge Pills created as an accessory.
8	The Knowledge Pills were made available on CD-ROM for all the participants at the close of the training actions, so they could take them to their workstations.
9	Dissemination among employees. All the training action participants were encouraged to share the Knowledge Pills with other colleagues. In general, this is what happened, because their usefulness was immediately recognised.
10	Assessment of the results of the project through meetings with the internal customer and reports on the training actions.

Results The implementation of the Knowledge Pills Methodology was a success, and among the results we highlight the following:

- Over 10,000 euros/month in cost savings (considering only the 150 direct participants).
- The employees began to share knowledge in a way they had never done before.
- New employees receive better training in their integration.
- And training continues even without a trainer in the company.



Capturing Our Best

Type of Thisisa Non-Governmental Organisation, JCI – Junior Chamber International, **Organisation** which is an organisation of young leaders and entrepreneurs between the ages of 18 and 40.

> JCI has about 200,000 members, distributed in 5,000 communities in over 120 countries.

> JCI is an organisation that has as one of it goals the personal and professional development of its members, and therefore gives a lot of attention to training, having developed a trainer certification programme, which has more than 10,000 trainers.

Challenge

In 2009, the persons in charge of training for JCI in Europe noted that there was a very asymmetric distribution of certified trainers throughout Europe, that is:

- Trainers with the highest certifications were concentrated in only a few countries.
- Trainers in the process of obtaining their certification had great difficulty in finding other trainers they could use as mentors.

These difficulties meant that the overwhelming majority of trainers did not go forward in their certification process, and when they did, the process was very slow, due to the lack of knowledge.

Furthermore, the trainers with the highest certifications were available to help the less experienced trainers, but only at certain times of the year, specifically at European and world conferences, which was obviously insufficient.



Capturing Our Best, Continued

Actions carried The following table gives a summary of the actions carried out:

STEP	ACTION
1	Determine the areas of difficulty of the JCI trainers in Europe, both in the certification process for trainers, as well as their development as trainers.
2	Decision on the format of the Knowledge Pills. In this case, it was decided to interview the most experienced trainers in Europe during the European conference held Budapest, using for this purpose a video camera with a wireless microphone.
3	Selection of content to be created in the two areas: Certification programme. Skills and good practices in training.
4	Selection of certified trainers to be interviewed in the videos. This selection was made based on the content chosen in the previous point.
5	Creation of videos of up to 3 minutes in length with over a dozen trainers during the JCI European conference.
6	Publication of the videos created.
7	Distribution of the videos though various supports: Group created on Facebook (JCI TrainerTeam) to support the project. Channel on YouTube — Video Tips For Trainers (www.youtube.com/VideoTipsforTrainers). Podcast channel on iTunes — Video Tips for Trainers, in this way also allowing access to videos created using iPod and iPhone. Twitter was also used to broadcast the uploading of videos on YouTube.
8	Due to the success attained among the European trainers and by request of many non-European trainers, the scope of the project was expanded worldwide.
9	After selecting new content and new trainers, more videos were produced, this time at the JCI World Conference held in Tunisia.
10	The videos were published and distributed through the various channels already established in step 7.



Capturing Our Best, Continued

Results This was a project for capturing the tacit knowledge of the best trainers of a world organisation, the success of which was far beyond expectations and which meant its scope had to be expanded.

We highlight the following as the main results of the project:

- Increased motivation of the trainers to follow through on their path towards certification of their competences.
- Rapid access to more than 50 videos with important content for any trainer.
- Because the decision was made to place the videos on open channels, this resulted in an improved image of JCI and even brought new trainers to the organisation, as they recognised the quality of the certification programme.
- Due to the use of iTunes, trainers located in certain areas of Africa. Asia and Latin America had access to content they could download and see on mobile devices, not being dependent on having conditions for Internet access with video streaming capabilities.



YouTube channel created by the project. www.youtube.com/VideoTipsforTrainers



A New Approach in Public Administration

Type of This is a governmental agency that deals with various persons and enti-**Organisation** ties located not only in Portugal, but here and there around the world.

Challenge This agency received a financial grant to modernise its administrative processes, specifically through the elimination of paper in its workflow.

> Due to imperatives of the project, the change could not be gradual and involved making various changes simultaneously, specifically:

- Change of equipment.
- Creation of a new Agency Portal.
- Change of the Workflow programmes.
- Creation of a virtual Single Counter to serve private individuals and entities.

The structure composed of more than 150 persons who needed to:

- Be motivated for a change that had all the ingredients for turning into chaos in its implementation.
- Know clearly how they were going to have to perform the processes on the day the system changed.



A New Approach in Public Administration, Continued

Actions carried The following table gives a summary of the actions carried out:

STEP	ACTION
1	Meeting with the persons within the organisation responsible for the project to determine the needs for the internal and external communication of the project.
2	It was decided that the head of the project for the organisation should make a video to explain to all the employees and stakeholders the following points: Reasons for and objectives of the change. The most important actions to be carried out. Intended results of the project.
3	The team of consultants responsible for the implementation of the process of change was trained using Knowledge Pills.
4	Creation of Knowledge Pills directed toward the employees of the Agency.
5	Distribution of Knowledge Pills through the Intranet.
6	New Knowledge Pills are currently being prepared, for use by persons and entities that have a relationship with this Agency through the Single Counter created under the scope of this project.

Results This was a project of internal communication and simultaneous training that had the following results:

- Greater motivation of the employees in the implementation of the change, because there was a visible engagement of the hierarchy in the project, who openly supported the project in a video.
- Due to having the Knowledge Pills as a resource, the employees had fewer difficulties in the implementation of the change.
- The consultants in the technological area had fewer requests for help, because the Knowledge Pills are always available on the Intranet.
- The videos remain available to the new employees and current employees that need them, regardless of the day of the week or the hour of the day.



University TV

Type of This is the Instituto Superior de Economia e Gestão (Higher Institute of **Organisation** Economy and Management), one of the most widely recognised institutions for teaching Economy and Management.

> The application of the methodology was made in some of the postgraduate courses.

> These courses have been very successful in the Portuguese market and have been characterised by their innovative character in terms of content and methodologies.

Challenge In the subject of e-Marketing, the intention is to give a perspective of the impact of the digital media on traditional marketing, specifically in the realm of multimedia.

> Classroom time is clearly insufficient for the students to understand the potentialities of using video in Digital Marketing.

out

Actions carried The following table gives a summary of the actions carried out:

STEP	ACTION
1	Launching of an activity for the students to create a 3-minute video about a specific part of the material on the subject of e-Marketing. This work counts towards the final classification of the students.
2	Production of videos by the students in several possible formats: Recording a short interview. Presentation of a topic in front of the camera. Recording a guided tour to a site, with narration. Presentation in Powerpoint with narration.
3	Publication of the videos and uploading to YouTube by the students.
4	Showing of some of the videos and discussion on the challenges and application of this type of content.
5	Insertion of the videos created in a Web TV to be available to current and future students, as well as former students.

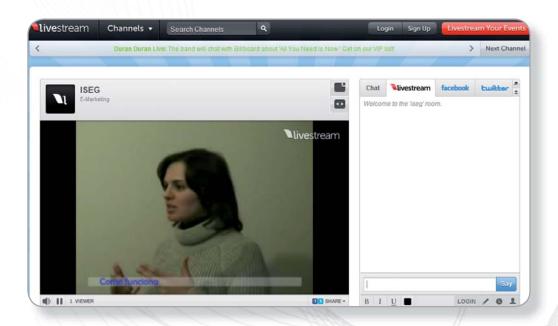


University TV, Continued

Results As it has been a success up to the present time, this project is on-going and it is foreseeable that it will be adopted in the next editions of postgraduate courses.

> Among the main results from the implementation of this methodology, the following should be pointed out:

- The students believe that this type of work brings them closer to the day-to-day experience of business communication.
- The content previously created by students helped the current students not only to better understand the content of the material, but also to help them produce their videos better, as an improvement is seen in the quality of the videos produced in each edition.
- The school, the courses, the subject, the professor and even the students were promoted externally, specifically through the tags associated with the videos created.
- Gradually, a repository is being created of knowledge given in the classroom, but which was captured for the benefit of the creators themselves, and for the professor and future students, as well.



University Web TV at Livestream. www.livestream.com/iseg

INDEX



C

Critical Micro Skills, 30

Ε

Explicit Knowledge, 13 External Knowledge Mediator, 32 Externalization, 13

F

Formal training, 16

ı

Informal training, 17

K

Knowledge Mediator, 32 Knowledge Pill, 17

M

Micro Skills, 30

0

Organisational Knowledge Centre (OKC), 32

S

Social learning, 15 Socialisation, 13

Т

Tacit knowledge, 13 Transverse Micro Skills, 30











