



Overview of Knowledge Management Methods



Agenda

- The big picture and its interlinked elements;
- Planning for KM;
- Habilitating organizational memory;
- Knowledge leveraging processes;
- Caring of key competences;
- Networking, collaboration and partnership;
- Feedback mechanisms; and
- ICT infrastructure



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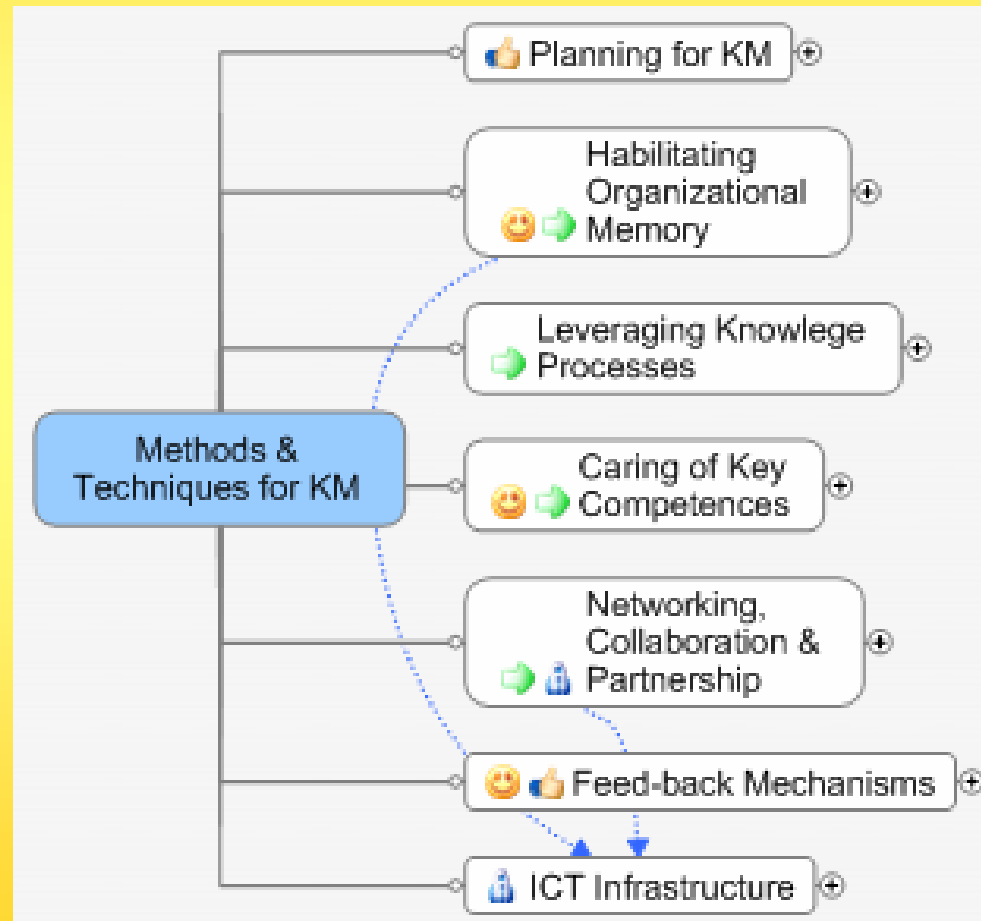


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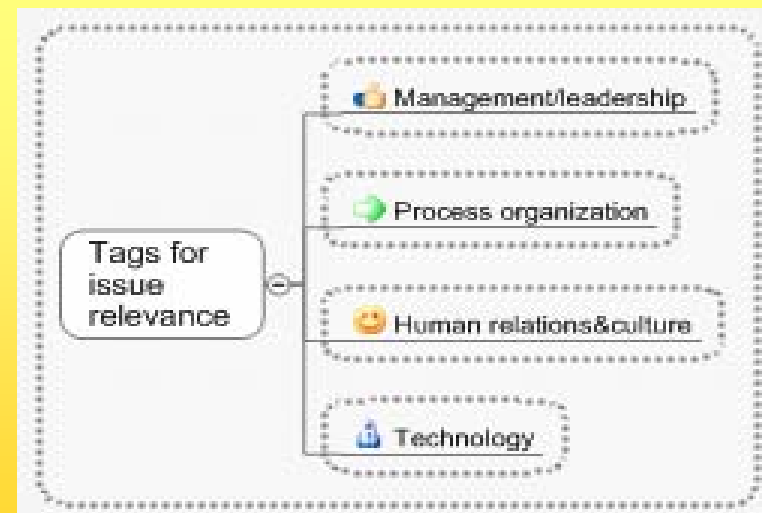
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No time to present, but discussed in the material supplied for the handbook

The Big Picture and the Links Among its Elements (1/2)



- Numerous ways to “artistically” slice and dice a melon;
- And 1000 times more ways to present this subject; and
- If not elegant, I hope you find useful this presentation.

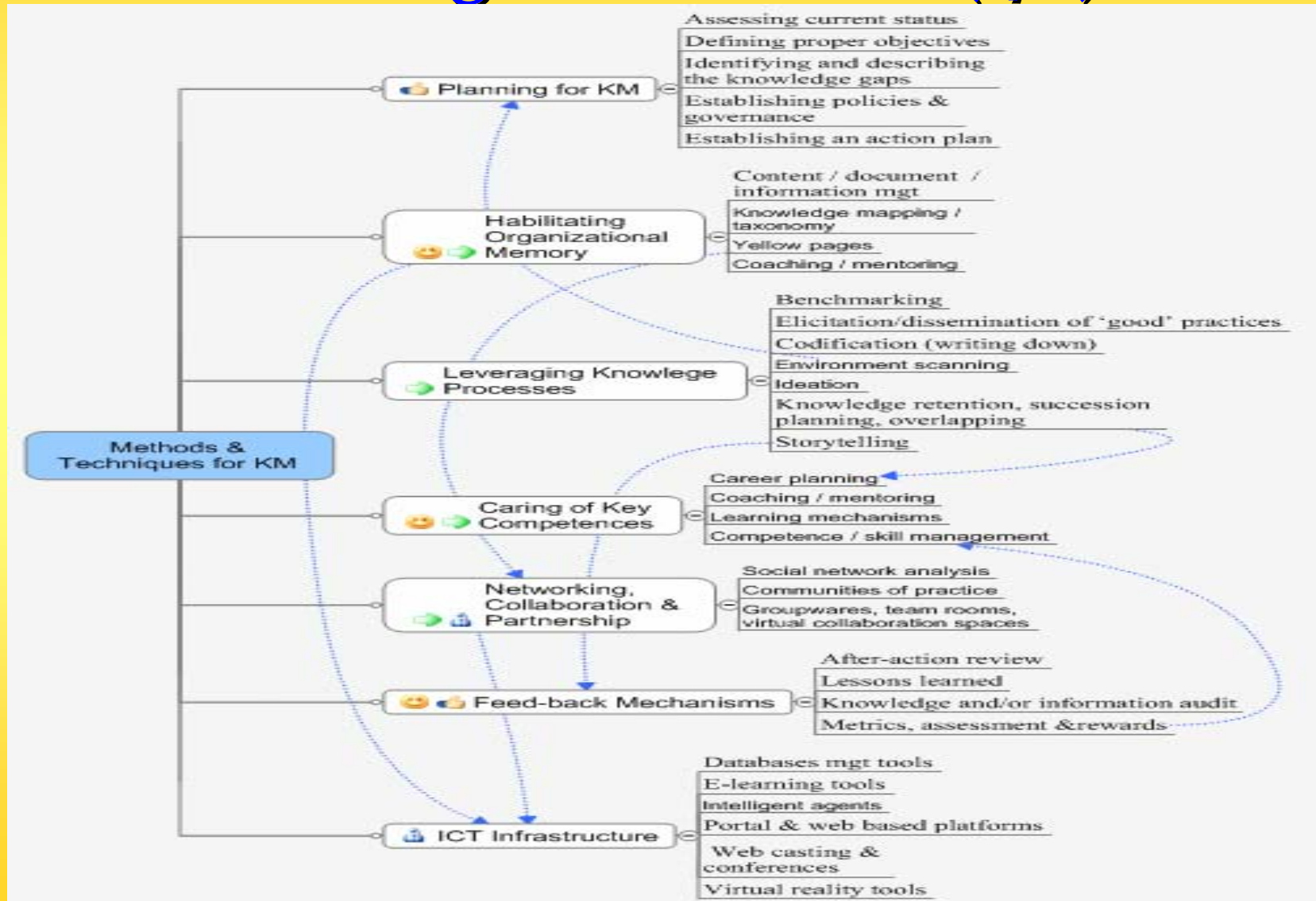




The Big Picture and the Links Among its Elements (2/2)



CNEN





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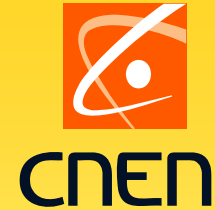


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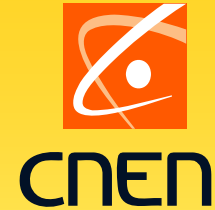
Planning for Knowledge Management



- Assessing current status
- Defining proper objectives
- Identifying and describing the knowledge gaps
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Assessing Current Status (1/3)



Basically two kinds of analysis for this aim:

- a more general, that assesses to which degree the enabling conditions for KM are present in your organization (a example will be presented); and
- a more specific that actually describes what are the critical knowledge domains and objects and why they are critical.



Assessing Current Status (2/3)



The Knowledge Maturity Model of TerraForum Consultants

- Seven dimensions of analysis and five stages of maturity;
- The dimensions are Governance, Culture, Information Management, Networks, Learning and Metrics;
- A basic gauging matrix describes generically the main incremental characteristics that should be visible in the organization as it moves towards a more mature stage;
- When this methodology is applied there are some five or more indicators (and respective addressing questions) that are used to measure the stage that the organization is in each dimension;
- The assessment is usually made by means of interviews, questionnaires or by justified voting and followed by group discussion. Justified voting means that every grade assigned to an indicator should come with the justification of why the person could not grade lower and why could not grade higher. This way of doing is usually the richer for stakeholders to understand the current status.





Assessing Current Status

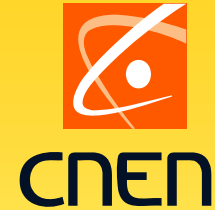
(3/3)



	Governance	Culture	Information Mgt	Networks	Learning	Metrics
Level 5	KM is clearly linked to the organization's objectives & strategic processes. KM & intellectual Capital themes are regarded as strategic	KM is incorporated to the fundamental values of the organization. Organization leaders show behaviors that support KM	A corporate portal with well defined profiles is the main source of information to the workers. It is the indispensable means to every day work.	Collaborating networks extrapolate organization boundaries and involve similar enterprises, partners, customers and suppliers.	Systems thinking & learning organization paradigms permeate management decisions	The whole management model of the organization incorporates metrics that are clearly linked to KM & intellectual capital
Level 4	KM has been formalized as a corporative initiative with well defined goals & resources. Governance is well established & multidisciplinary.	KM concepts are well disseminated and adopted by many workers. Lack of sharing & of transparency is not acceptable .	Discipline & knowledge to classify, organize & assess authorize content & documents is well disseminated at all levels of the organization.	Communities of practice are aligned to the main strategic objectives of the organization & they have formal & dedicated governance.	Process & project management have incorporated sophisticated learning methods and continuous improvement is widely disseminated.	Performance evaluation of management is clearly linked to KM and to increase and preservation of the organization's intellectual capital
Level 3	Creation, codification, organization, sharing & protection of knowledge stated to be responsibility of some areas.	KM is seen as the responsibility of some specialized areas.	There are well defined processes for content & document management in accordance with a corporate taxonomy.	Networks & communities are legitimated & supported by the organization (even technologically)	Information systems, networks and sharing culture are considered vital for organizational learning	Qualitative and quantitative formal assessments are carried out regularly
Level 2	KM have started to appear in some communications & corporate documents. Initiatives labeled as KM have started to show results	Some knowledge sharing initiatives are supported by top management. A few learning forms, beyond classroom, are supported.	Some types of information (e.g. policies, norms, official documents, etc.) are centralized & well organized	There is a few communities at the intermediate level of the organization	Learning is structured from a organization's competency model	Qualitative and quantitative formal assessments are carried out for some projects
Level 1	KM is a subject that is discussed by unconnected groups in the organization	"Knowledge is power". Focus is placed in operational & short term results	Information is not managed in a structured way and mostly resides in personal or area computers.	Only or mostly informal networks are functional.	Learning is associated with training provided by Human Resources Department	Initiatives are informally evaluated and without regularity



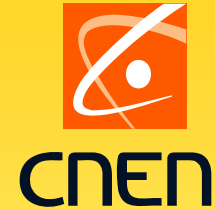
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Defining Proper Objectives



- Nancy Dixon [8] “common knowledge” - the knowledge that employees learn doing organization’s tasks, or better defined, “meaningful links people make in their minds between information and its application in action in a specific setting”;
- The way an organization do work define the way (common) knowledge is generated within it, for instance project oriented organizations build and evolve their knowledge along project cycles;
- Use this perspective to understand your organization and set KM objectives that have synergy with your way of working and build knowledge.
- With this understanding and the results of the previous assessment there should be no difficulties to define the objectives that are expected to be accomplished with KM.
- It is of capital importance the mutual connection - KM objectives entirely aligned with the strategy of the organization and likewise the presence of one or more goals contemplating KM in organization’s strategic planning.



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Identifying and Describing the Knowledge Gaps



There are different ways of doing it, but:

- if you know the current status (assessment done);
- and if subset of the KM objectives are targeted to achieve a desired status in so many years, then;
- indirectly some “knowledge gaps” have already been defined.

Another possibility can be used if the organization has its working processes well mapped, then:

- one can rank processes in terms of importance and Bohn’s scale, as adapted by Tiwana, can be used to assess process knowledge and compare present and desired situations. In this way you can describe the knowledge gaps of the more important processes



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Establishing Policies and Governance (1/2)



- Policies should stress values of knowledge and of a sharing mind set which will enable a culture that is inductive of KM processes.
- Governance should be:
 - flexible and adequate to the magnitude of the effort that the organization has foreseen for its KM activities;
 - planned to be scalable according to a phase approach that has been conceived to fully implement the KM objectives set forth; and
 - unless you work in a recently created enterprise, you know the “dos and donts” of your organization, so adapt any suggested guidelines to create a governance arrangement that really works at your place.



Establishing Policies and Governance (2/2)



A summary of governance entities and roles

Sponsor	Strategic alignment
	Budget decisions
Steering Committee	Prioritization
	Definition of indicators
	Monitoring and follow-up
	Scope definitions
	Team composition decisions
	Budget allocation
KM Manager or Coordinator	Proposal formulations
	Planning
	Framework definitions
	Training and coaching
	Gateway among KM initiatives



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Establishing an Action Plan (1/2)



Vision and Framework for Action

- Experience shows that major change occurs when organizations are inspired by compelling visions that energize employees, therefore a short and powerful endo-marketing phrase, synthesizing the change and goals of the first KM initiatives, shall be used as launching flag for KM.
- It is highly advisable that an overall framework shall be elaborated. It should tag current status, desired status, knowledge gaps and goals, and put them together into the perspective of a phased / gated approach showing the macro-steps and links from today's reality to the desired future. A general roadmap should be included in this framework.



Establishing an Action Plan (2/2)



Practical Criteria for Prioritization of KM Initiatives

- To decide the best items to fit the starting set of KM initiatives, one should consider:
- **Resources** – The amount of financial and **human resources** required to implement each initiative;
- **Infrastructure** – an estimate of whether the initiative will require important changes or additions to the IT infrastructure, hardware or software;
- **Complexity** – consideration of the number of leading actors and functional department boundaries to be crossed as well as the need for attitude and working practices changes;
- **Short-term impact** – the ease of implementation, cycle-time of involved processes and their connections to working practices should all be analyzed to estimate a typical time for positive outcomes to be noticed; and
- **Value-added** – estimates of value from the perspective of the relevance of the critical knowledge components that are being leveraged by the initiative.



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Habilitating Organizational Memory (1/2)



- **Content, document and information management**
 - intimately associated with organization's knowledge portals;
 - CMS should provide means to perform and manage the following tasks: creation of documents; revision of documents; inclusion of metadata and quality control;
- **Knowledge mapping / taxonomy**
 - One way to knowledge mapping is to start with process maps to identify the "intersection set" of the processes that are both critical (and distinctive) for the organization and also knowledge intensive;
 - For those processes, through combination of: documentation review and analysis; interviews with leading personnel; writing up of summaries; and validation with the experts one can identify the knowledge that enable the performance of such processes;
 - Taxonomies are quite commonly found for business & non-business purposes, part of the reason could be because it is inherent to our nature to classify, or to put things in boxes
 - More precisely, taxonomy is the classification of information entities in the form of a hierarchy, according to the presumed relationships of the real world entities they represent.



Habilitating Organizational Memory (2/2)



- **Yellow pages**
 - An effective way to access knowledge is to know who knows, but a few of us knows more than 20 to 30 people with whom we maintain regular knowledge exchange contacts;
 - Many organizations have created "yellow pages" applications, which enable employees to find and contact other staff with particular expertise and skills (no small effort and challenging to keep updated);
 - Good practice is to have a employee-owned yellow pages system, supported by good software tools, aligned with the organizations knowledge map or taxonomy and, if possible, managed and facilitated by representatives of the most frequent users



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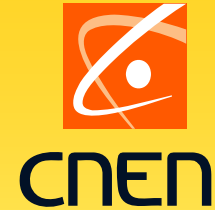
Knowledge Leveraging Processes



- **Benchmarking**
- **Elicitation/dissemination of 'good' practices**
- **Codification (writing down)**
- **Environment scanning**
- **Ideas and suggestions program**
- **Knowledge retention, succession planning, overlapping**
- **Storytelling**



Benchmarking

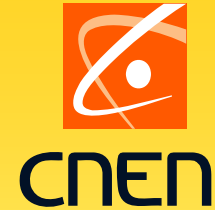


The purpose is to search for and identify best practices in a given domain of activities, aiming to spread their uses to improving overall performance;

- **Metric or Performance Benchmarking** – is the quantitative measurement of performance against other organisations over time, using Key Performance Indicators – KPIs;
- **Process Benchmarking** - is the management analysis of a organization's own business processes and comparison with those of organisations with exemplary performance in those processes;
- **Internal Benchmarking** – that is used when an organization searches for best practices within its own boundaries;
- **Explorative benchmarking** – that is used to compare the performance of an organization with other competitive and non-competitive organizations;
- **Best Practice Benchmarking** – that is used to identify and learn from best practices in other organizations using similar processes but achieving superior performance



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Elicitation/Dissemination of 'Good' Practices (1/2)



- To be practiced by everyone in every activity that is performed, if you find someone else doing something in a better way and **that can be ethically copied**, just do it;
- Simple in theory, but it gets somewhat complicated in practice;
- Industry with significant technology content have experienced with a lot of technology transfer approaches, but the effective success rate of such attempts has not been encouraging and results were usually much below the expectative;
- Check literature on Intel's "copy exactly method"



Elicitation/Dissemination of 'Good' Practices (2/2)



Suggested steps to ensure successful replication

- Select a practice that can be copied—and that's worth copying. Some processes, such as unusually productive interpersonal working relationships, aren't "clonable." Others can be copied but perhaps shouldn't be; e.g., when their success stemmed mostly from luck. To select a practice for replication, ask: "Can we copy it? Should we? Does it have a track record and offer a detailed example of what we need to achieve?"
- Work from a single, active template. You'll have proof of success, performance measurements, concrete steps, and a reference when problems arise.
- Copy the example exactly. Resist the urge to tinker with the template early—you'll risk re-creating problems that the practice's originators already faced and addressed.
- Adapt only after achieving acceptable results. Create some form of a graduation period and then feel free to incrementally innovate on their solid platform of existing knowledge.
- Do not discard the original template. No copy perfectly replicates the original. Refer to your template to identify and correct mismatches.



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Codifying (writing down)



- Codifying or making knowledge more explicit is something that everyone does and very often.
- Since our time as students whenever we go to a lecture or a conference, the question was - what is the minimum note-taking we have to do while paying full attention to the event and yet get the maximum recallable content when we need it.
- At the organizational level the questions are **what, when, how and to which extent** should knowledge be documented to maximize the ability of its timely transfer and content recover of those accessing it.
- Also in the organizations a lot of the work people do get somehow documented, but not much of knowledge content gets shaped in a suitable and easily transferable form through this documentation.



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Environment Scanning (1/2)



- It is the monitoring, evaluating and disseminating of information, in a variety of forms, to key managers within an organization;
- It should constitute an important source of relevant information to strategic planning and organizational learning in the process of continually adapting to changes in the environment;
- Essential to environmental scanning is the identification of external variables that function as trends, defined as the changes and events in an organization's external environment, which might affect its function;
- Trends are typically categorized into four basic societal level factors:
 - economic forces that regulate the exchange of materials, money, energy, and information;
 - technological forces that generate problem-solving inventions;
 - political-legal forces that allocate power and provide constraining and protecting laws and regulation;
 - and socio-cultural forces regulate the values, mores, and customs of society



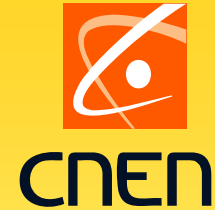
Environment Scanning (2/2)



- Trends can be quantified as series of historical data that can be projected into the future;
- However, extrapolation models with empirical are nowadays described as obsolete because major shifts in paradigms and technology are not linear, and can't be predicted with historical data;
- Alternatively, foresighting of innovation can be estimated by integrating conceptually linked measures with expert opinions;
- Expert opinion can evaluate the significance of linear trend projections qualitatively or quantitatively, in terms of the degree of probability of occurrence and relevance of the phenomenon to the organization;
- Technology roadmaps present suitable characteristics for guiding the environment scanning and intelligence efforts of the enterprise, by simultaneously showing the possible evolution of technology, products and markets and explicitly considering their linkages



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This subject will be just mentioned



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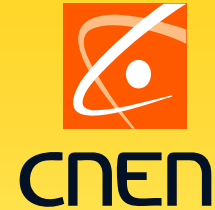


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These subjects will be treated in another presentation



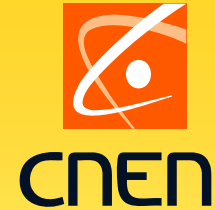
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Storytelling



- A successful leader is often a good storyteller;
- Storytelling has always been a fundamental resource for human groups, to help socialize, communicate, dominate, plan, teach, motivate, advising and many other finalities;
- A remarkable story narrated and repeated by organization's leaders are usually much more motivating to the collaborators than written manuals, norms and procedures;
- For the Knowledge Socialization Project at IBM, stories are full of information because they draw on commonly understood truths (or metaphors) to convey more information than is obvious;
- In organizations people act collectively, but think individually, what represents a problem for organizational learning. Storytelling is a powerful tool in this concern, as it can give life to cases and convey them to the listeners with the emotions of the real situation, creating a far richer learning opportunity than just a report.



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- Career planning
- Coaching / mentoring
- Learning mechanisms
- Competence / skill management
- Social network analysis

Subjects of other presentations



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Subjects of other presentations





Coaching and Mentoring



- Coaching, mentoring and job rotation entail the development of a set of practices that help to accelerate learning in the organization and help to mature younger employees earlier. These techniques involve close personal relationships that support communication of implicit and socialization of tacit knowledge.





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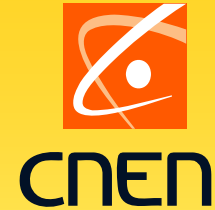


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Networking, collaboration and partnership



- **A part of the subjects in this group will be treated in detail in my presentations of Social Network Analysis;**
- **The others will not be presented, but are discussed in the material I have supplied for the handbook**



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