System Perspectives on KM and Innovation

In2:InThinking Network
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Intro/Ice-break

- Name
- Organization
- What you do at your organization
- Skills
- Expectations from this workshop

KM Overview at PWR

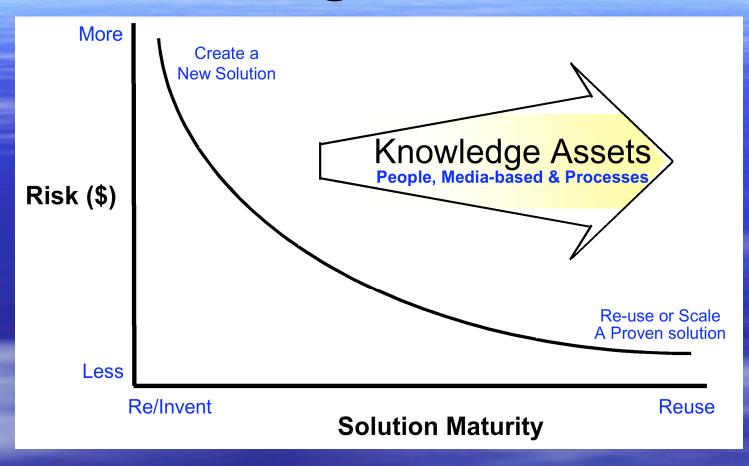


KM Challenges...



...Aging workforce...

KM Challenges continues...



... duplication on problem solving & process improvements...

Other KM Challenges...

What are some of your organization's KM Challenges?

And why do you think they exist...?

So...how is it possible that company leadership does not always see these KM challenges?

To illustrate this point, here is a simple quad chart.

| | Know | Don't Know |
|------|-----------------------------|--------------------------------------|
| Know | I know what I know | I know what I don't know |
| Know | I don't know what I know | I don't know what I don't know |

Know Don't Know I know what I I know what I don't know know I don't know I don't know what what I know I don't know

Organizational earning

Know

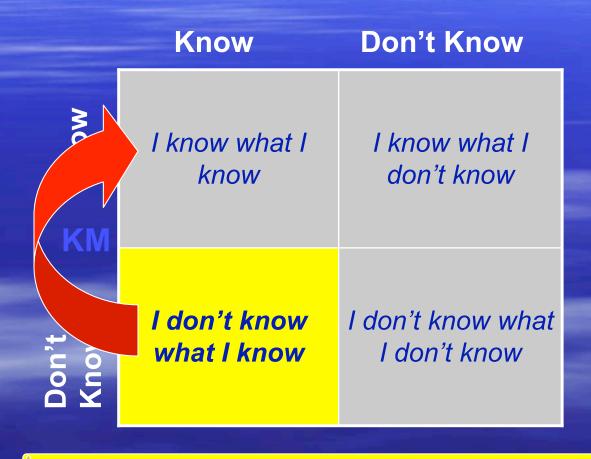
I know what I know

I know what I don't know

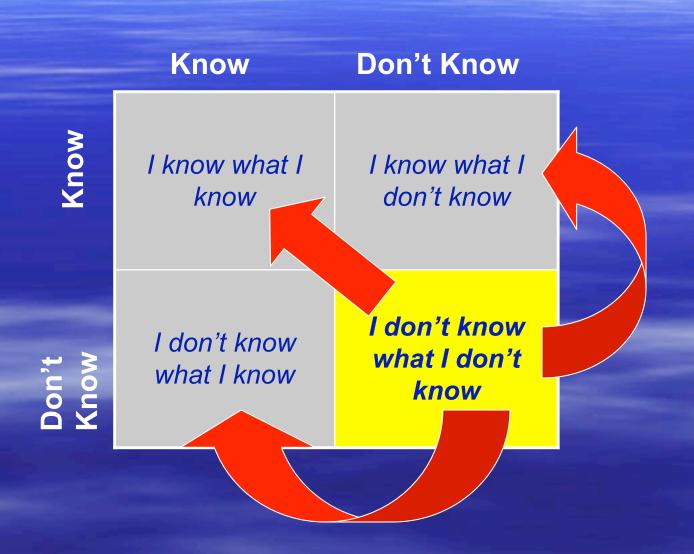
Don't Know I don't know what I know

I don't know what I don't know

Innovation Know Don't Kn w I know what I know what I don't know know **Knowledge-based** i don't know what I don't know what I know I don't know



If we only knew what PWR already knows

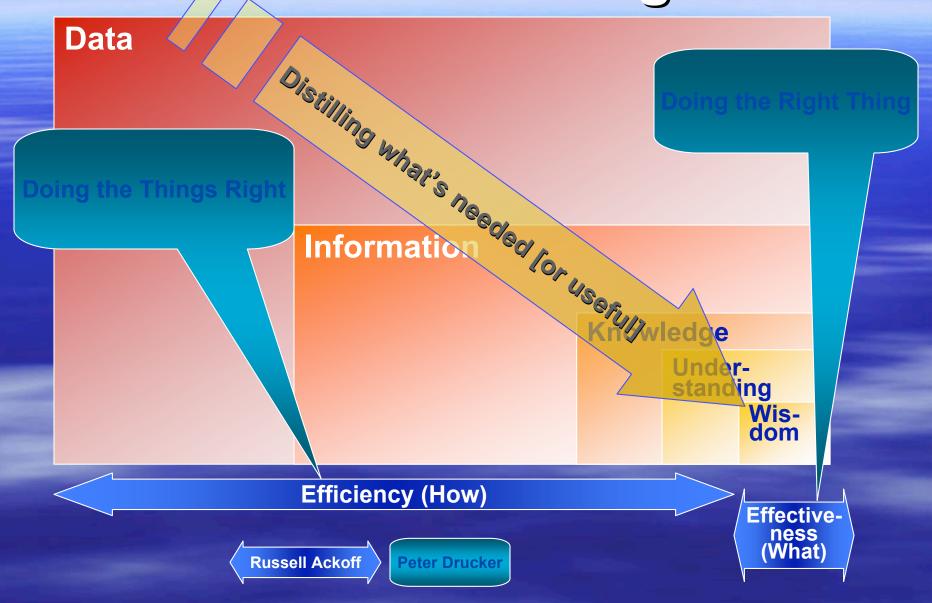


What is Knowledge...

With KR chart in mind...

Let's take a look at "knowing" or "Knowledge"

What is Knowledge?



KM Overview at PWR (cont.)



KM Process and Tools

KM Process KM Tools

Map

Critical Capabilities Retention

Capture

Organize

Transfer

Utilize

Knowledge Transactions

Media-

based

People

People

Mediabased

Collaboration Tools

Capturing Tools

Training Tools

Searching & Organizing Tools

Knowledge Transactions and Supporting Tools Media-

People

based



LL/BP

Library

transfer & utilize

Quindi

Mediabased

LL/BP Goldfire Standard Work Web-based DBs organize & transfer

ILM

Mitigation Plan Exercise

Refer back to the KM challenges we've discussed earlier,

What are some of the solutions or plans to mitigate those challenges?

Sharing of Results

Expectations from Mitigation Plans

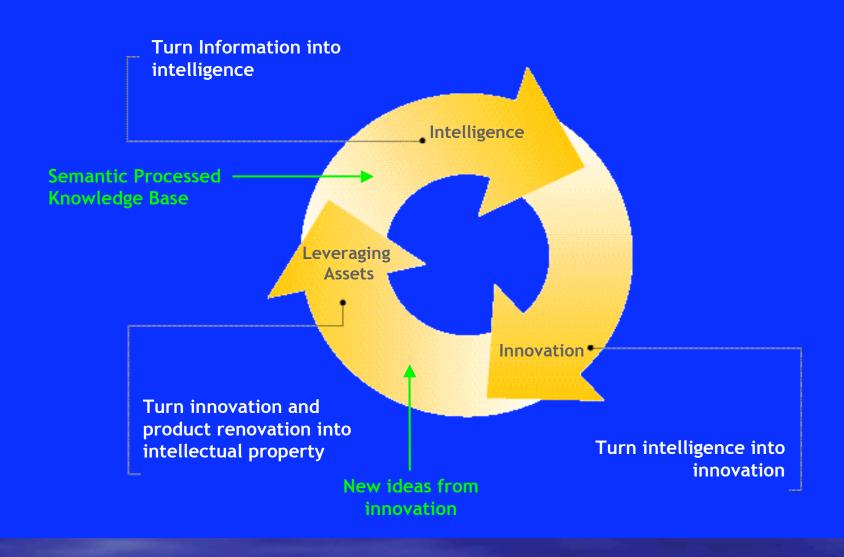


Issues with Traditional Innovation Methods

- Limited resource for Brainstorming sessions
 - Relies on subject matter experts
- Ideas are often rushed to solution without a through understanding of the problem or task at hand
 - Leads to subsequent rework
- Limited access to the needed information
 - Tribal knowledge buried in departmental silos

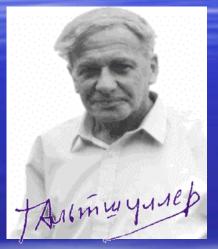
 - Lost due to wo Kgrotwierdge
 Relevant info from other scientific disciplines beyond reach
 - Reinvent the Managementing what has already been done

Knowledge Base for Innovation & Innovation to Create Knowledge Base



Innovation Technique TRIZ

Russian acronym for "The Theory of Inventive Problem Solving"



- Created by Genrich Altshuller (1926 -1998)
- Research began in 1940's

- Findings began with over 200,000 patents
- Research covers over 3.1 million patents

3 Key Findings

- 1. Problems and solutions are repeated across industries & sciences
- 2. Patterns of technical evolution are repeated across industries & sciences
- 3. Best innovations occur when scientific effects are used from outside the field where the original problems were developed

This is how TRIZ works

Knowledge-based, Systematic Innovation Methodology

Patent-based 40 Principles

Scientific Effects

Evolution-based Prediction

TRIZ
General
Problem

Your Problem

TRIZ
General
Solution

Your Solution

After thought

Please fill out the Survey...



Thank you...