

KEYNOTE A Marriage of Innovation and Business Process Management

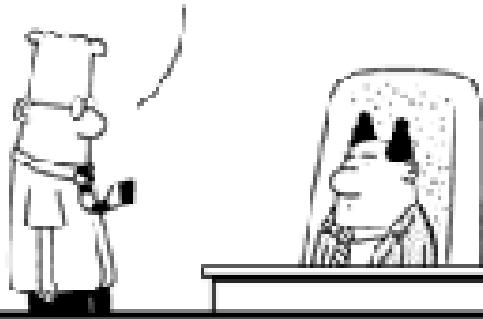
Howard Smith
CSC CTO EMEA, Author
Co-Founder BPMI.org
Founder SouthbeachInc.com

Applying the methods of Innovation to Re-Invent Process

So you want to improve a business process!

How shall we model it?

I NEED A \$1,600
HANDHELD BAR CODE
SCANNER TO FINISH
MY LAB TESTS.

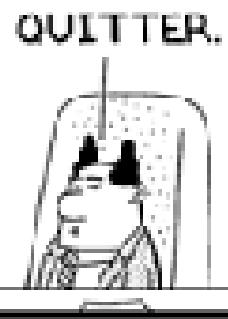


OKAY. APPLY FOR A
CAPITAL BUDGET
VARIANCE. PREPARE
AN RFP, GET THREE
BIDS, FORM A TEAM
TO EVALUATE THE BIDS,
THEN PREPARE A
PURCHASE ORDER.

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www.dilbert.com

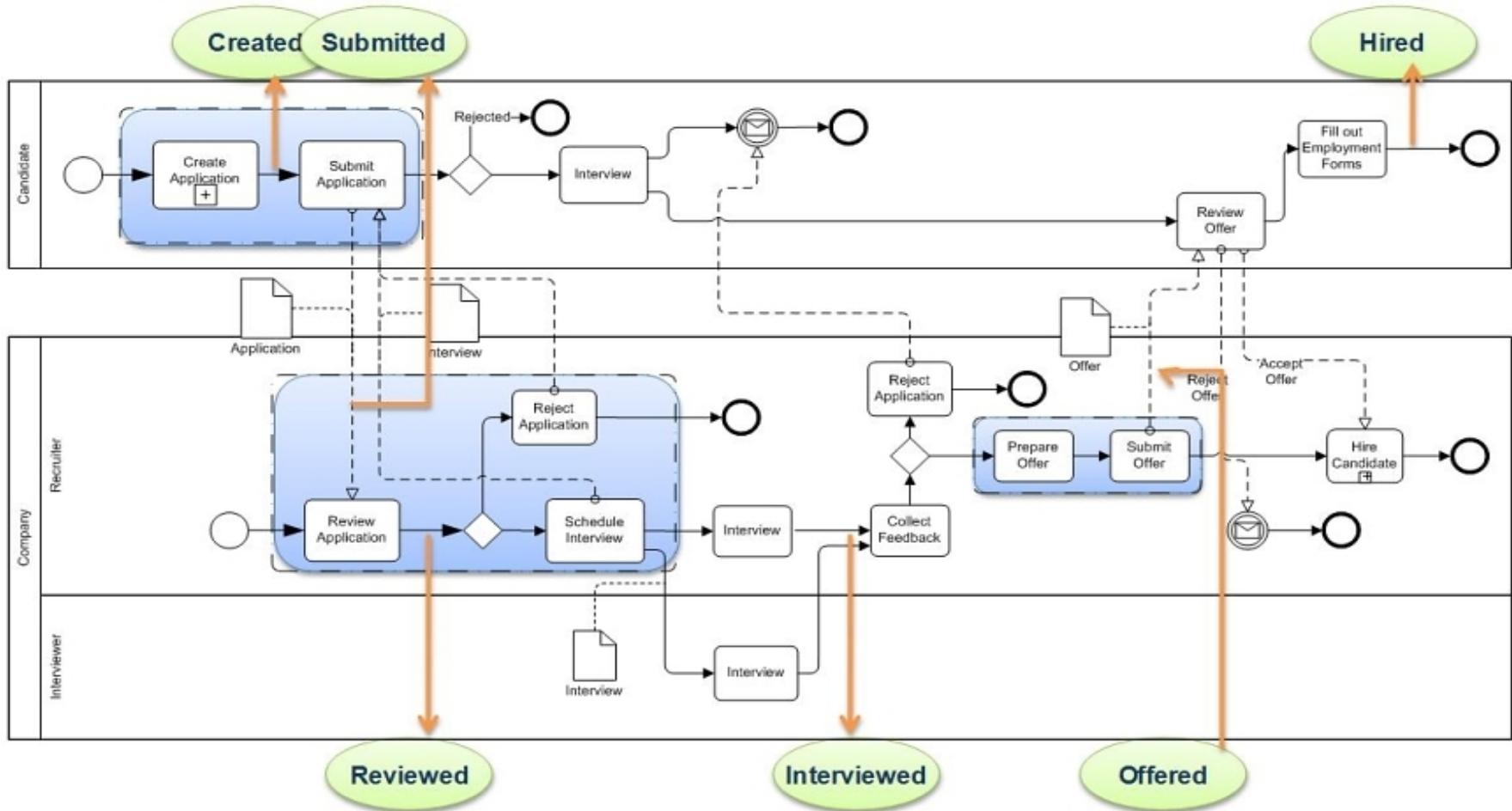
NEVER MIND. I'LL
JUST LEARN HOW TO
READ BAR CODES BY
SIGHT.



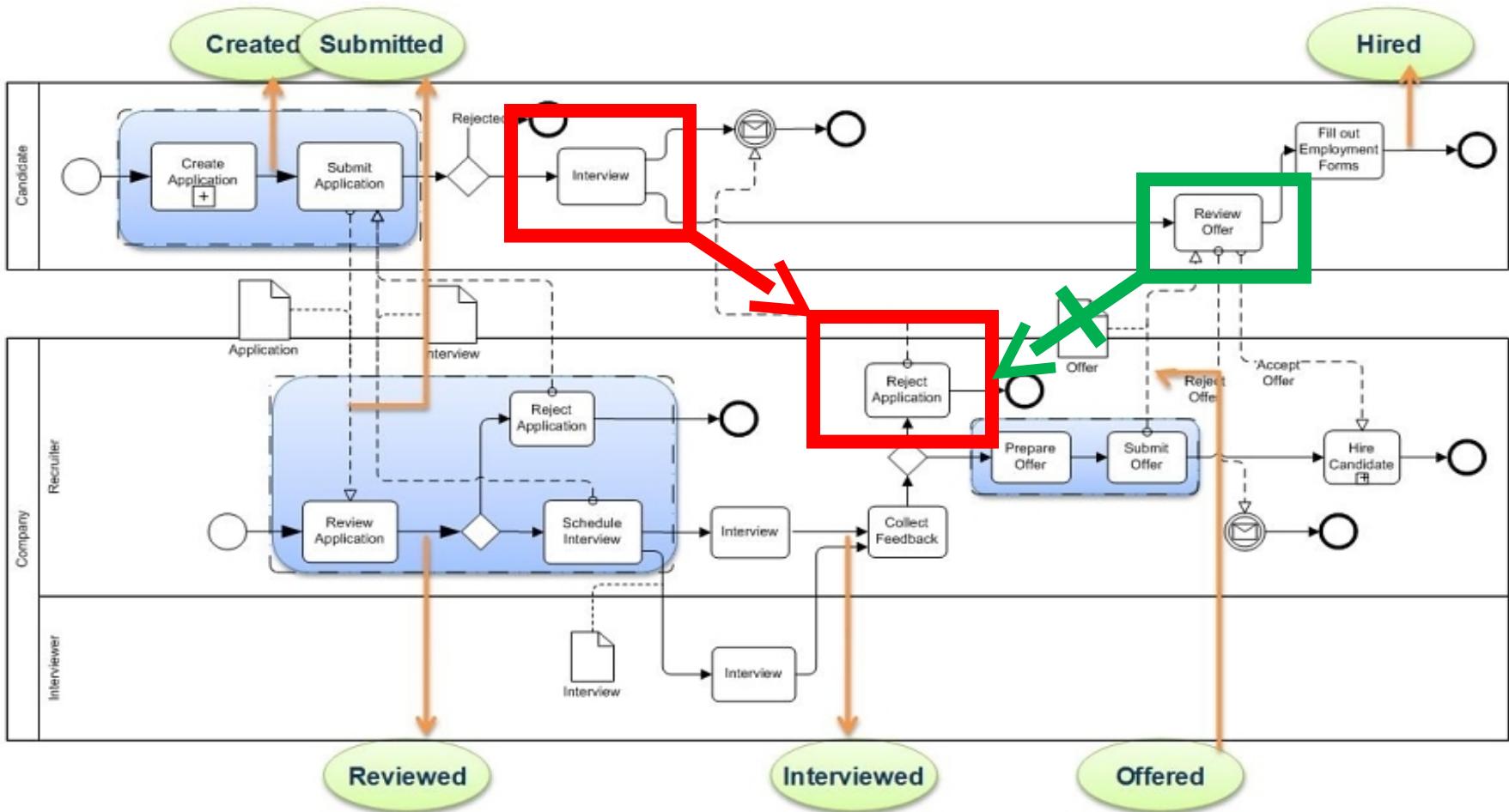
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09/2008 2

Executing a process is one thing – improving it is another



Executing a process is one thing – improving it is another



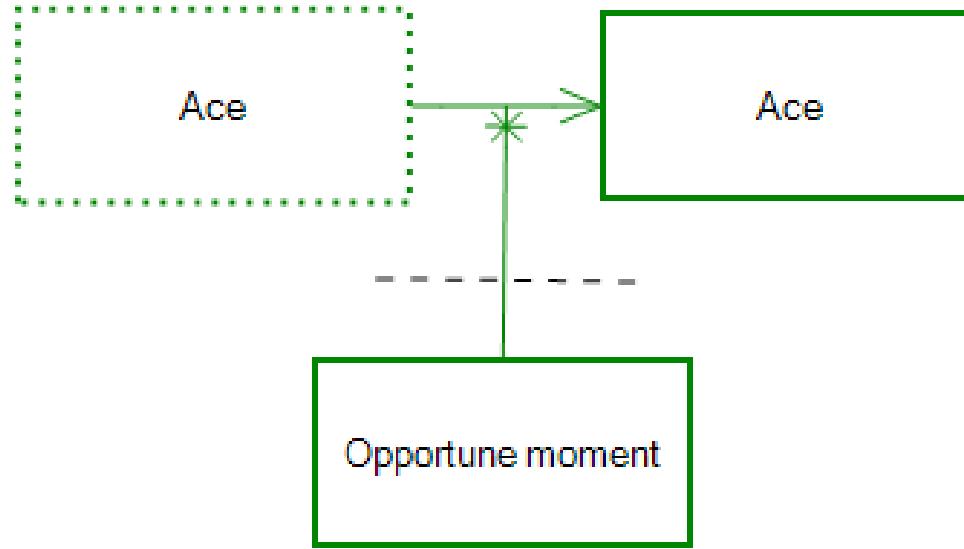
Introducing a new visual notation - Southbeach



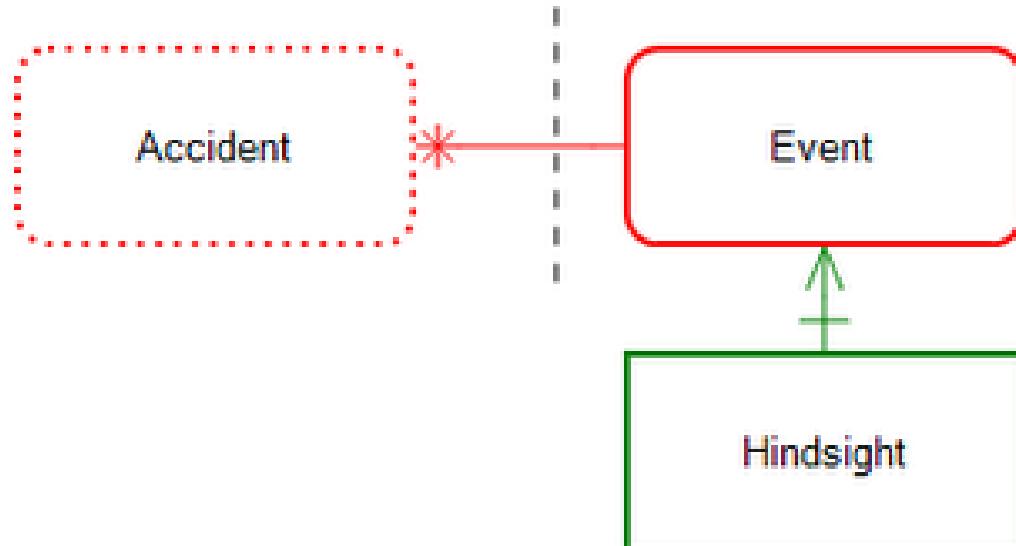
- Southbeach
Miami, FL.
- June 2005

Southbeach “idioms”

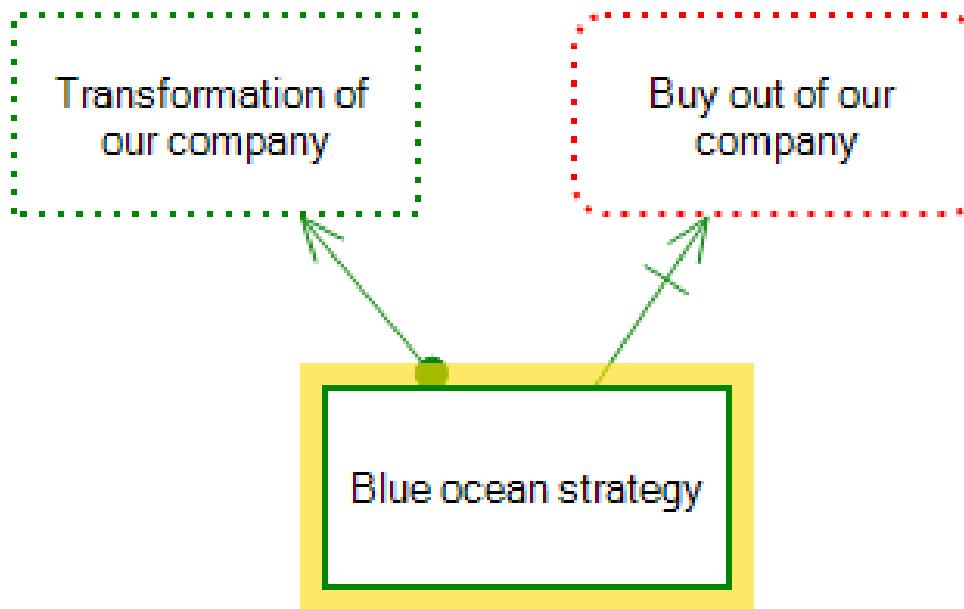
<http://southbeach-idioms.blogspot.com/>



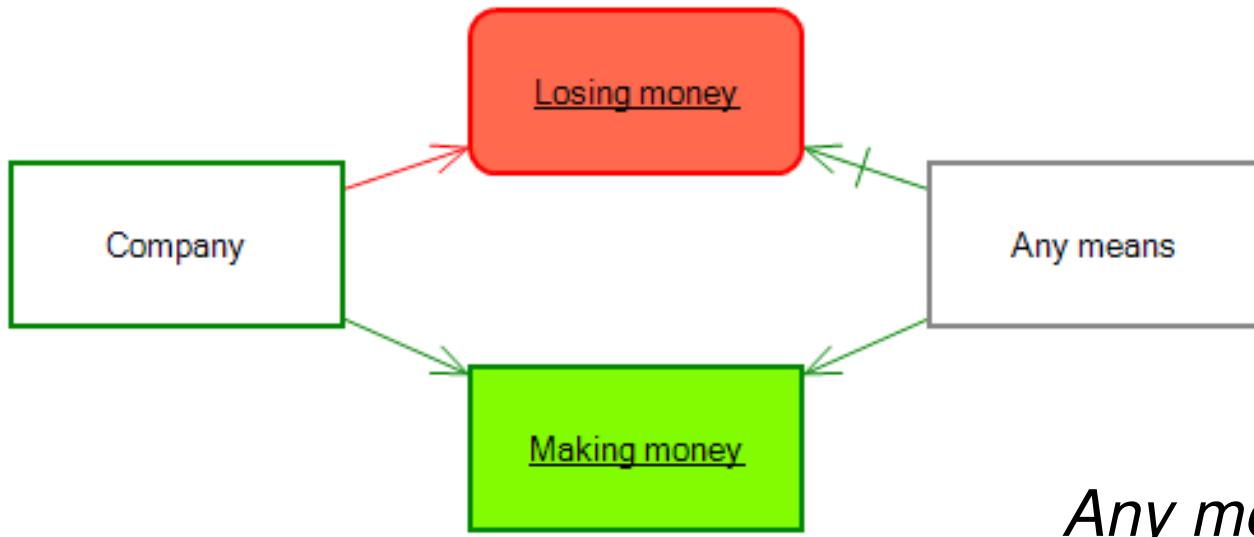
An ace up one's sleeve



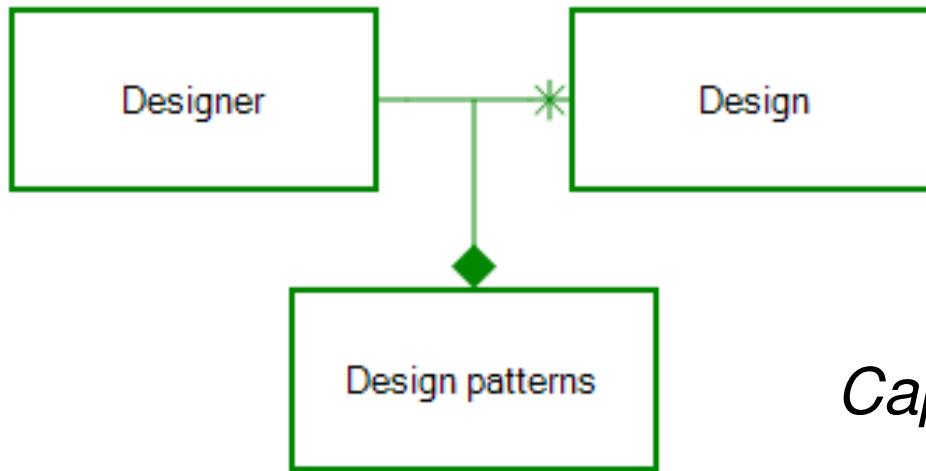
*An accident waiting
to happen*



*A new strategy
is needed*



Any means to an end



Capturing design patterns

Source of shame

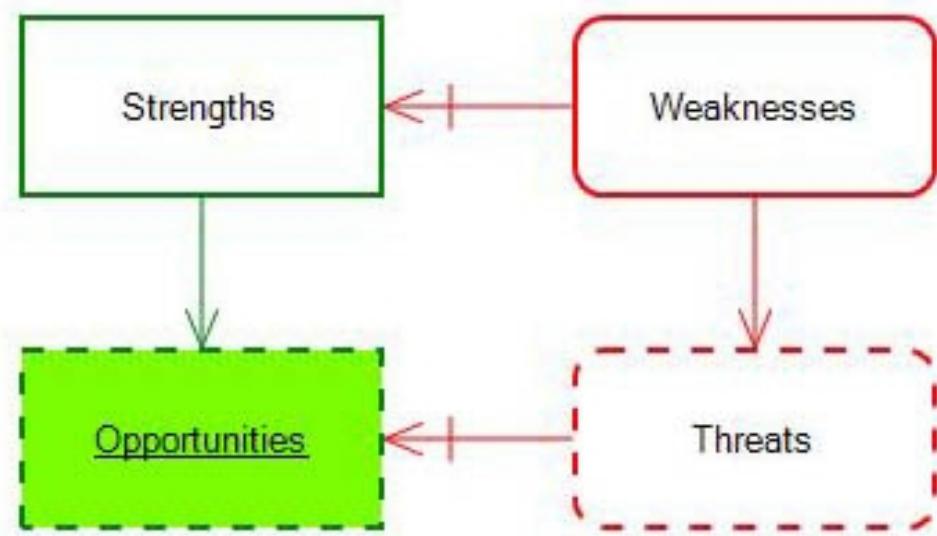
worry



A skeleton in the cupboard

secrecy

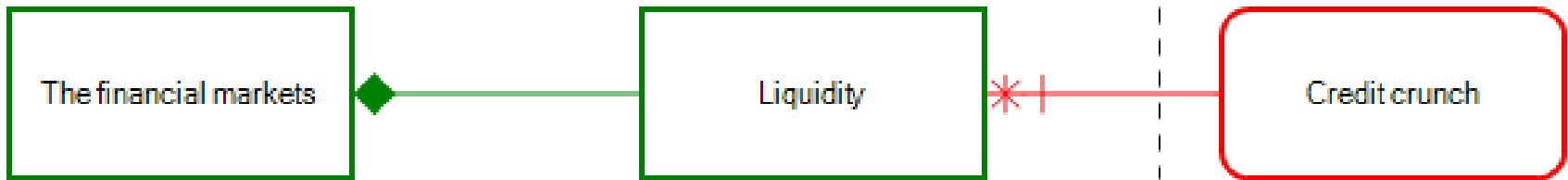
SWOT diagram



Not system dynamics, but bridging towards system dynamics

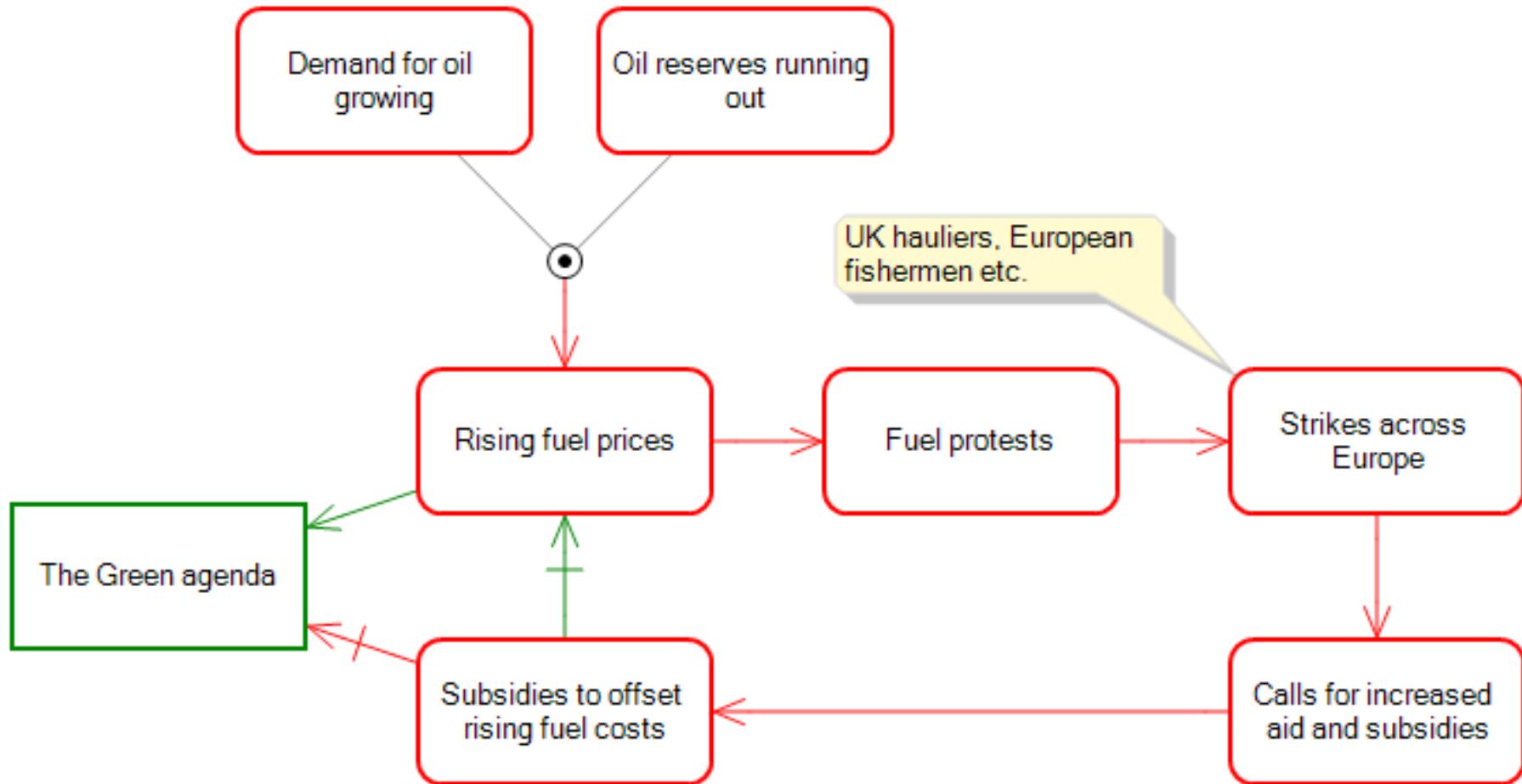


War on talent

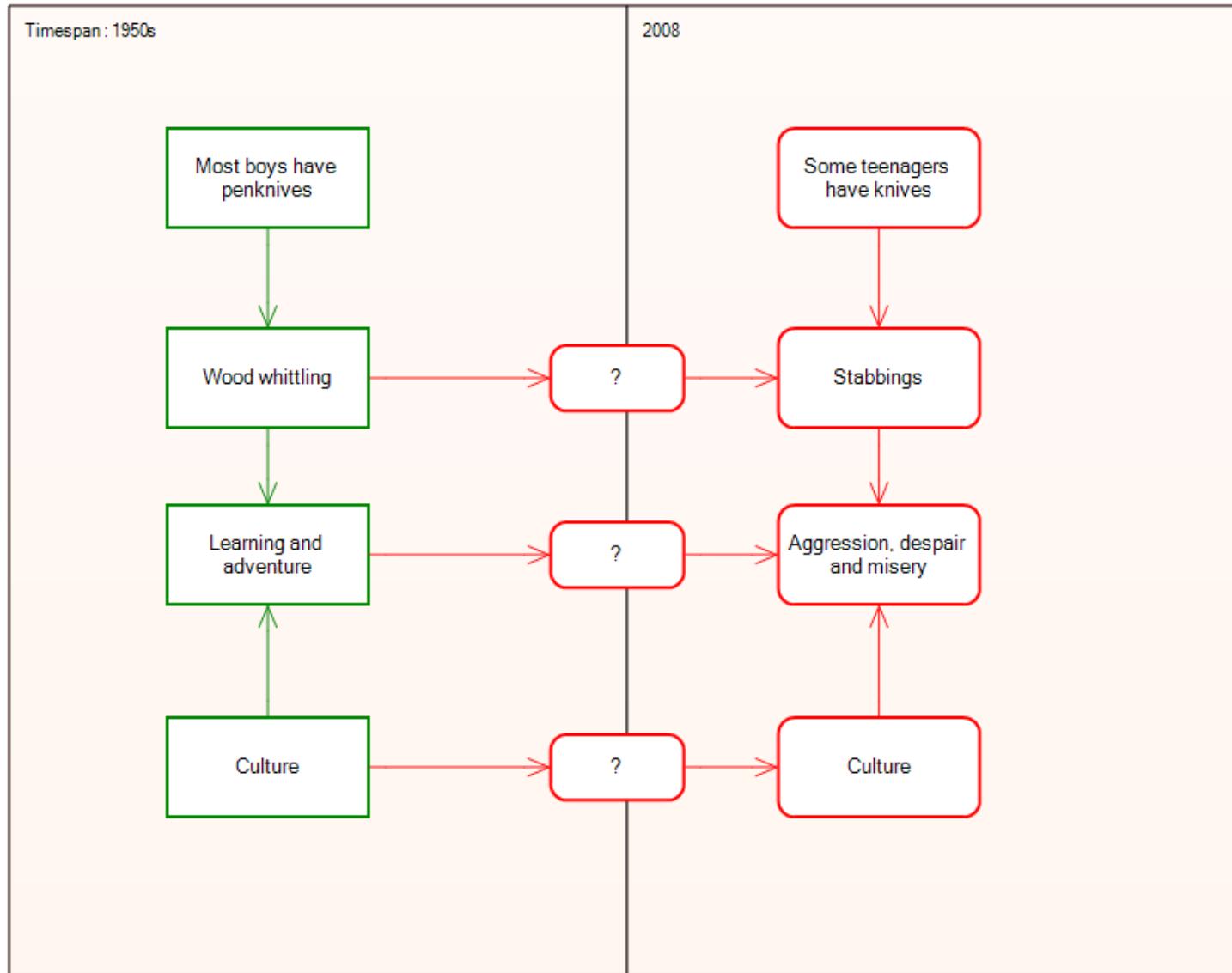


Credit crunch

Europe fuel protests



Boys with knives – a model with two perspectives

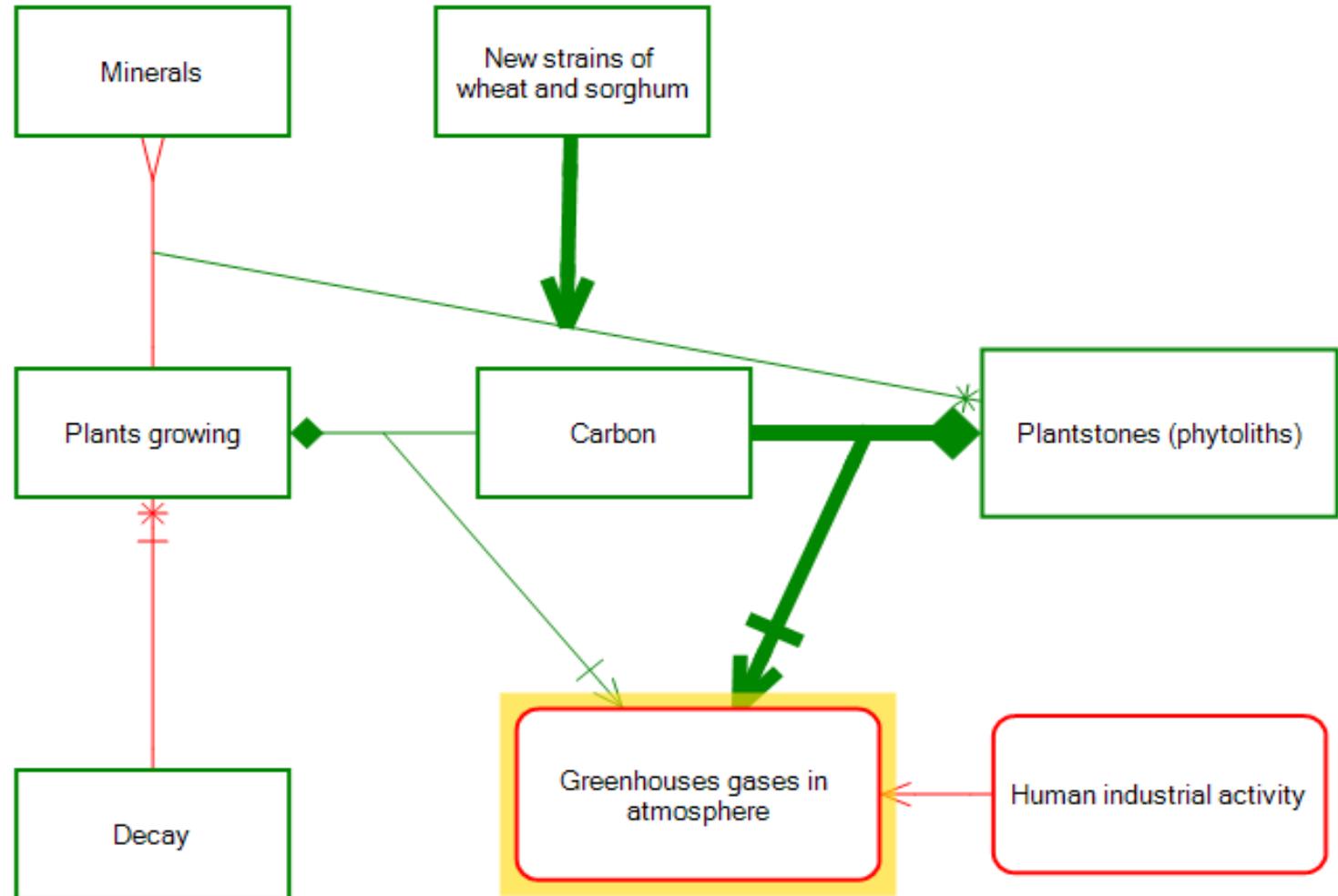


Do you know about plantstones?

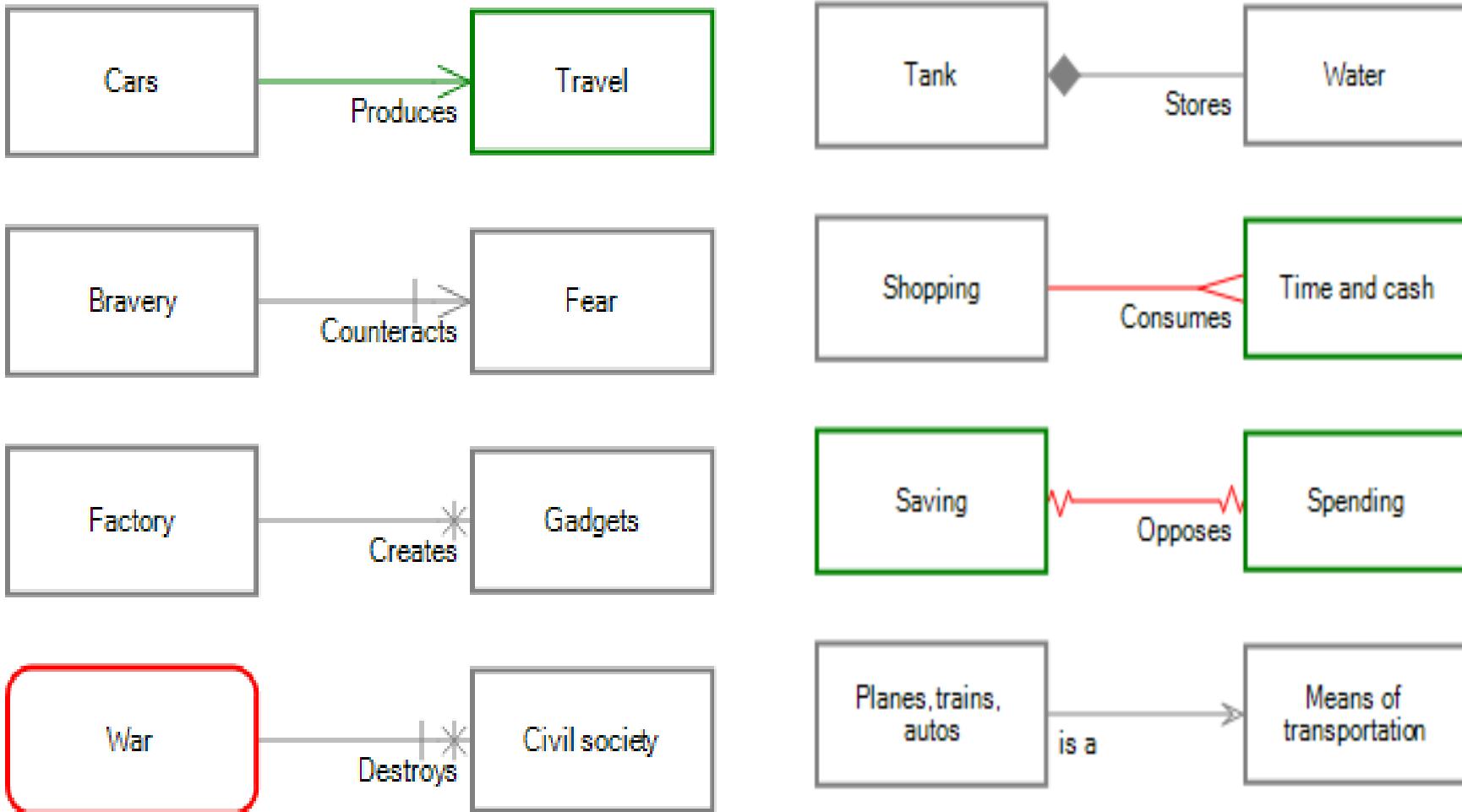
New Scientist 5th Jan 2008

While Others Lock Carbon Away for Years

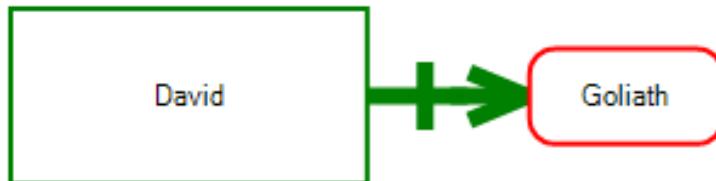
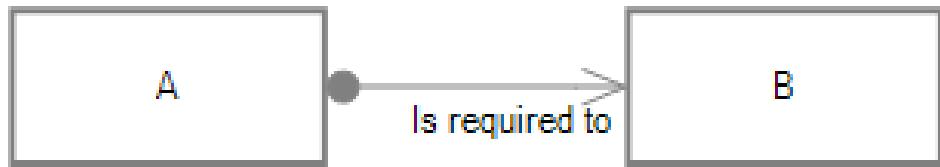
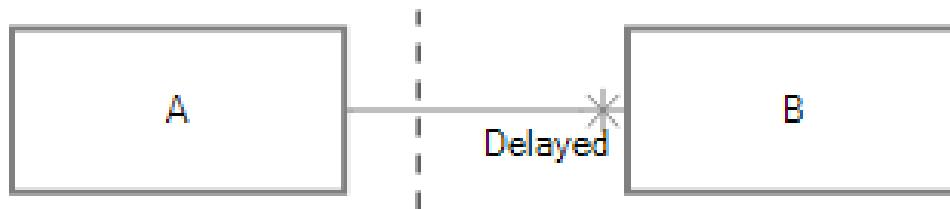
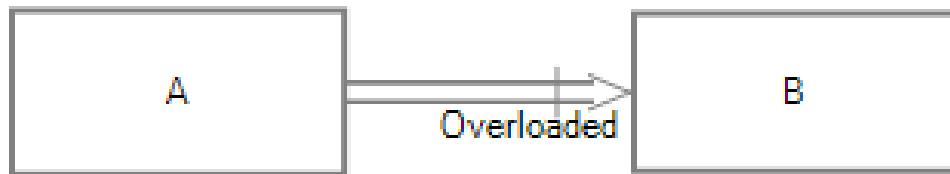
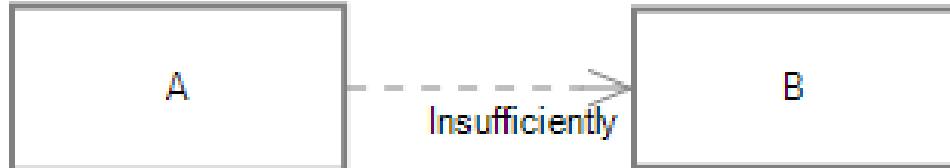
This is a solution



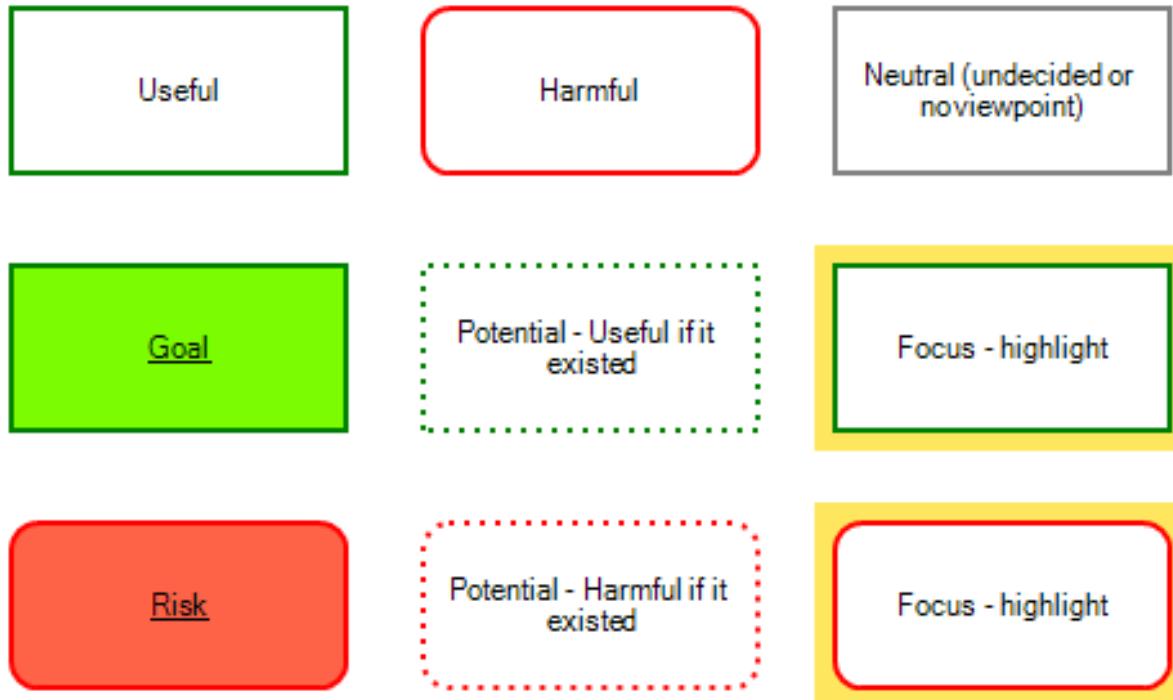
Southbeach effect classes



Effect modifiers



Agent types



Agent types

Processes

Functions

Resources

Qualities

Events

Ideas

Things

Trends

Separations

In Space

In Time

By Structure

By Perspective

By Aspect

By Role

By Probability

On Condition

Combining attributes creates new meaning

Focus on this goal

Focus on this potential

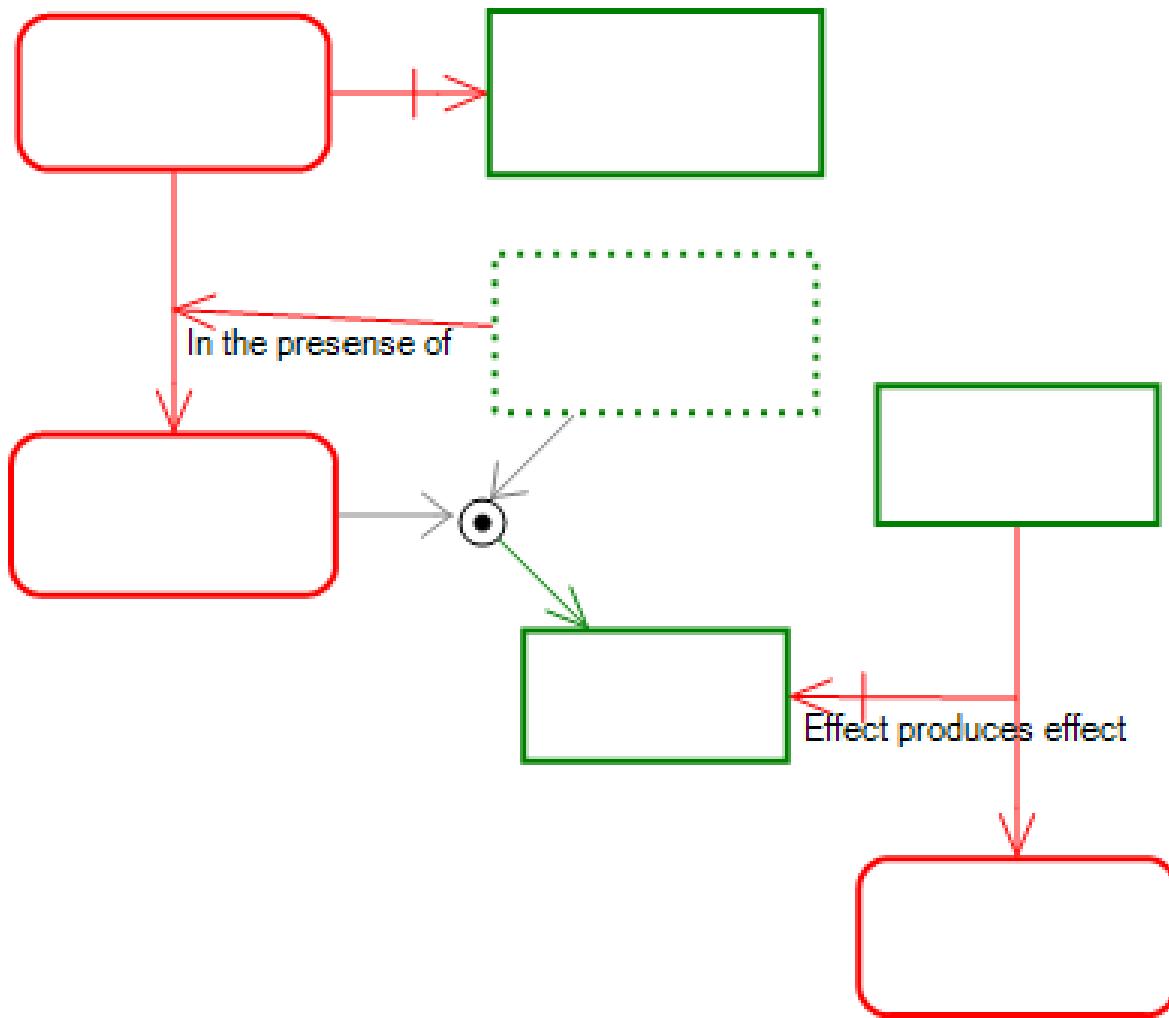
Focus on this risk

A potential risk

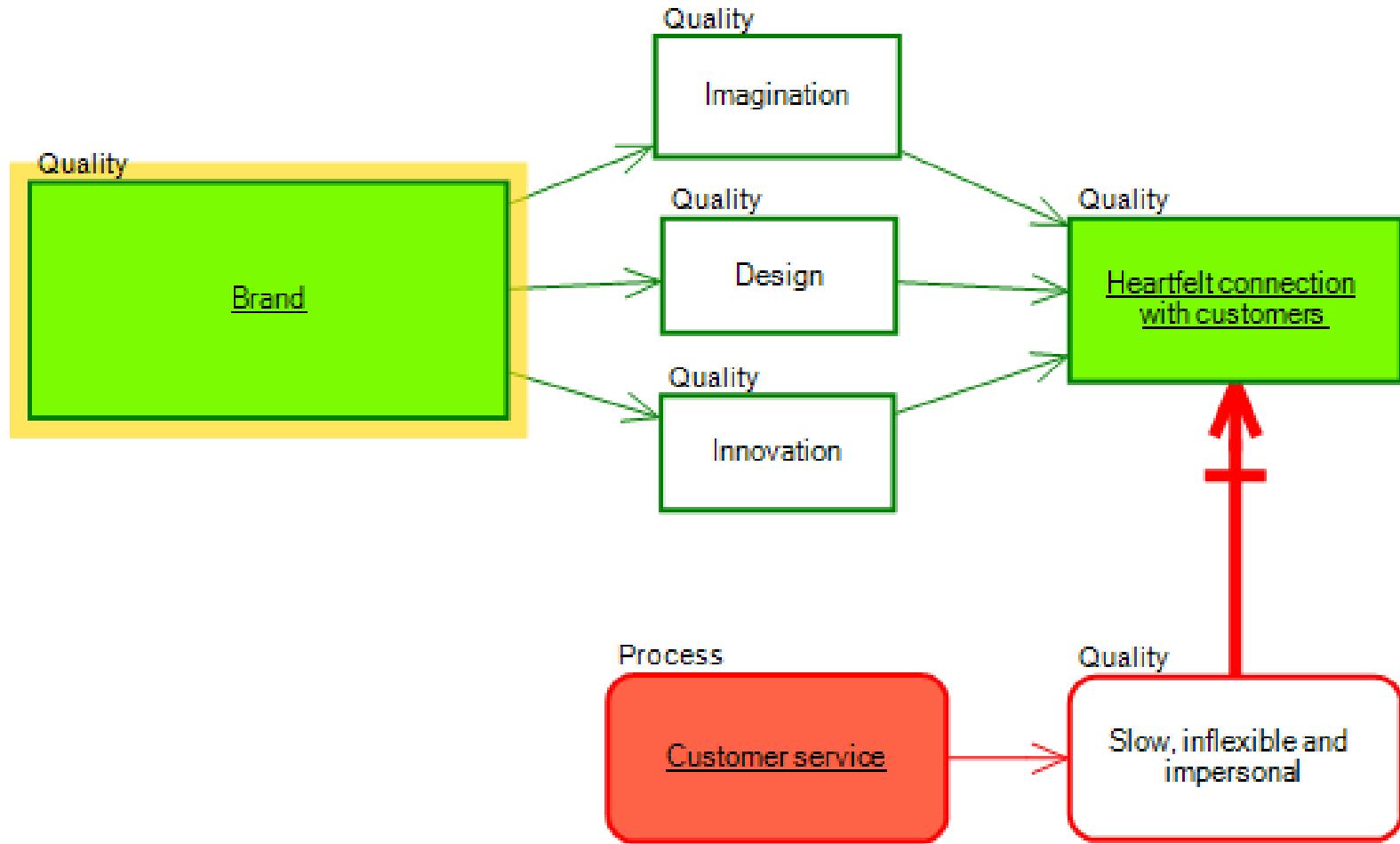
Focus on a potential
goal

Is the goal useful or
harmful?

Effects on effects, by effects, in the presence of



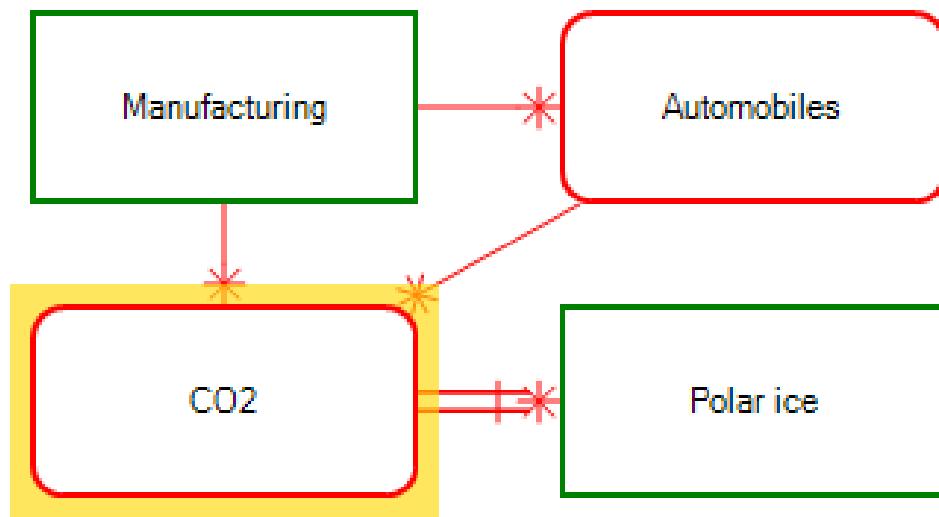
Effect of poor service on brand



Southbeach idioms have been chosen carefully

Southbeach idioms are semantic roots

Synonyms provide for rich expression

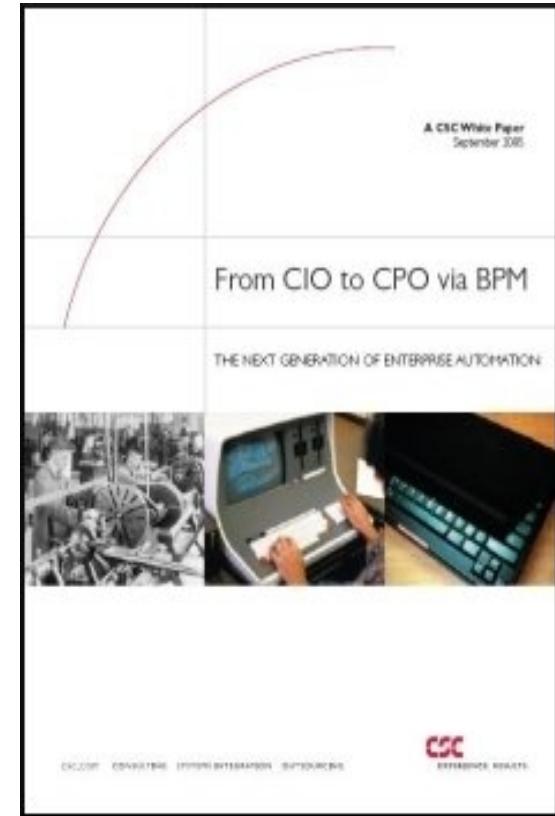
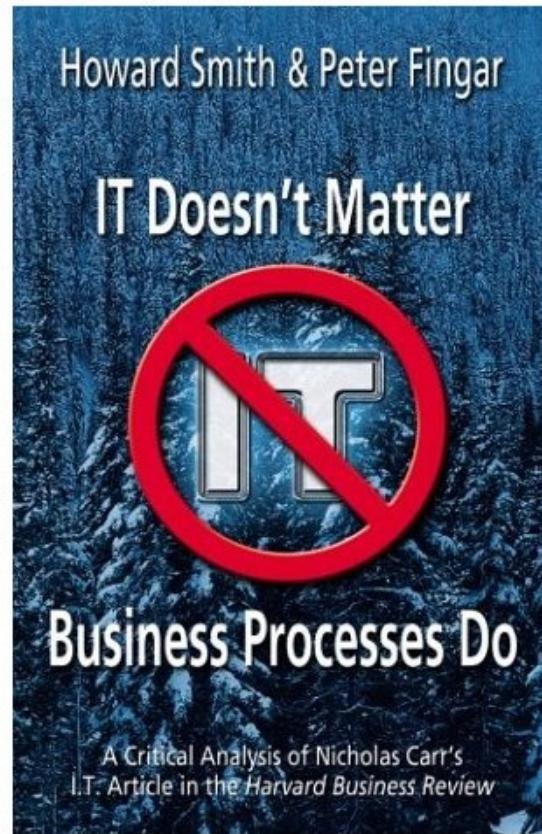
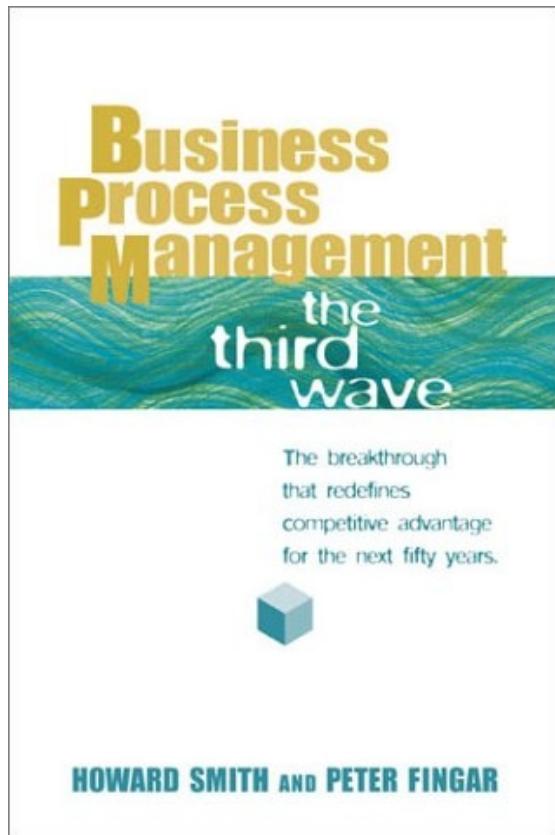


**Creates =
Manufactures**

**Creates =
Emits**

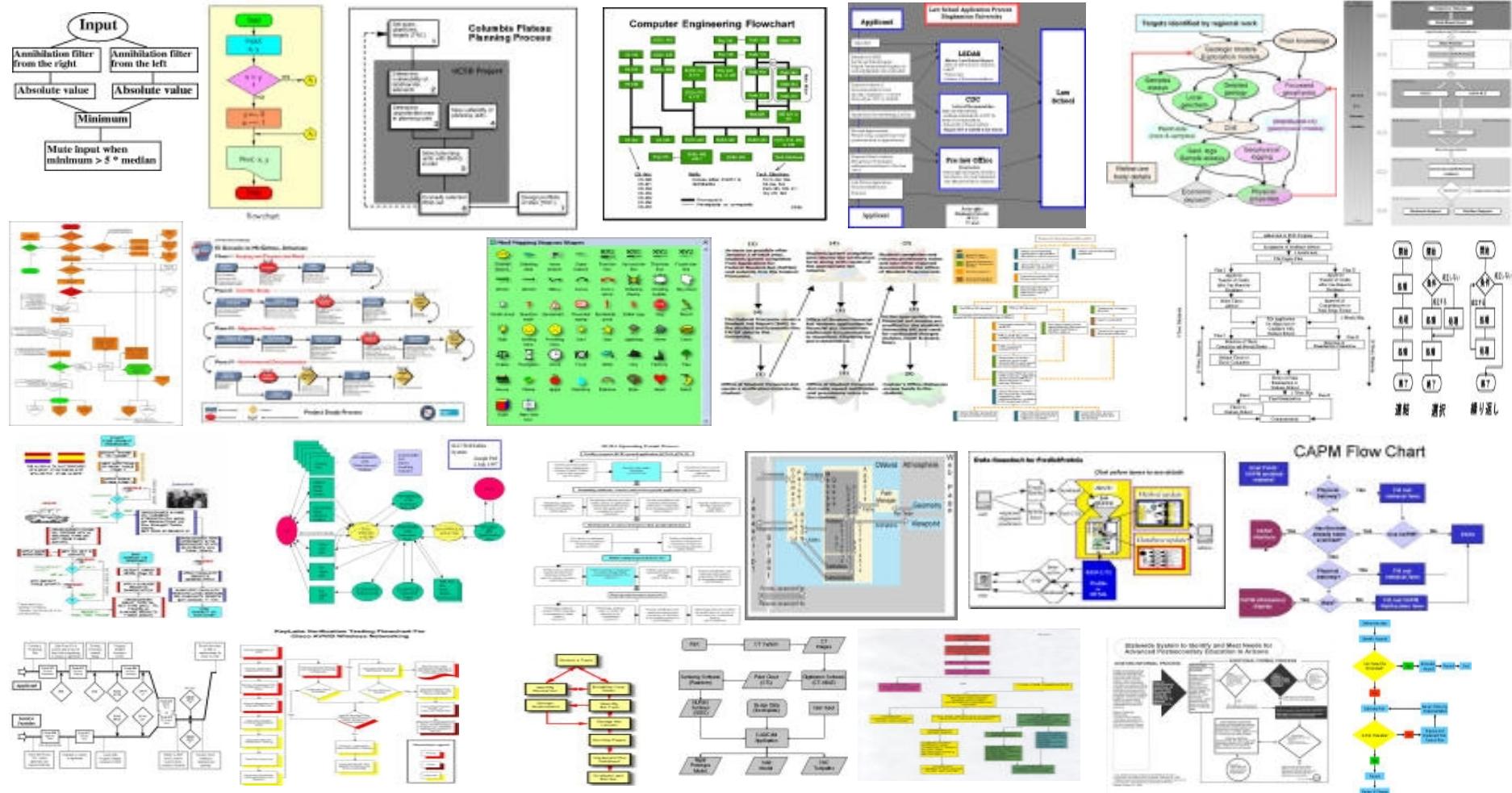
**Destroys =
Melts**

What came before



<http://howardsmith.editme.com>

We all draw diagrams



Process work is pervasive – methodologies were diverse (Still are?)

As a result: diagrams and semantics are diverse

- G2000 organizations are almost universally embarking on multiple process improvement exercises to increase organizational efficiency or effectiveness
- These efforts go by many names, including industrial engineering, ISO certification, Six Sigma, Sarbanes Oxley, enterprise business architecture (EBA), business process improvement (BPI), business process re-engineering (BPR), Audit and Compliance, Rummler-Brache, Integrated Definition Function Modeling (IDFM) and Lean Thinking, to name a few

- Entity relationship diagrams
- ANSI standard flowcharts
- Process models, various
- Data flow diagrams
- Unified Modeling Language (UML/MDA) diagrams (activity, class, etc.)
- Catalyst, LOVEM
- Network diagrams
- CRUD (create, read, update, and delete) matrices
- IDEF charts (0 through 9)
- EPCs (event chains)

BPML, BPMN, BPQL, BPMS, BPEL



BPMN Information Home - Windows Internet Explorer

http://www.bpmn.org/ bpmn

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Object Management Group

**Object Management Group/
Business Process Management Initiative**

BPMN

Business Process Modeling Notation (BPMN) Information

BPMN Specification Releases: Frequently Asked Questions:

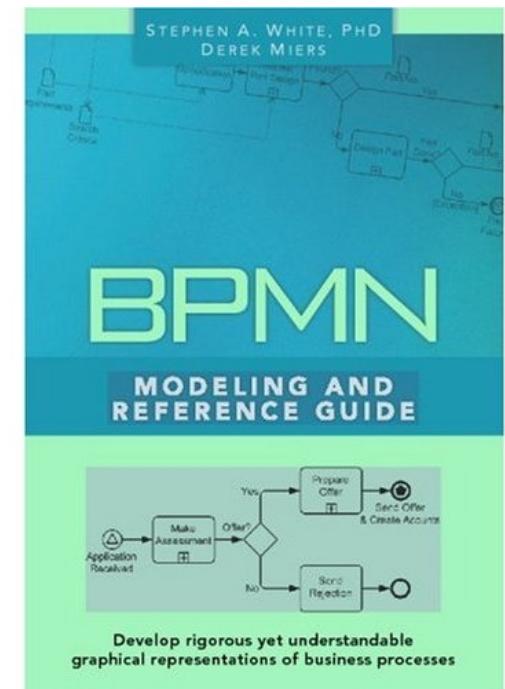
BPMN 2.0 RFP: Request for Proposals for See [FAQ](#).
version 2.0 of BPMN

BPMN 1.1: OMG Specification, February, [Wikipedia Entry](#)
2008 (PDF 3,372K)

```

    graph TD
        subgraph Candidate [Candidate]
            CA[Create Application] --> SA[Submit Application]
            SA -- Rejected --> I[Interview]
            I --> FE[Fill out Employment Forms]
            FE --> H[Hired]
        end
        subgraph Recruiter [Recruiter]
            RA[Review Application] --> SI[Schedule Interview]
            SI --> I
            I --> CF[Collect Feedback]
            CF --> PO[Prepare Offer]
            PO --> SO[Submit Offer]
            SO --> HC[Hire Candidate]
        end
        subgraph Interviewer [Interviewer]
            RA --> SI
            SI --> I
            I --> CF
            CF --> PO
            PO --> SO
            SO --> HC
        end
        I --> FE
        FE --> H
        RA --> SI
        SI --> I
        I --> CF
        CF --> PO
        PO --> SO
        SO --> HC
    
```

BPMN





http://www.intalio.com/



intalio bpmn

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Intalio, Leader in Open Source BPMS



COMPANY

CUSTOMERS

PARTNERS

PRODUCTS

SERVICES

DISCOVER

DOWNLOAD

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BPMN + BPEL + Open Source = SOA ROI

Intalio | BPMS is the only BPMS to natively support the BPMN and BPEL industry standards. And best of all, it's 100% free. [Get it today!](#)

BPM 2.0 AS EASY AS 1-2-3

[1. Get a Free BPMS](#)[2. Schedule Training](#)[3. Get More Help](#)

INTALIO PRESS RELEASES

- [08/06/2008: Intalio | BPMS 5.2 Introduces Key Features for Enterprise Cust.](#)
- [05/22/2008: Intalio User Conference June 17-18, San Francisco, CA](#)
- [04/23/2008: Liferay Portal and Intalio Partner](#)
- [04/08/2008: Intalio/NTT Data Intramart Automate Risk Management w/BPM](#)
- [04/01/2008: Intalio | On Demand Launched, First Open Source BPM SaaS](#)

INTALIO IN THE NEWS

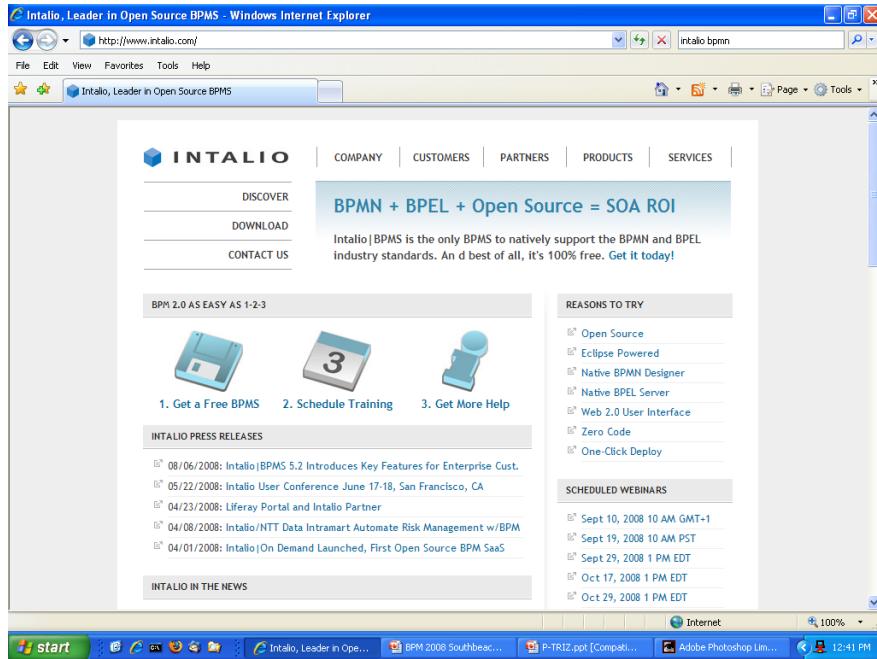
REASONS TO TRY

- [Open Source](#)
- [Eclipse Powered](#)
- [Native BPMN Designer](#)
- [Native BPEL Server](#)
- [Web 2.0 User Interface](#)
- [Zero Code](#)
- [One-Click Deploy](#)

SCHEDULED WEBINARS

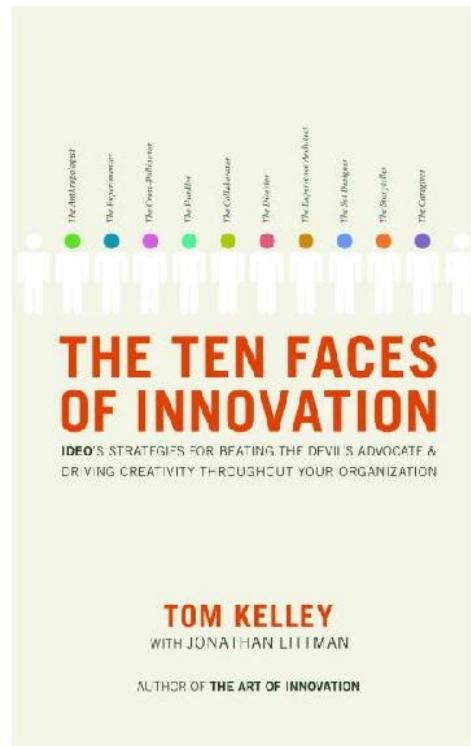
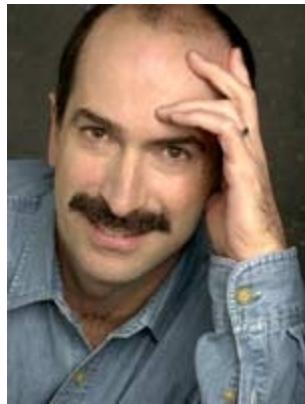
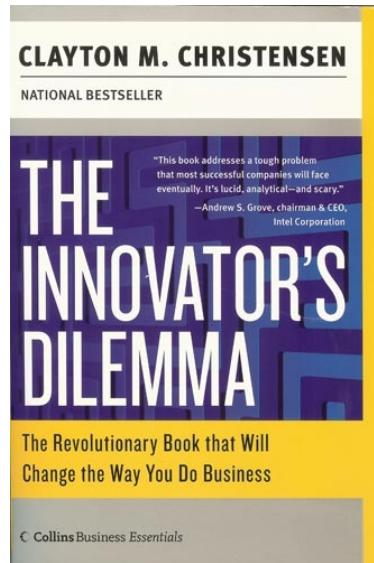
- [Sept 10, 2008 10 AM GMT+1](#)
- [Sept 19, 2008 10 AM PST](#)
- [Sept 29, 2008 1 PM EDT](#)
- [Oct 17, 2008 1 PM EDT](#)
- [Oct 29, 2008 1 PM EDT](#)

BPM

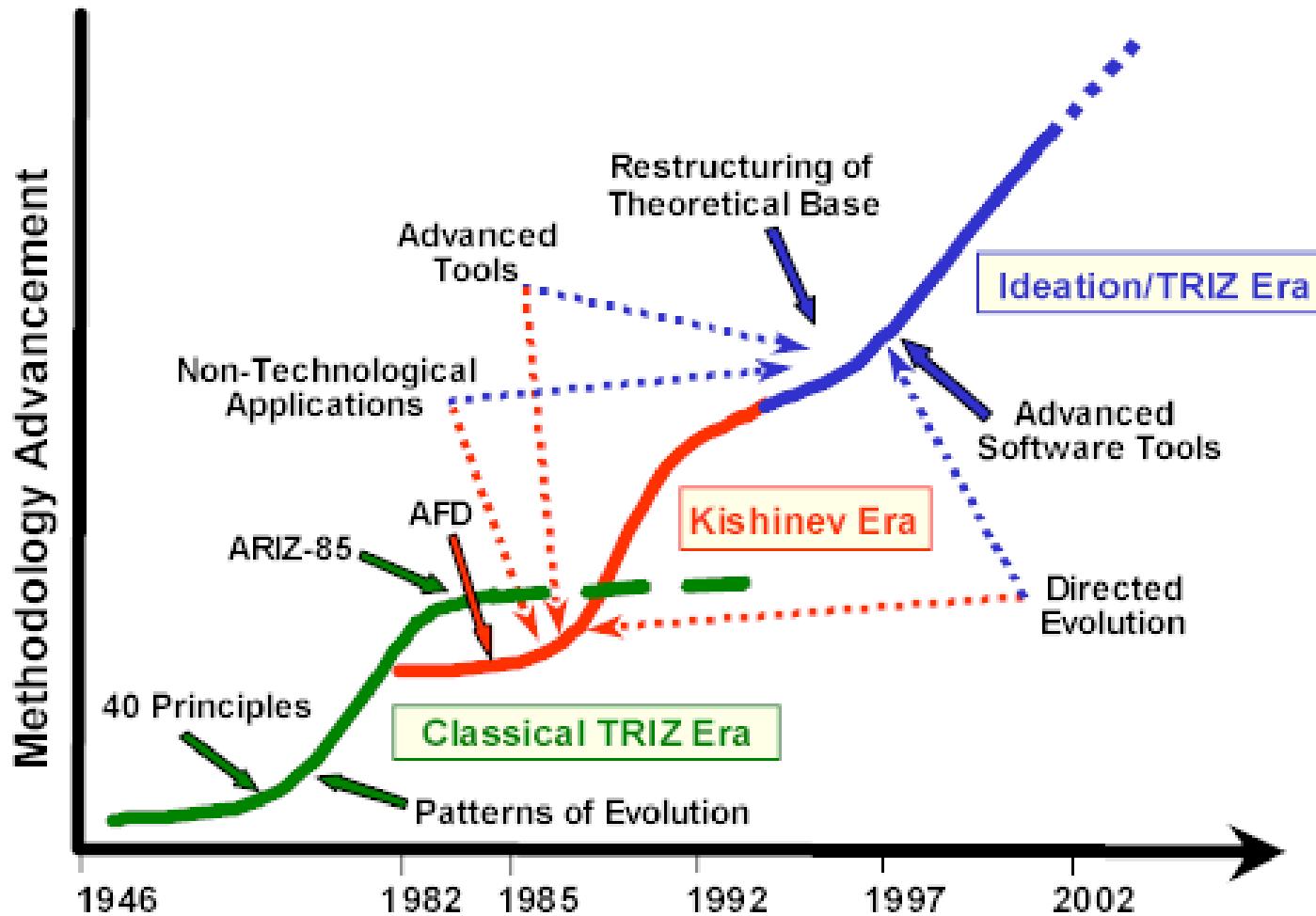


- “The future has arrived!”
- “I cannot believe it! I modeled and deployed my first process in a record time. I think you have a very nice tool. Congratulations!”
- “A game-changer in the industry”
- “A very powerful BPM tool for business analysts. It bridges the gap between Business and IT in an elegant, easy to use manner.”
- “Graphical process design tool, web-based workflow user interface, automatic generation of forms, and enterprise-class open-source architecture. It has everything our customers have been asking for.”
- “There is more to the tool than meets the eye. Its capabilities will surprise you.”
- “Using Intalio BPMS, we experienced massive acceleration in deploying portal-based business processes”

Management gurus get attention



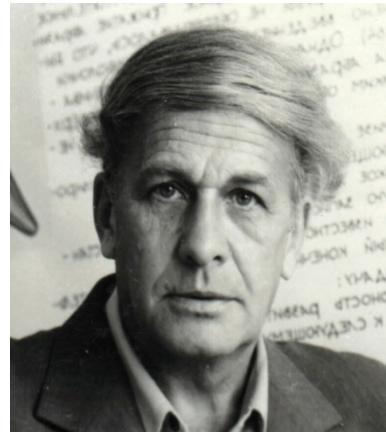
The alternative history of innovation - TRIZ



Source: Ideation International

The roots of systematic innovation should be acknowledged

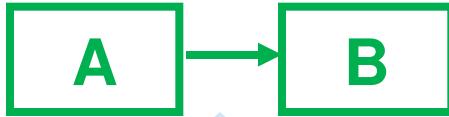
- Genrich Saulovich Altshuller
- Father of TRIZ
- A process for creativity?
- 15 October 1926 – 24 September 1998



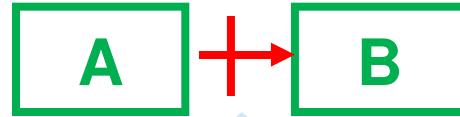
- Boris Zlotin and Alla Zusman
- TRIZ masters and methodologists
- Pioneering the foundations for the development of a modern TRIZ methodology
- Ideation International
- www.ideationtriz.com

Asking questions drives innovation

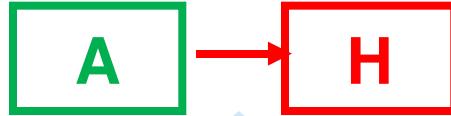
Does A really produce B directly?



What is harmful about A?



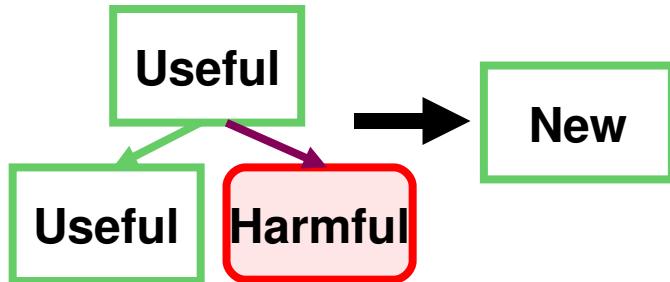
What direct consequence of A yields H?



What specifically about A counteracts H?

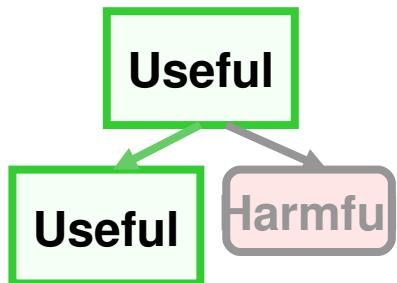


Models can suggest improvements



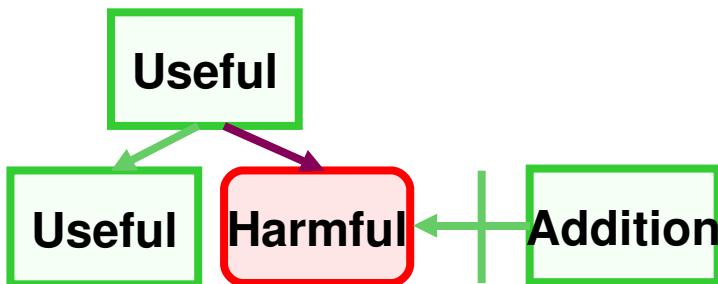
Example 1

Replace the system with a new system
that does not exhibit the harmful function



Example 2

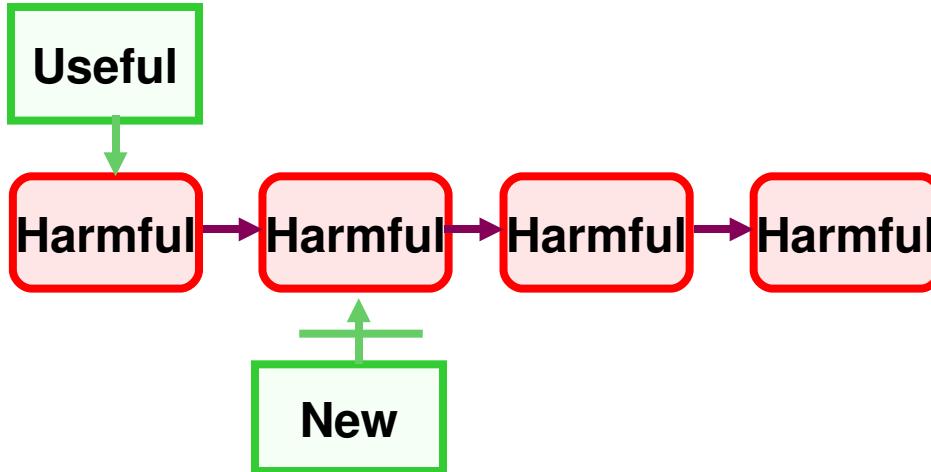
Find a way to eliminate or reduce the
harmful function



Example 3

Add a compensating function to limit
the impact of the harmful function

More examples of innovation

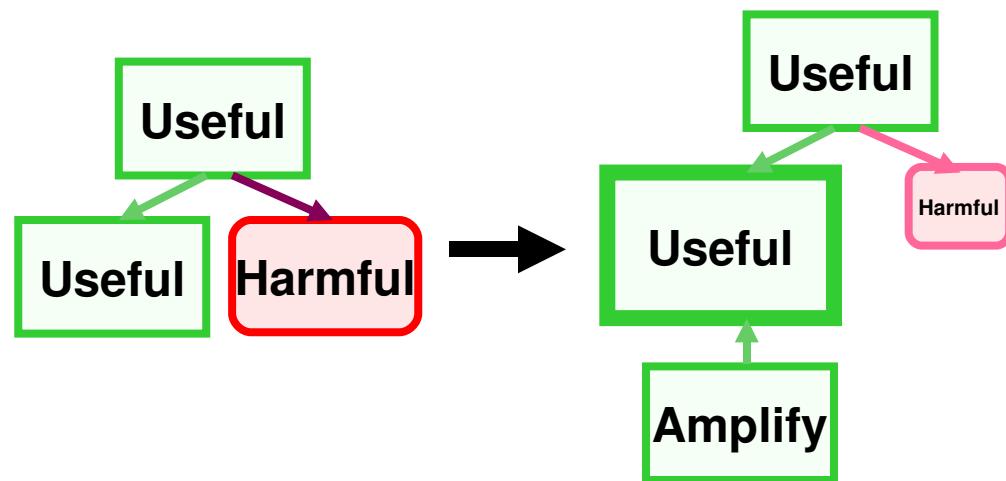


Example 4

Compensate a harmful side effect to break a chain of harmful knock on effects

Example 5

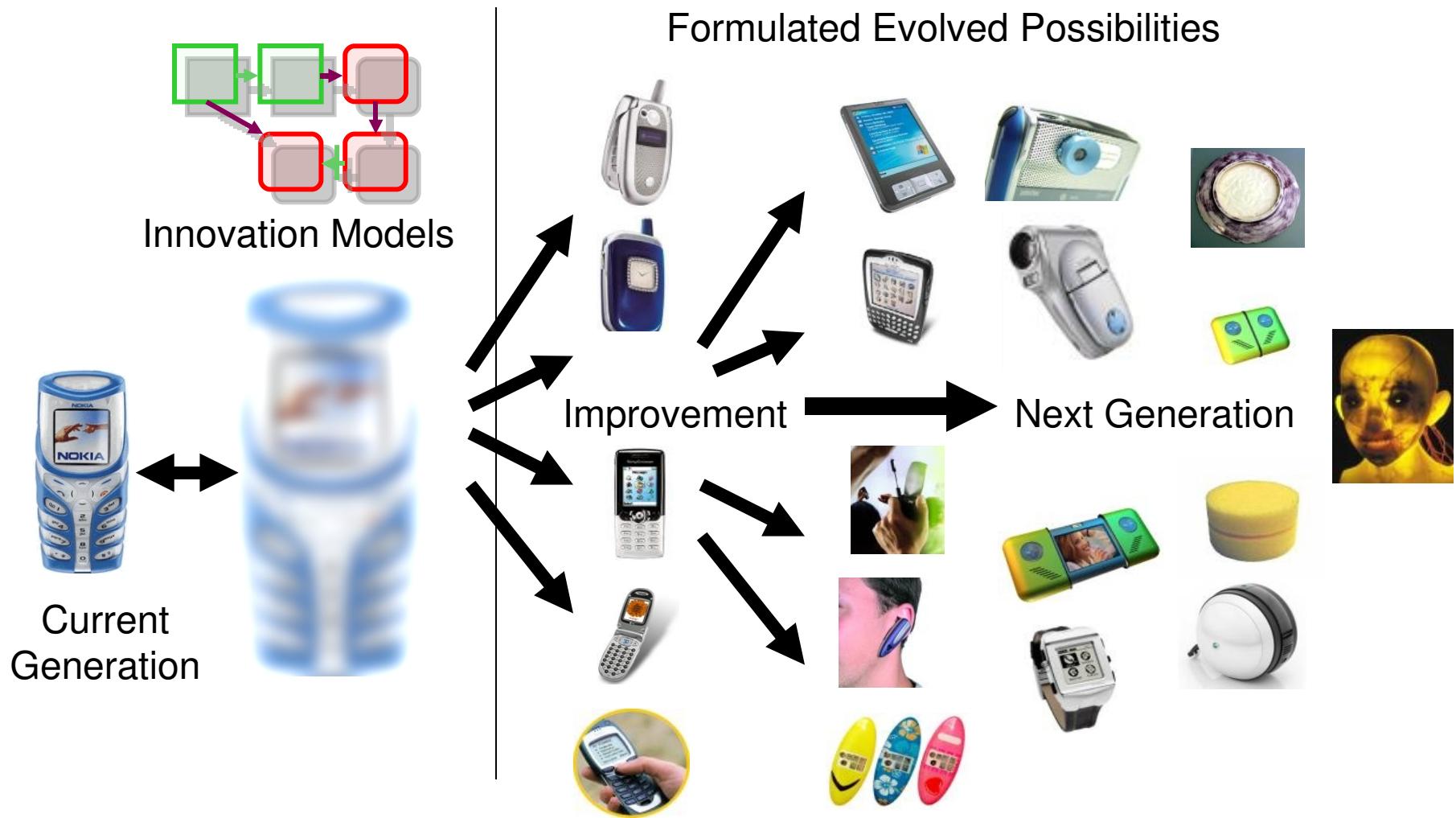
Amplify the useful output, to the extent that the harmful function becomes insignificant





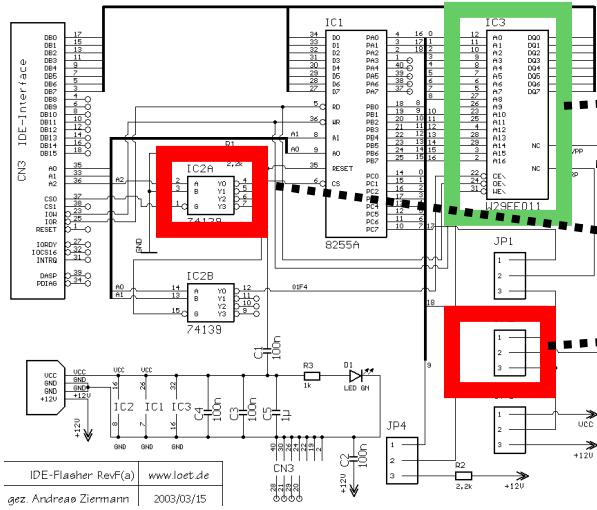
Every thing that exists, or is yet to exist, is attended by an inseparable companion ...

The innovation shadow-self

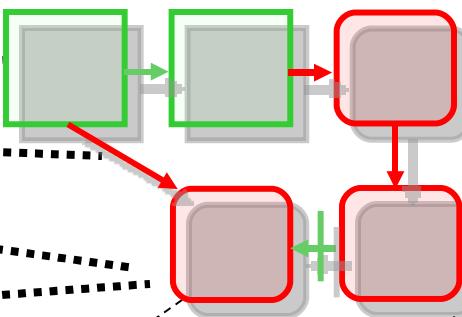


Any existing intellectual property can be open to innovation

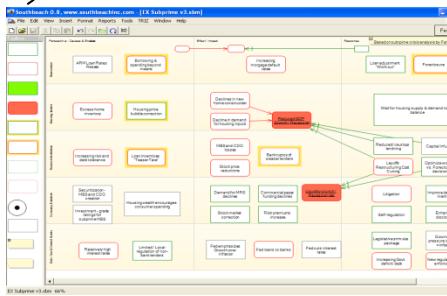
Schematic, diagram, document, process, etc.



Innovation notation



Innovation model

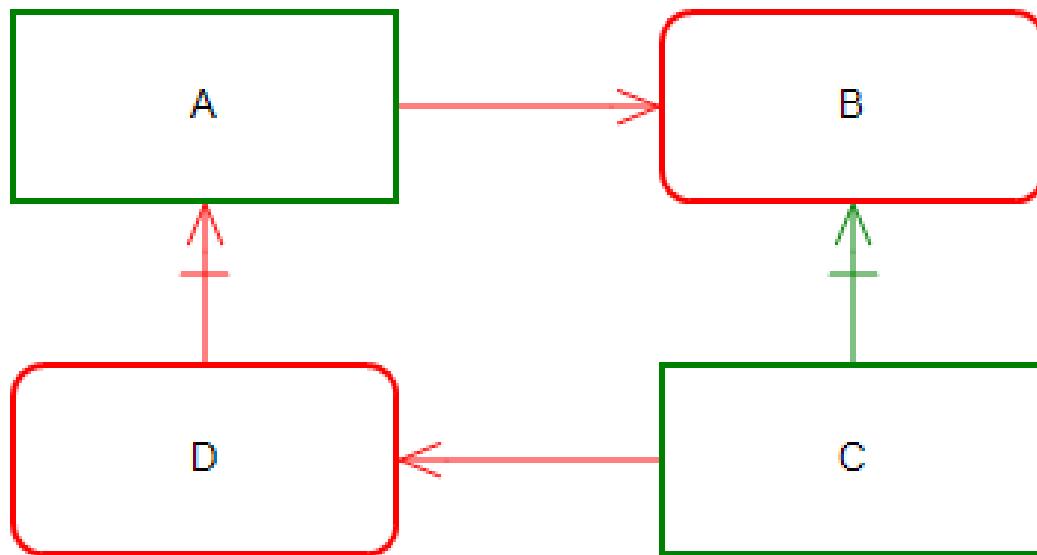


Methodology

Innovation pathways

TRIZ uses a simple notation which many like ...

but is it too simple?



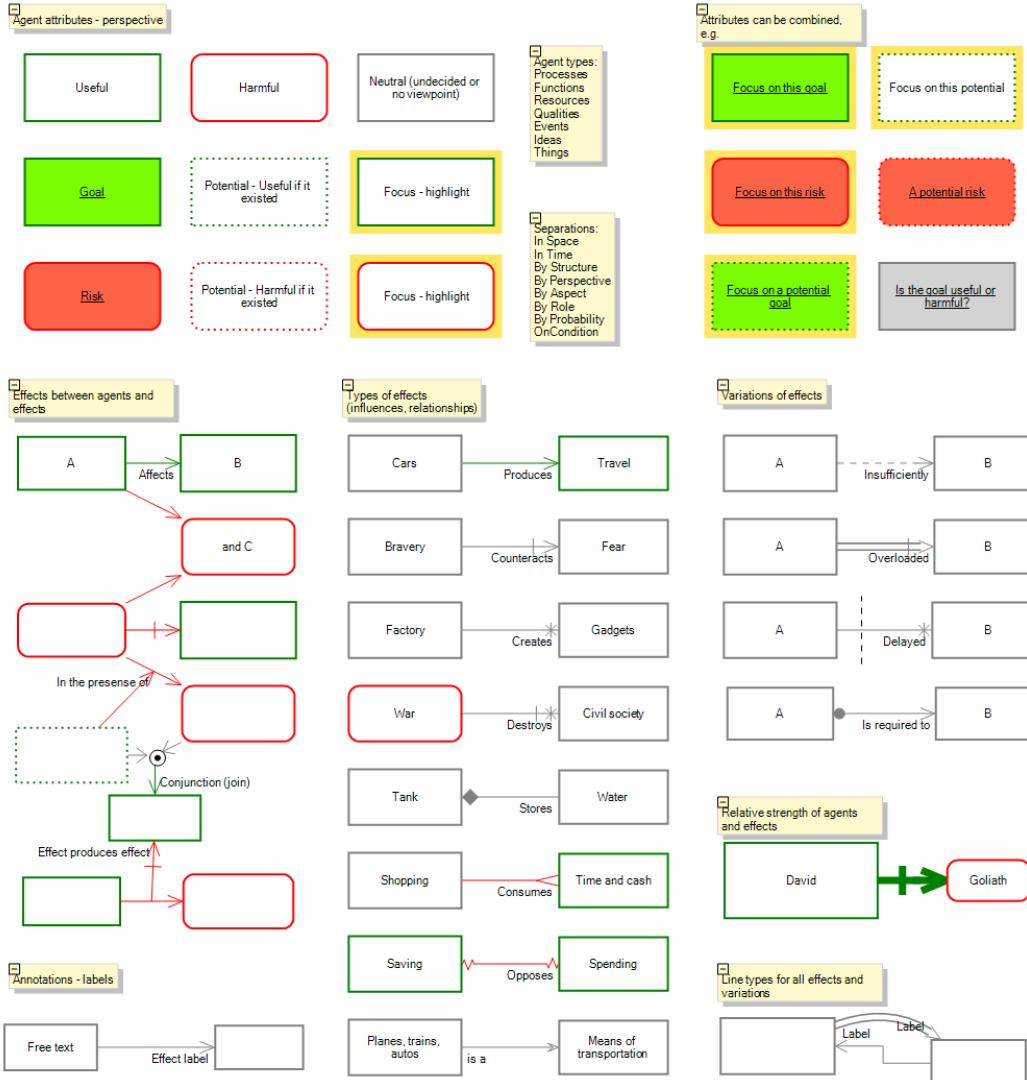
Useful

Harmful

Produces

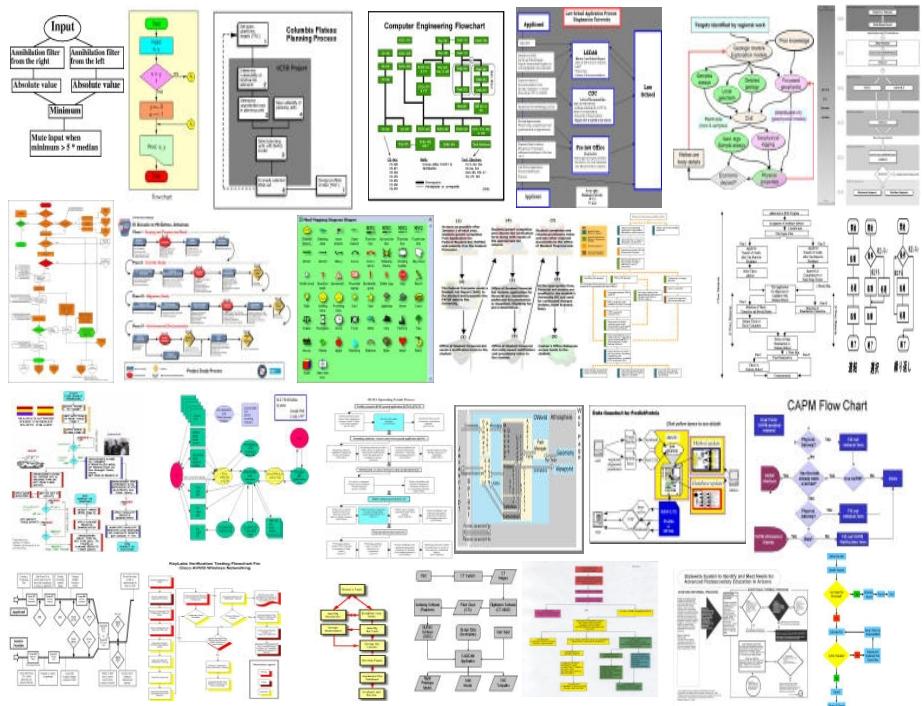
Counteracts

Southbeach notation ... more expressive yet still simple



- New visual diagramming and modeling style
- Extends TRIZ notation
- Fosters integrative thinking
- Model from multiple perspectives
- Resolve contradictions
- Suggest ways forward
- Applications in business, design, engineering, change management, process work
- Appeals to management consultants and architects

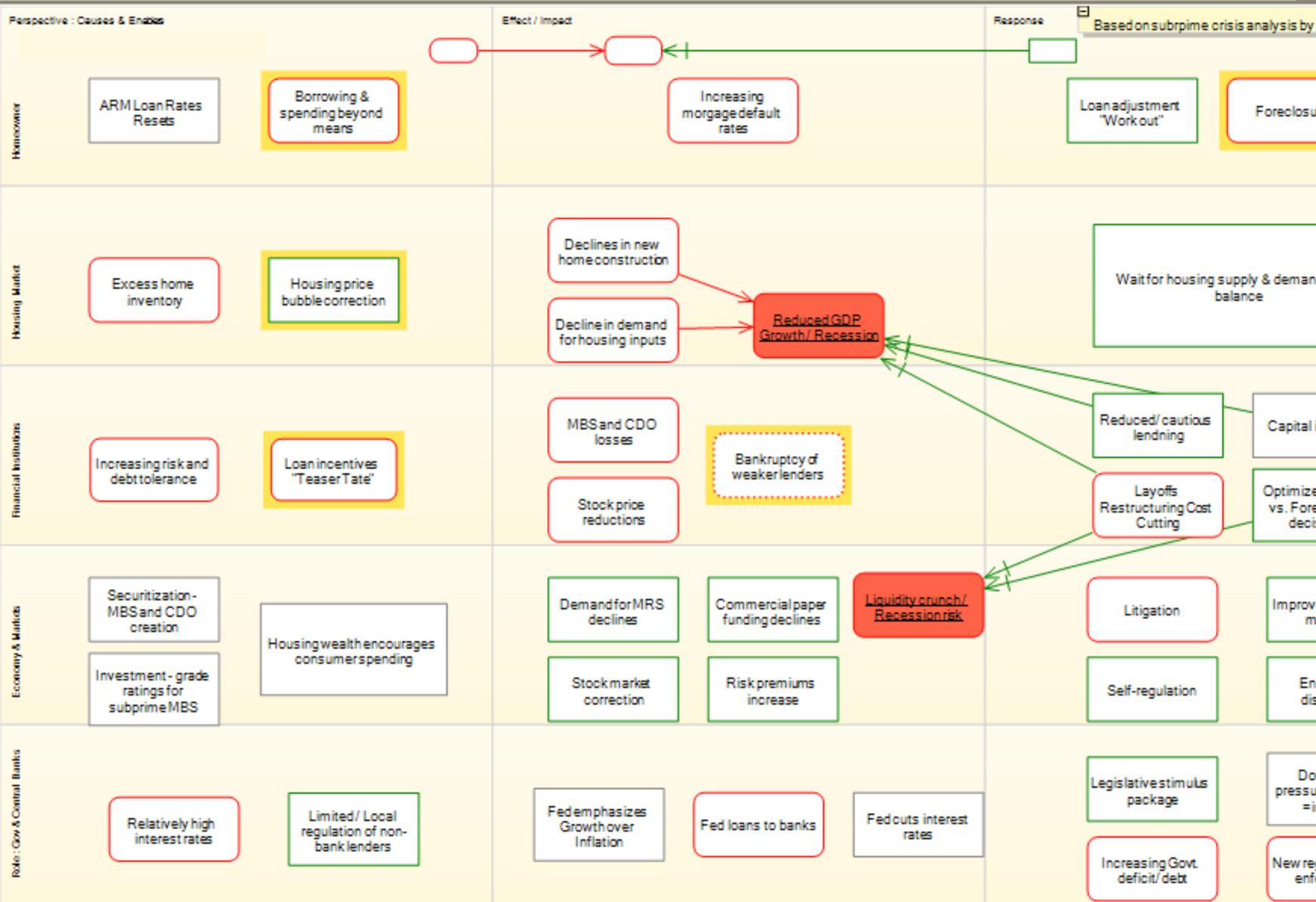
Does not replace any other notation



- Complements all other notations
- Draws from previous notations
- Can be used to mark up other notations
- Stands in its own right as a useful new notation
- Formal semantics, but will be used flexibly
- Modeling of perspectives

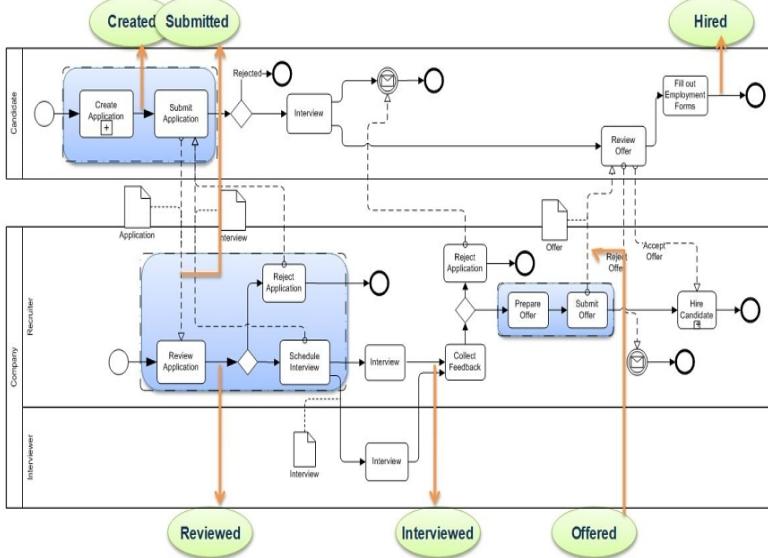


Toolbox



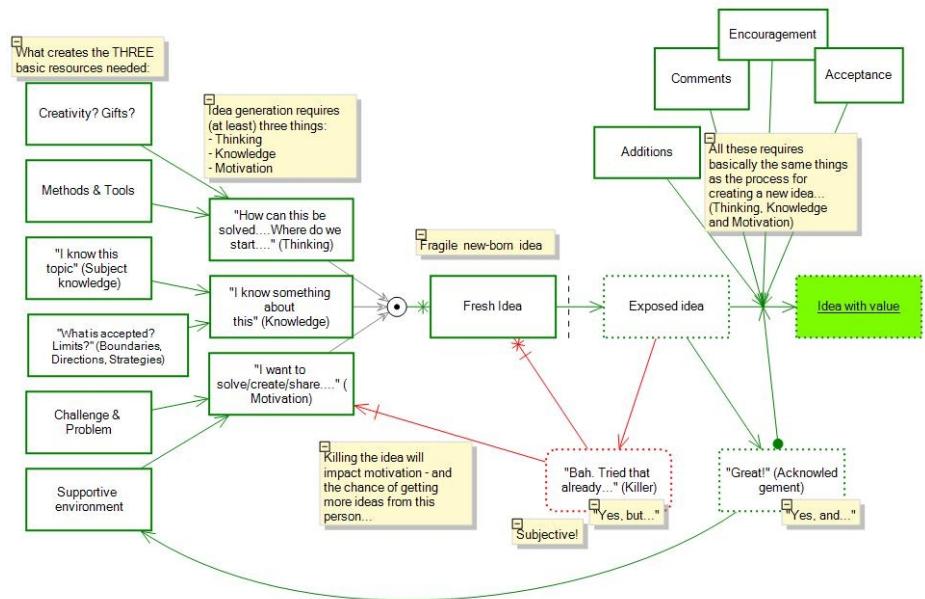
Executable models?

Run the process - tasks



BPMN/BPMS

Improve the process - suggestions



Southbeach

Model courtesy of Anders Jangbrand, CSC

<http://howardsmith.editme.com>
<http://www.southbeachinc.com>



The Innovator Is A Problem Solver



Do you have problems?

An obscure methodology originating in Russia in the 1940s, which has mainly been applied in engineering, is nevertheless being used today by CSC's solution architects working on their customers' most complex problems. It's called TRIZ. This article explains how TRIZ works and why we think it will become an important tool for the CIO and across the IT organization.

The IT portfolio brings a problem portfolio
...to the first time you delighted the business. Was it the result of systematic thinking? Or unexpectedly solving a key problem that was hindering progress?
The problems you inherited from your predecessor are the solutions they created to counteract older problems buried deep in the history of your organization. How will you avoid leaving a similar legacy to your successor? If you must now cut further costs from the portfolio, at the same time develop valuable new business processes, there is no way around it. The associated legacy must be resolved. Can you

**Howard Smith
and Mark Burnett**

Howard Smith, a research associate of the Leading Edge Forum, is CTO for CSC European Group and a leader of CSC's global BPM and enterprise architecture centre of excellence. An early advocate of process technology and a co-founder of BPMI.org, Howard is a regular columnist at BPTrends and author of two books about IT and business processes.

hsmith23@csc.com

Do You Have Problems? A TRIZ Overview



What Innovation Is

White paper
38 pages

P-TRIZ Series

A BPT COLUMN

Process Innovation

March 2006



Howard Smith
CTO CSC European Group
Corporate Office of Innovation
Computer Science Corp.
hsmith23@csc.com

P-TRIZ Formulation

Last month we introduced readers to Process-TRIZ (P-TRIZ), a new method of use to anyone documenting, analyzing, or re-designing business processes. Developed by Mark Burnett and Howard Smith at Computer Sciences Corporation, P-TRIZ is a methodology for identifying process reengineering options and the associated solutions.

While workflow, rules engines and BPM systems are proving effective at introducing new processes', the design of such processes has to be determined before they can be deployed - with or without new technology. That's where P-TRIZ can help. In this article, I show how a P-TRIZ model is used to generate an exhaustive list of re-design options. This first step in P-TRIZ is called *formulation*.

In P-TRIZ, every process model (swimlane model, BPMN diagram etc.) can be accompanied by one or more corresponding *process innovation models*. Where the swimlane model describes how the process should execute, the process innovation model describes how the process can be *improved* or *re-invented*.

Process innovation models are easy to read and are a great aid to communicating what is good and bad about any process. The notation requires only two types of boxes and two types of lines:

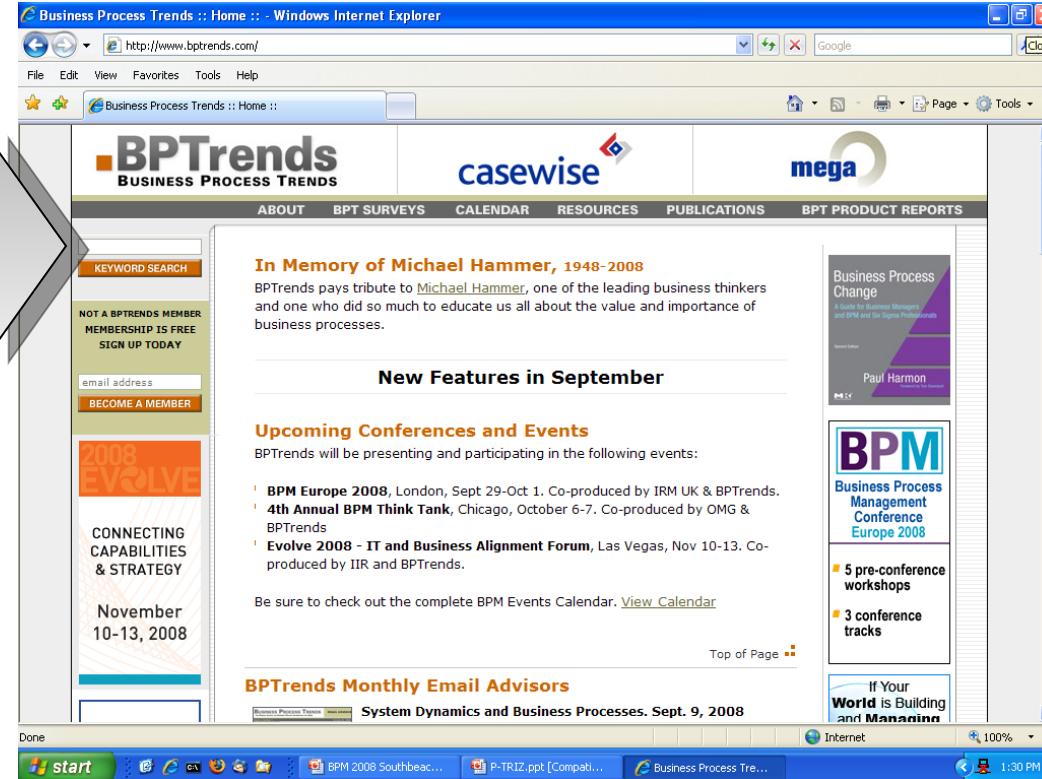
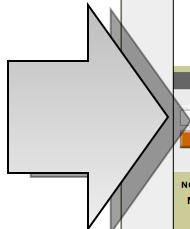
e.g.
Functions
Processes
Operations
Activities

Useful
A function considered useful
in this context
Harmful
A function considered harmful
in this context

<http://www.bptrends.com>

<http://trizmethods.blogspot.com>

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TRIZ
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The screenshot shows the BPTrends website homepage. At the top, there's a banner with the BPTrends logo, the Casewise logo, and the mega logo. Below the banner is a navigation menu with links to About, BPT Surveys, Calendar, Resources, Publications, and BPT Product Reports. To the left, there's a sidebar with a keyword search bar, a section for 'NOT A BPTRENDS MEMBER' with a 'SIGN UP TODAY' button, and a section for '2008 EVOLVE' with the text 'CONNECTING CAPABILITIES & STRATEGY' and 'November 10-13, 2008'. The main content area features a tribute to Michael Hammer, a section for 'New Features in September', and a list of 'Upcoming Conferences and Events'. It also includes a section for 'BPTrends Monthly Email Advisors' with the date 'System Dynamics and Business Processes. Sept. 9, 2008'.

Many articles plus
Southbeach Spec (70 pages with examples)

Southbeach Modeler

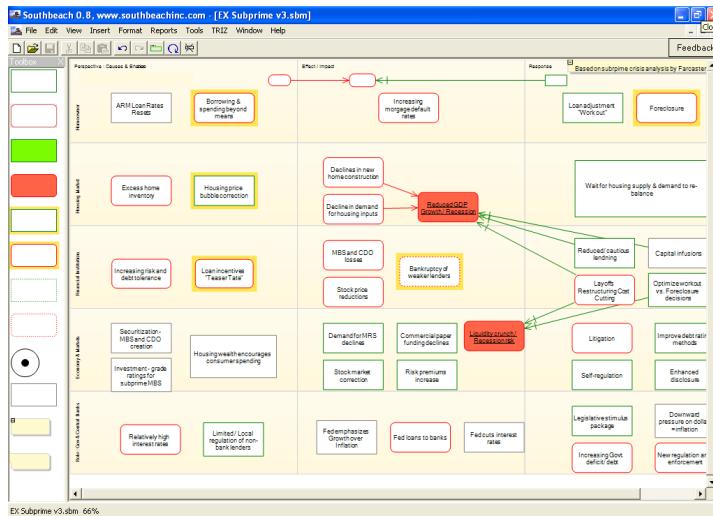
Reference implementation 0.8

FREE download

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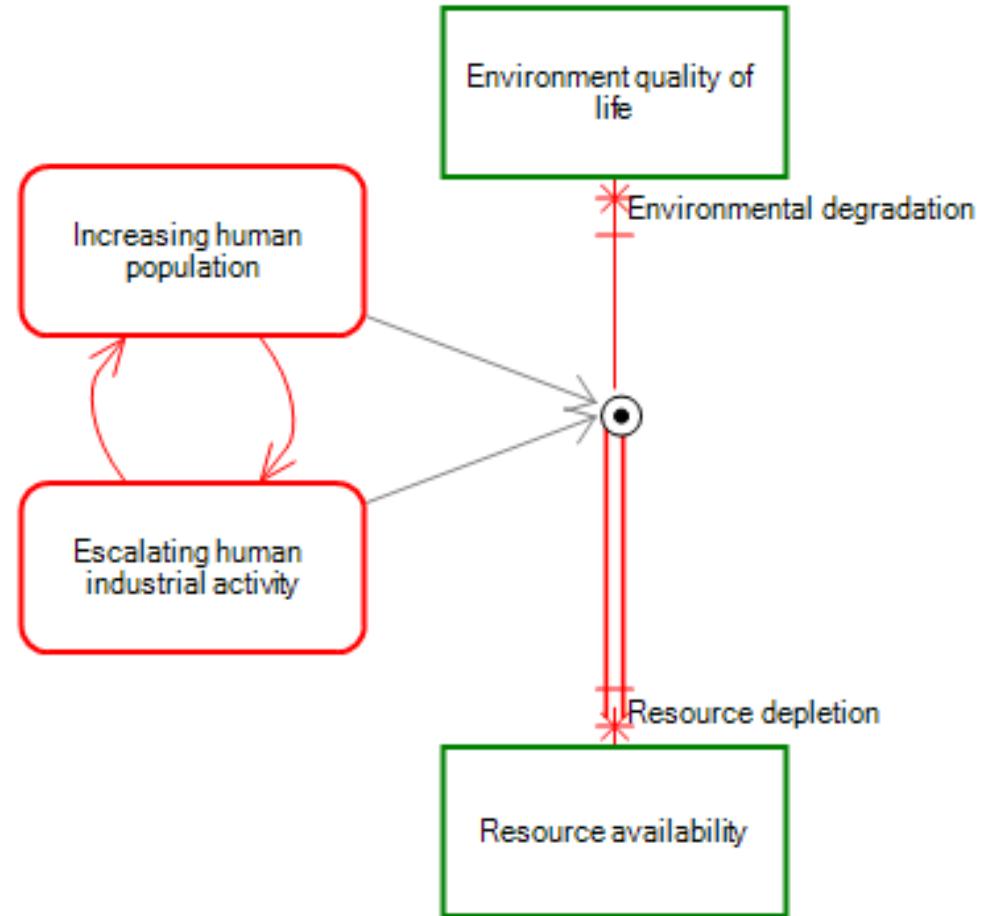


<http://www.southbeachinc.com/software/download>



- Explore the new notation
- Share with colleagues
- Create models, elaborate models, share models
- Designed for workshops and consultants
- Report on all elements in a model, with descriptions
- Supports large or complex models
- Navigate to related models and documents
- Export models to other documents
- Web links to useful resources and tools
- Provide your feedback

Final thought



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<http://www.southbeachinc.com>

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