

Six Sigma: Upgrade Programme 2007

Author Programme 2006/07
Prof. Dr.-habil. Elena Averboukh
Fellow Six Sigma Master Black Belt

LUSI-Zentrum eG (interdisciplinary Centre for Quality
of Life and Usability Studies)

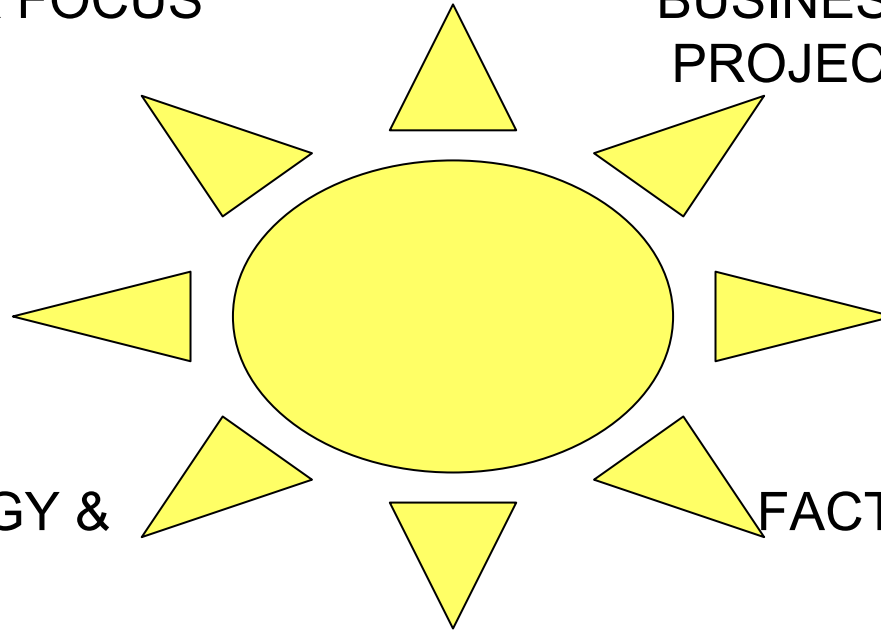
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TRIZ SIX SIGMA BUSINESS STRATEGY

CUSTOMER FOCUS

BUSINESS PROCESS- AND
PROJECT MANAGEMENT



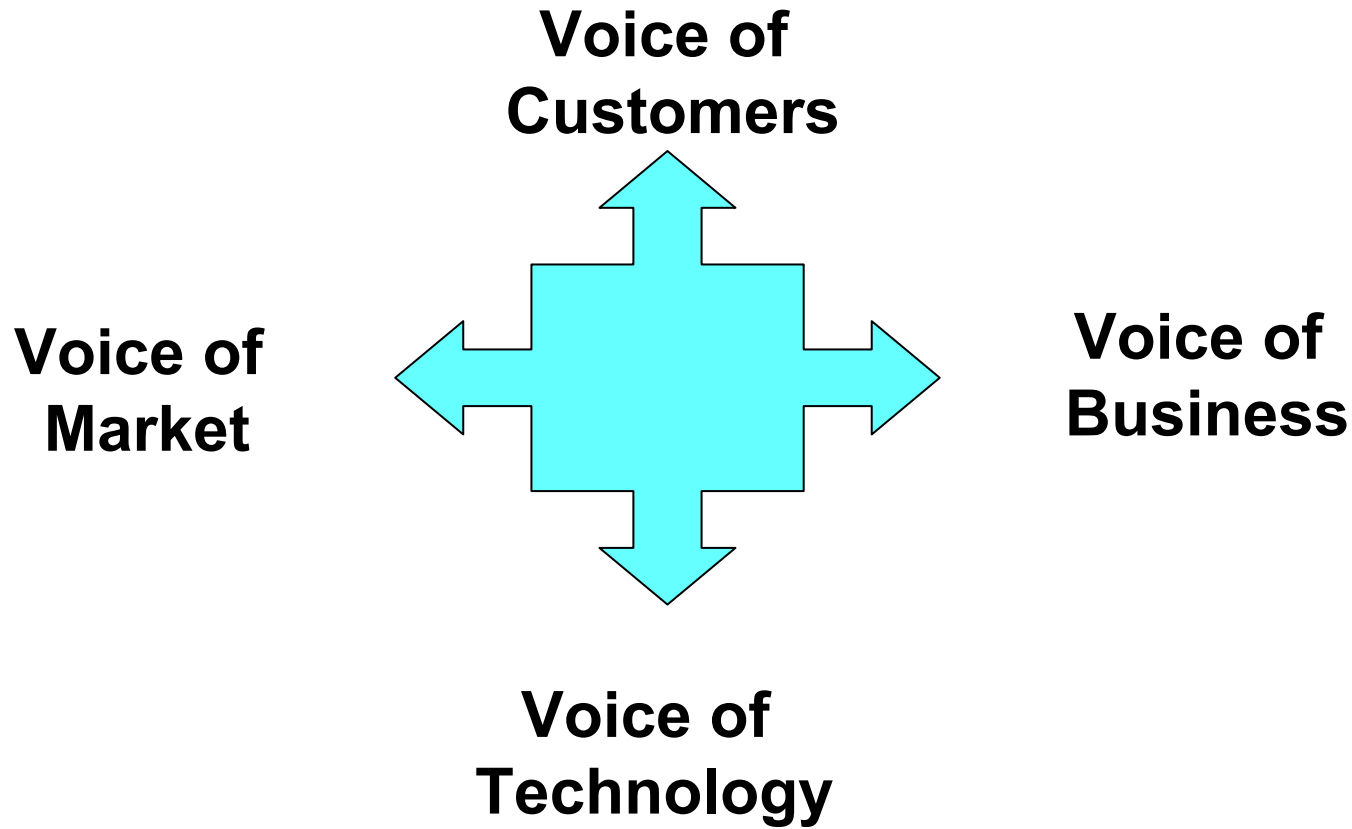
METHODOLOGY &
TOOLS

FACTS- AND DATA-BASE

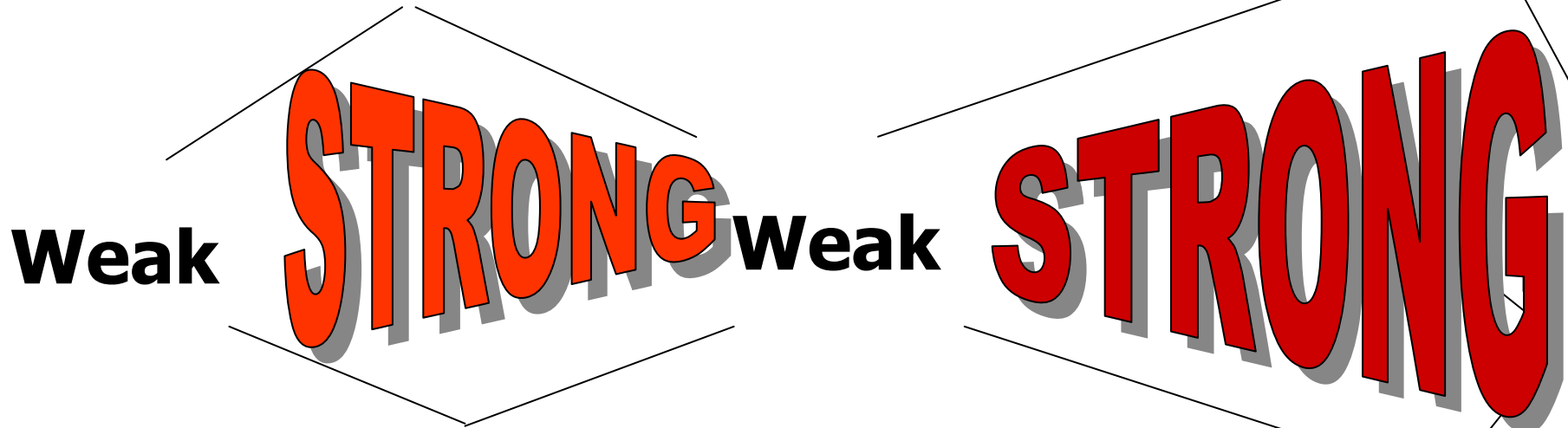
(TRIZ) INNOVATION- DRIVEN

The Goal: to design and to produce goods and services
at a **six sigma level** capability to meet customer's requirements

Contradictory Requirements to the Business Processes



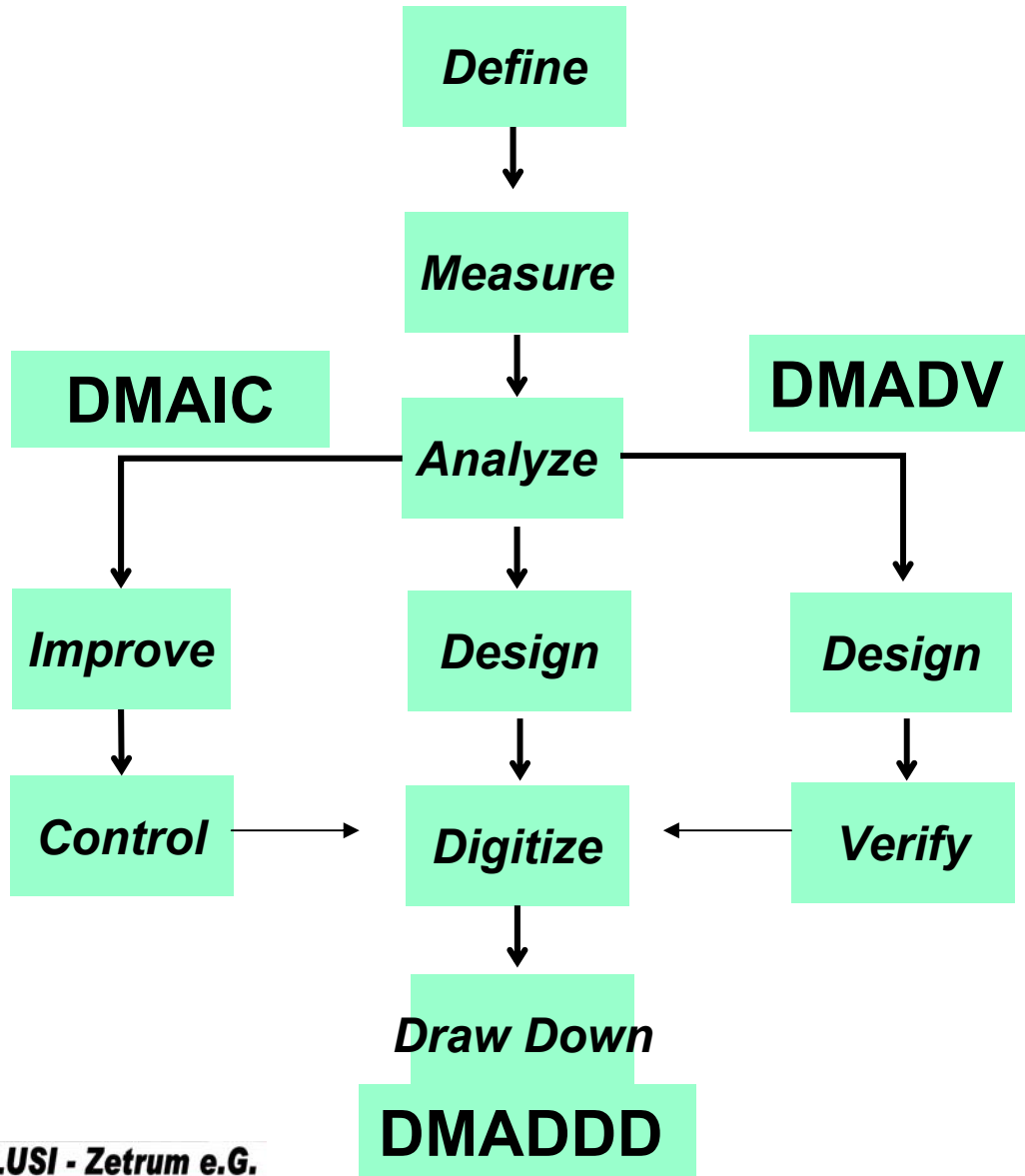
Traditional Six Sigma vs Innovation Process



Define	Measure	Analyse	Design	Verify	DMADV
Define	Measure	Analyse	Improve	Control	DMAIC

Isolated DMAIC-DMADV Roadmaps

DMAIC VS DMADV



⇒ Alignment & Mobilization

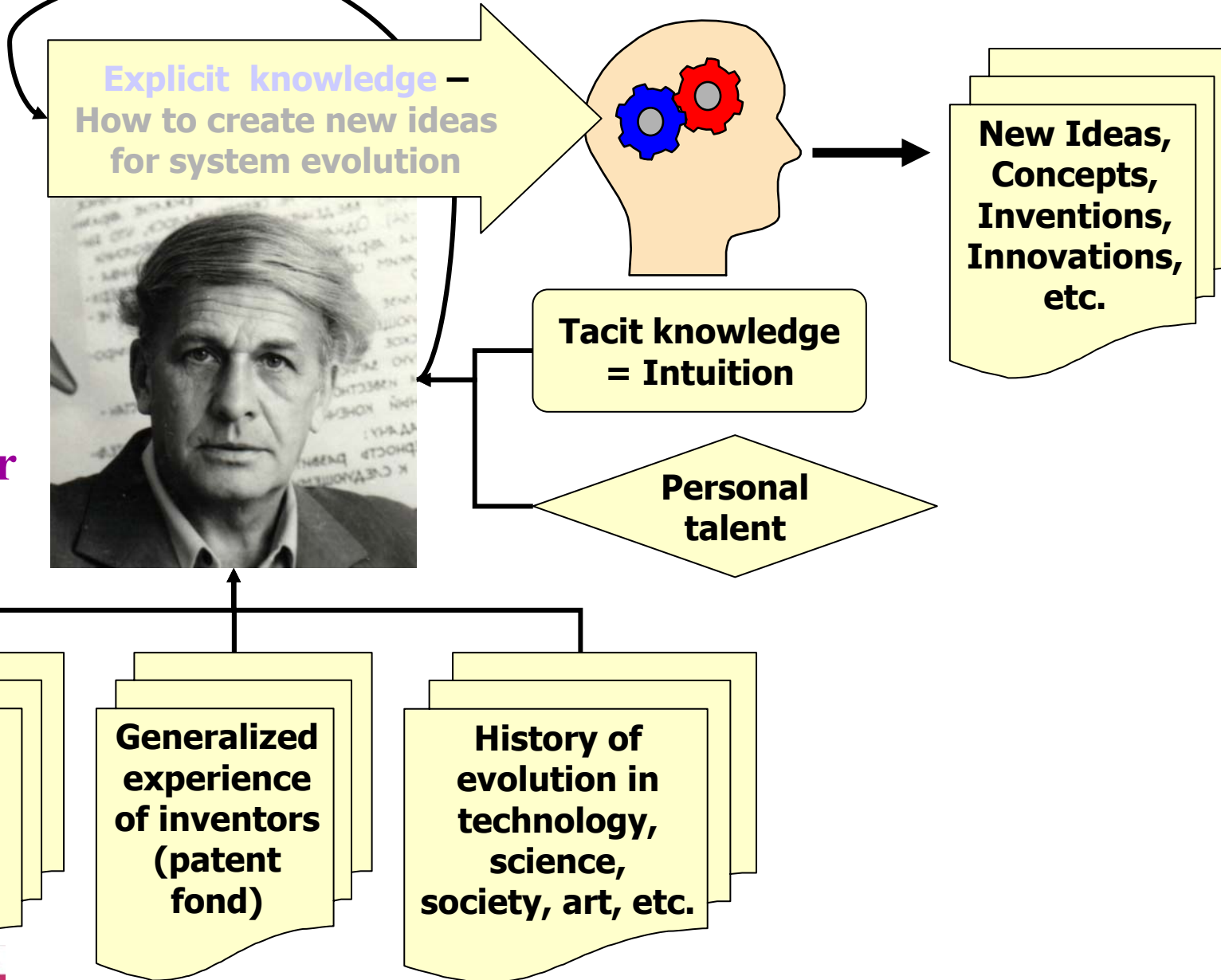
⇒ Clarity & Motivation

⇒ Profound Understanding

⇒ Breaking Tradition

⇒ Institutionalizing Change

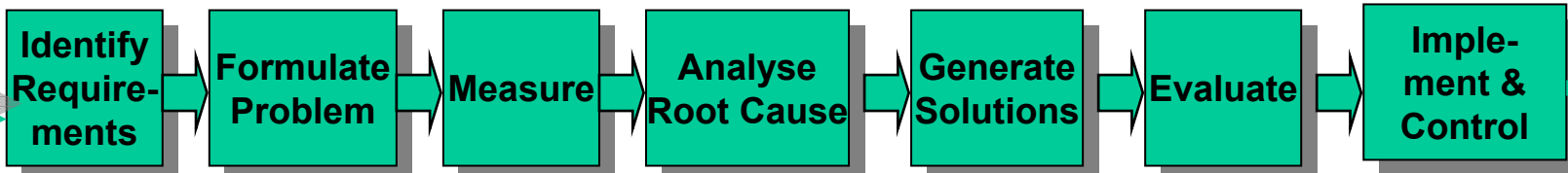
TRIZ-based Idea Generation



The Added Value of TRIZ

STRONG

Unified DMAIC-DMADV-TRIZ Roadmap



Define

Measure

Analyse

Design

Verify

DMADV

Define

Measure

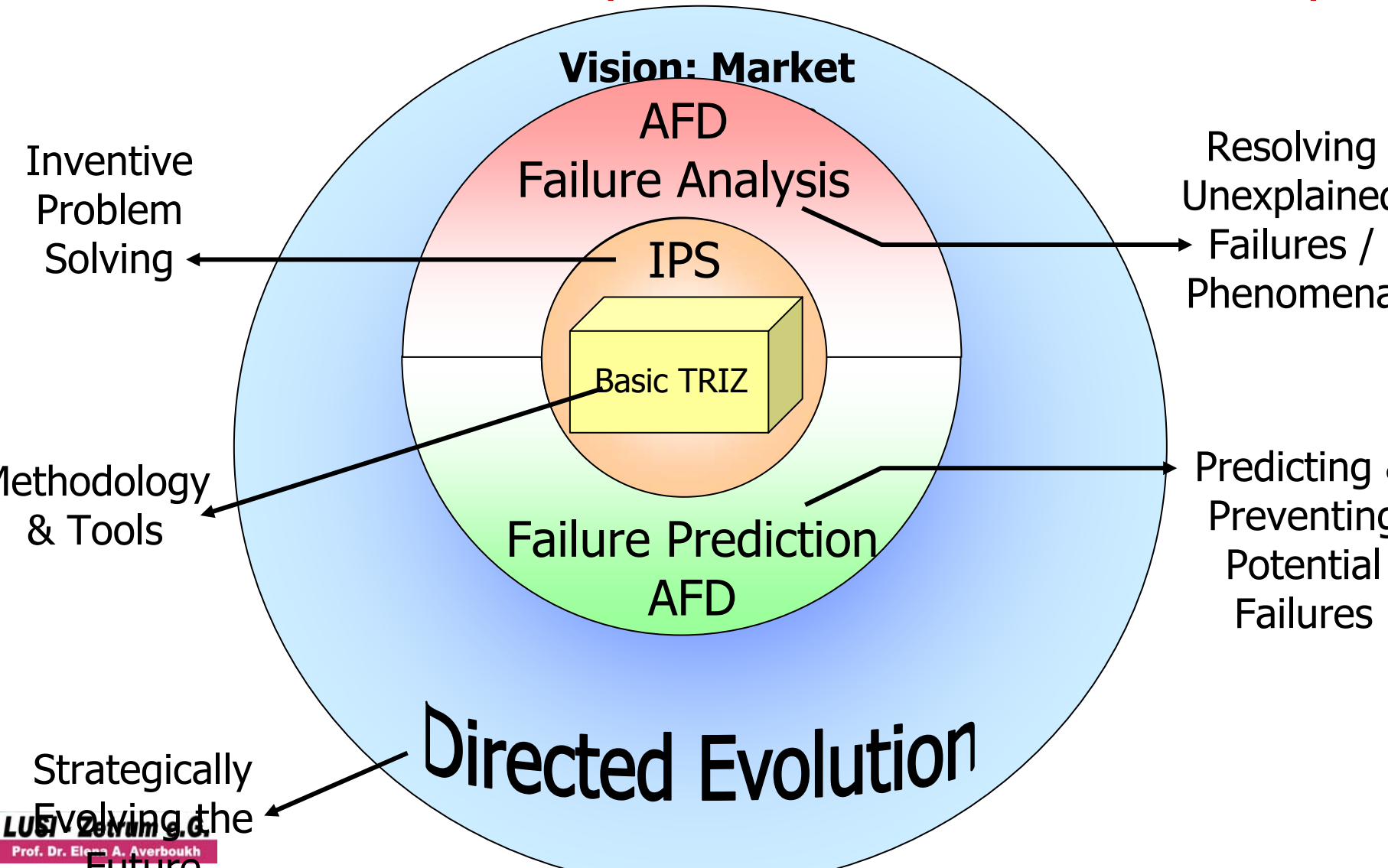
Analyse

Improve

Control

DMAIC

Interactive Knowledge-Based I-TRIZ Tools (Ideation International Inc.)



Upgrade Programme 2007: Goals

Improve **Effectiveness, Efficiency and Return on Investment** of Six Sigma Deployments by

- **Harmonising** methodology and **state-of-the-art** six sigma deployment leadership and executive skills and practices across company divisions, management circles and business processes
- **Enabling** six sigma professionals to efficiently support **Breakthrough & Strategic** business (product and/or service) development, i.e. ensure **top-line** along with **bottom-line** business and financial benefits
- **Integrating** Six Sigma with advanced **Innovation-, Risk- and Project Management** practises
- **Learning** state-of-the-art software technologies and **tools** for efficient performance and Six Sigma project management

Upgrade Programme Specifics

1. Presents a **Unified DMAIC-DMADV-TRIZ Roadmap** for strategic business case and –project management
2. Consists of obligatory and optional **stand-alone training modules, which are integrated into the relevant Six Sigma Roadmaps, i.e.**
 - **DMAIC (Define, Measure, Analyse, Improve, Control)**
 - **DMADV (Define, Measure, Analyse, Design, Verify)**

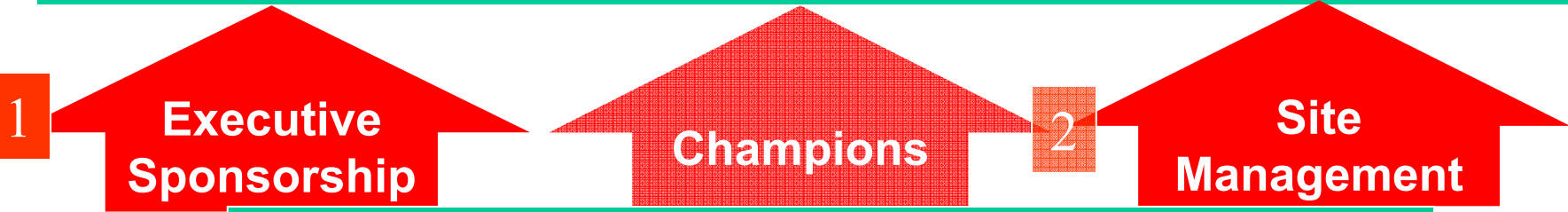
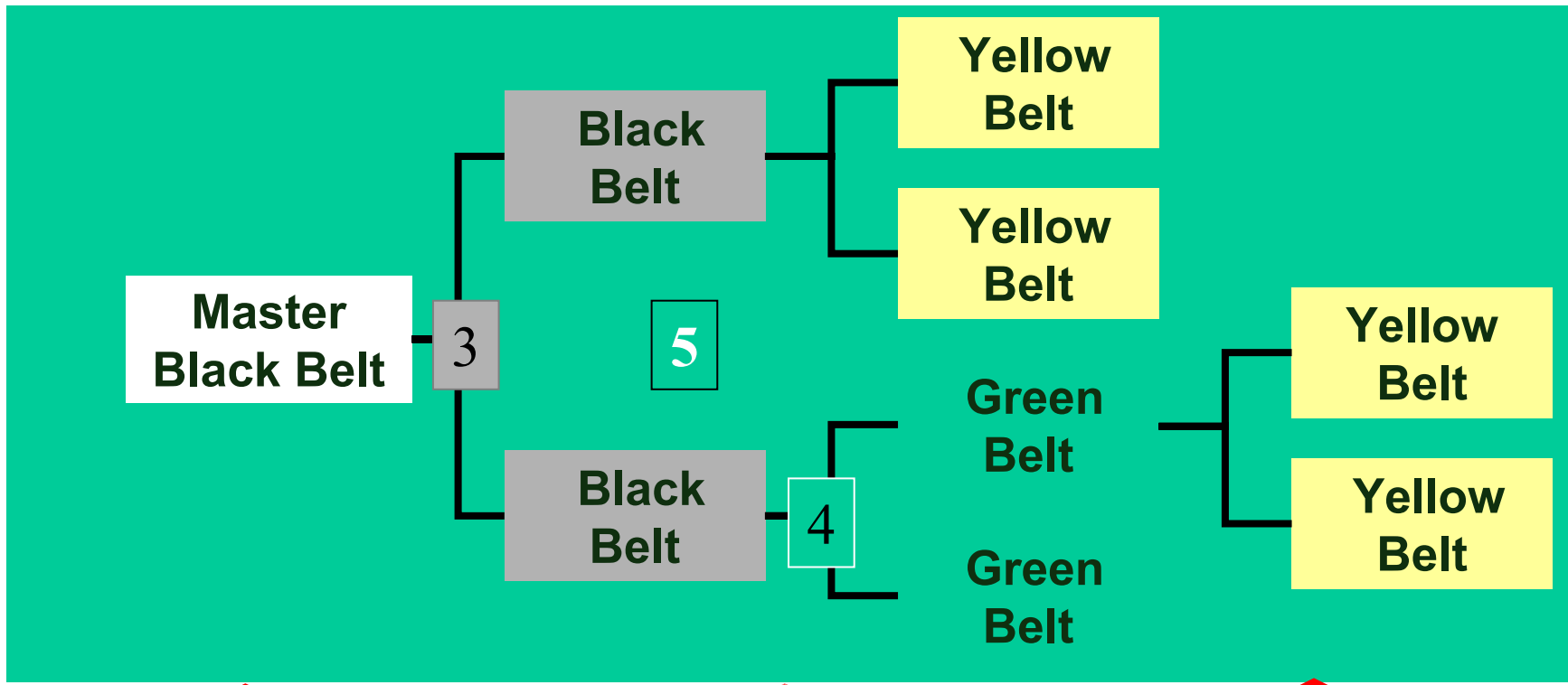
Upgrade Programme Specifics cont.

- . **Project-based hands-on training** with direct and/or virtual coaching
- . **Customised training programmes**, linked and adopted to the
 - Corporate strategy and Balanced Score Card
 - Existing/future corporate Six Sigma Infrastructure and Organisational Structure
 - Six Sigma Deployment strategy and tactics
 - Software tools/license available
 - Budget and time scale available for the upgrade
 - Background (training, professional experiences, projects) of
 - Champions and Sponsors, and
 - Six Sigma Professionals

Corporate Six Sigma Upgrade Training Programme 2007

1. 3-days Six Sigma **Annual Update for Executives** 2007
2. 1-2-days TRIZ Six Sigma Workshop for Champions and Sponsors (to be performed before each upgrade training rollout and/or between upgrade training modules)
3. TRIZ Six Sigma Upgrade for **Black Belts and Master Black Belts** 2007
4. TRIZ Six Sigma Upgrade **Green Belt-to-Black Belt**
5. TRIZ Upgrade for **Six Sigma Professionals** (Green Belt, Black Belt)

Competence Development across SIX SIGMA Professional Infrastructure



Process Owners

Top-Down Upgrade Training Deployment

1. Annual Update for **Executives** (3 days)

1.A Executives Interviews and Coaching in upgrading of Corporate Balanced Score Card, Strategic Business Cases, and Corporate Six Sigma Deployment Strategy (3-7 days)

1.B Review of the ongoing and latest Six Sigma Master Black Belt and Black Belt projects (2-4 days)

1.C Customisation of the training programme for Champions and Sponsors (1-2 days)

Top-Down Upgrade Training Deployment

cont.

2. TRIZ Six Sigma Workshops for Champions and Sponsors (Kick-off, TRIZ Six Sigma Project Definition, Selection and -Management) – before each training rollout (1,5 –2 days) and before stand-alone upgrade training modules (0,5-1 day)

2.A Planning further deployment (1-2 days)

2.B Customisation of the training programmes and materials (4-9 days per training course)

2.C Selection of Software tools for training and Project Management

Top-Down Upgrade Training Deployment cont.

3. TRIZ Six Sigma Upgrade for **Master Black Belts and Black Belts** – customer specific, e.g. 10-14 training days over 3-4 months or as a Summer School (12 training/coaching days in 2 weeks)

3.A. Training trainers (optional) – 3 days

4. TRIZ Six Sigma Upgrade **Green Belt- to- Black Belts** – customer specific, e.g. **10-14** training days over 3-4 months

Project-Based Upgrade Training

- Training session – max 4 days per week (ca. 60-70% Training /30-40% Project Coaching)
- Trainee's Individual Project Work – 2 man-days during the training week, and about 10-12 man-days between training sessions

Upgrade Training Project Selection

- Projects for trainees have to be selected during the TRIZ Six Sigma Workshops for Champions and Sponsors (first rollout – during the Champions Launch Workshop)
- Two types of projects: Class Project vs Individual Projects
 - For TRIZ training modules only 1 Class Project is selected
 - For other training modules – max 4-5 Class (Team) Projects
 - Recommended: separate individual (or team) projects for different training modules
- Mega-projects for MBB

Coaching Resource: Recommended

- Min ½ day per individual (or team) project for each training module or between training sessions, min 3 or 4 times, i.e. 1 ½ -2 days coaching/project
- For TRIZ-tools related projects – virtual coaching by TRIZ instructors/ analysts via internet (1 day - first coaching, ½ days per each iteration, usually 1-3 iterations per coaching)

Upgrade Black Belt Modules 2007

- | | |
|---|----------|
| 1. BB Advanced Statistics | 4-5 days |
| 2. BB Voice of Customers (VOC) | 2-3 days |
| 3. BB Reliability Engineering | 2-3 days |
| 4. BB Transactional | 2-3 days |
| 5. BB Innovative Design (i-TRIZ) | 3-5 days |
| 6. BB E-business | 3-5 days |
| 7. BB Software-Hardware Systems Development | 3-5 days |

Upgrade Master Black Belt Modules 2007

- | | |
|-----------------------------------|----------|
| 1. MBB Advanced Statistics | 4-5 days |
| 2. MBB Voice of Customers (VOC) | 3 days |
| 3. MBB Reliability Engineering | 2-3 days |
| 4. MBB Transactional | 2-3 days |
| 5. MBB Innovative Design (i-TRIZ) | 7-9 days |
| 6. MBB E-business | 4-5 days |

7. MBB Software-Hardware Systems
Development

4-5 days

Contact

Dr. Elena Averboukh

e.averbukh@sixsigma-24.de

Cell (german) +49 172 7857 294

Cell (slovenian) + 38 6 40 51 6789

www.sixsigma-24.de