











WP2.3: Training on participatory building of **strategic scenarios** 

### Guidelines Tuning local strategic scenarios



This project is co-financed (ARPAF funds) by the European Union





### WP2.3: Training on participatory building of strategic scenarios

This presentation is divided in 3 parts:

1. Recall of concepts presented at the workshop

reminder

2. Recall of steps of scenario building done together

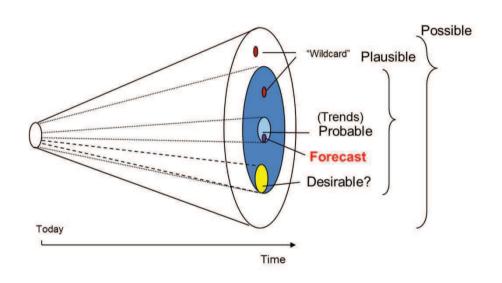
Scenario building

3. Description of task to be perform (with examples from FEM, which already done the task)

**TASK** 



- ✓ Not a single future but multiple futures!
- ✓ Looking only at the probable future we are probably... wrong!



**Probable futures** are those we can see from the data

Plausible futures are those we can think (beyond the data set)

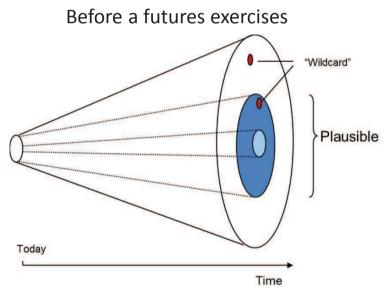
**Possible futures** usually are different to ones we usually think or see (wider, disruptive, more uncertain)

**Desirable futures**: futures preferred over others defined according to the aspirations of one or more subjects

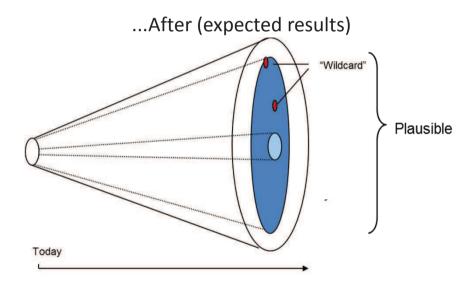
**Wildcards:** surprises, discontinuities, novelties (some may be recognized and included among plausible futures, others may be overlooked).



- ✓ Not a single future but multiple futures!
- ✓ Looking only at the probable future we are probably... wrong!
- ✓ Futures exercises can help broaden our perspective including more possible outcomes than before



The plausible future may initially not include some wildcards (=surprises, discontinuities, novelties)



The plausible future, after training, could include more elements even those initially not considered plausible



- ✓ Not a single future but multiple futures!
- ✓ Looking only at the probable future we are probably... wrong!
- ✓ Futures exercises can help broaden our perspective including more outcomes than before
- ✓ In the "Shell method", Strategic Scenarios (see slide 6) focus on the critical uncertainties, and the whole information about uncertainty range (covered by a set of four scenarios) informs the strategies, rather than a forecasted scenario

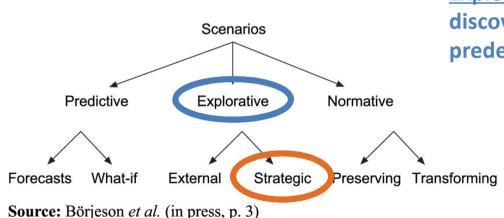


### ✓ A scenario it is not a prediction

Scenarios are consistent and coherent descriptions of alternative **possible futures** that reflect different perspectives on past, present, and future developments, which can serve as **a basis for action**. (Van Notten, 2005)

In the project, we refer to scenario definition following the Shell method,

### ✓ Strategic Scenarios:



**Explorative**: intended for exploration or discovery of critical uncertainties (without predefined variables)

Strategic: specific for the organizations developing them, relevant to their decisions

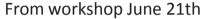
Shell (2008). "Scenarios: An Explorer's Guide" (PDF). www.shell.com/scenarios

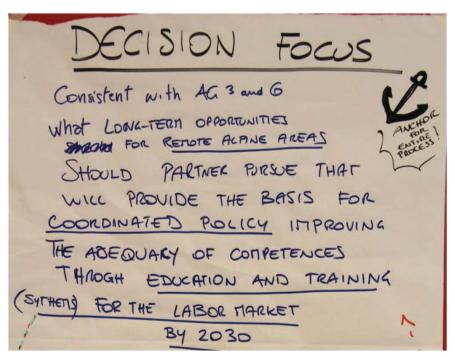


# 1. The Focal Question or Decision Focus and Key Decision Factors

#### A **decision focus** includes:

- Scoping statements of functions and geographies involved or affected by the decision
- Scoping statements of what's not included
- Time period in which the costs and benefits of the decision will be realized







# 1. The Focal Question or Decision Focus and Key Decision Factors

#### **Key Decision Factors:**

- Key externalities affecting the decision
- Events of outcomes about the future we would like to know more about to improve the quality and relevance of decision
- Related to external, largely uncontrollable conditions



From workshop June 21th



### 2. Driving Forces

The scenarios will ultimately be stories describing how different sets of interrelated forces lead to different future outcomes. Identifying the forces driving the focal question might involve simply constructing a list. The intent of the process is to open new thinking and not to reinforce existing frameworks.



From the workshop June 21th



### 2. Driving Forces

Clusters of variables/forces (as identified during the workshop) and the transcription of related post-it.

- Agri-policies: changing subsidies from EU, competition in agri-products by plain-flat areas agri-products, Agri-EU policy
- **2. Family issues**: gender balance, building family, change of pension schemes, new housing concept, new village community of generations, change of pension schemes (public)
- **3.** <u>Local politics</u> (stability): administrative aggregation, political instability, populism leads to low cooperation, political stability (EU, National, Local)
- **4.** <u>Connecting technologies</u>: internet connectivity, technology helps monitoring farming, block chain technology
- 5. <u>International relations</u>: opening borders (relation with different countries),
- **Migration issues**: immigration from other EU-countries, seasonal migration, immigration non-EU, Change of view for entrepreneurship by immigrants, emigration
- 7. <u>Land use dynamics</u>: barriers in buying land or to became entrepreneur, pasture abandonment, forest management/abandonment by private land owners
- **Sustainability issues**: awareness about climate change, request for nature, green jobs, energy literacy, support acceptance of mountaineers by society (urbans), changing value to/of local production, awareness for ecological agriculture (pesticides)
- **9.** <u>Education systems</u>: languages bi-trilingual (especially in border areas), e-learning, increasing competition of education institutions, increasing tertiary education => leaving remote areas
- **10.** <u>Public services</u>: decentralization of education and services (investment in South Tyrol), decrease in public services



Scenario building Pu

### 3. Critical Uncertainties

Purpose in building scenarios is to explore the boundaries of uncertainty and to look for a broad range of future outcomes. The emphasis is on divergence not convergence. Some driving forces are more important than others and some are more uncertain than others.

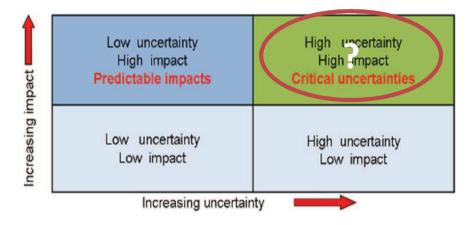
### Clusters of forces are distinguished into 2 groups:

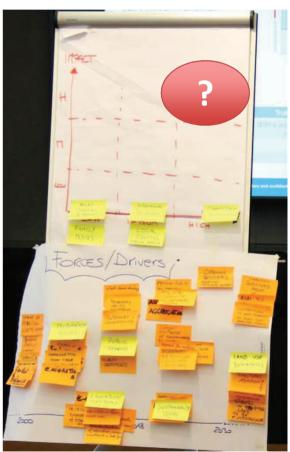
Predetermined	(truly) Uncertain
With a narrow range of future	With a wide range of future outcomes
outcomes or	or
to some extent knowable, with adequate data or knowledge	completely unpredictable



### 3. Critical Uncertainties

The (truly) uncertain clusters are ranked before in terms of uncertainty and then of impact





At workshop June 21°, we ranked all the clusters.



#### 4. Scenario Framework

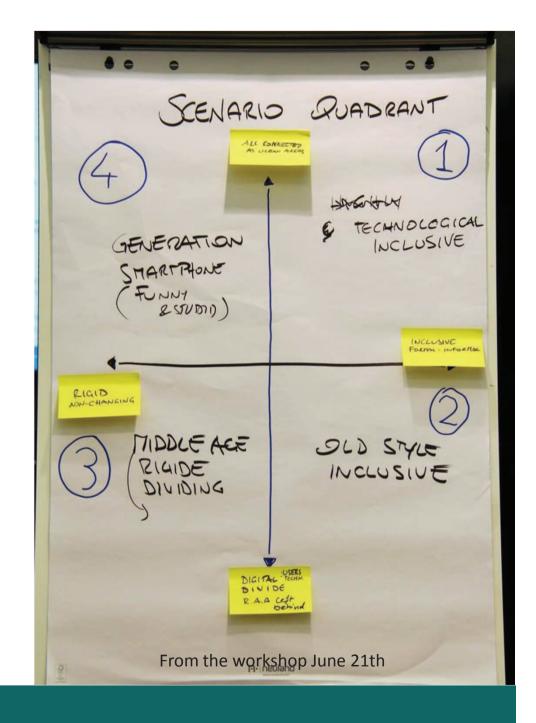
The critical uncertainties are interpreted as continuums and represented as orthogonal dimensions, where each quadrant then represents a unique combination of the critical uncertainties - a 2x2 matrix of plausible future outcomes

#### **Title of Scenario**

should describes the <u>essence of each possible</u> <u>world</u> and be memorable.

#### Narrative – the scenario story

• Write up a paragraph or two to describe your world (skip this if you are running out of time).





#### **5: Scenario Characteristics**

This step involves identifying major characteristics and building a story for each scenario. Characteristics are generated in a creative brainstorming session to describe the future end state. The list of driving forces provides a basis for defining the initial set of characteristics.

The intent is not to tell "true" stories of the future. The "real" future will likely contain elements of all four scenarios. The goal is to learn from the scenarios, to gain insights on what could change, why it could change and what this knowledge might mean for strategic decisions.



### **5: Scenario Characteristics**

# 1° Draft of narrative for Scenario 3 Rigide and dividing middle age

Variables/forces\* and the related plausible outcomes in 2030 used in the narrative:

- \* The local educational system includes a limited number of youngers, being with scarce resources **Education systems**
- \* Robotic automation technology is relatively accessible **Connecting technologies**
- \* Public services are distant Public services
- \* Fragmented families (or with members elsewhere) are little integrated with the local community <u>Family issues</u>
- \* Sensitivity about sustainability is common in all scenarios **Sustainability issues**
- \* Territory monitored but difficult to reach remains at risk of abandonment <u>Land</u> use dynamics

\* Here only a selection of them is used; in the project, we are using a simplified version of the original method, this would require to consider all the elicited variables.

### **5: Scenario Characteristics**

## 1° Draft of narrative for Scenario 3 Rigide and dividing middle age

June, 22, 2030, Adrian is looking at his smartwatch,

concerning the local traditional crops.

Meteo-alert says: "After the extreme rains of the last few days, today is going to be a hot day with dangerous UV level."

He is thinking: I will have to activate Dog-rone, my drone-shepherd to recall the animals to conduct in the barn, from the alpine pastures, before the sun is too high and that the UV rays become too dangerous for their health.

Last year 2029, Adrian was at risk of being unemployed. Arrived in the valley at beginning of 2004, he is thinking about leaving its activity and moving outside the region. Divorced 5 years ago, he is an innovative farmer, although without own land properties, due to the difficulty in buying a piece of arable land for non-locals and non-rich. The yield of 2029 was terribly scarce due to extreme climate events. His son, Denis, 18-year-old, is part of the local community, this year he has not passed the admission test for local vocational school. That school is a good opportunity to get key competences for a modern agriculture, environmental friendly and highly technological; despite being closed and conservative

Adrian and Denis won the local contest in food innovation, with new recipes made with local products, they are also inventors in kitchen.

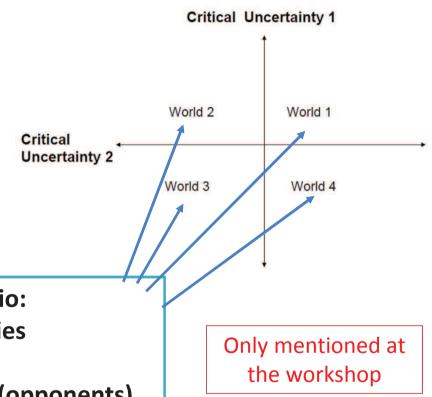
They are really considering moving to the nearest urban area, with more services, and lower living costs. "When we realized that others are leaving the valley we are planning to move too."



### 6: Scenarios to Strategy -**Implications, Issues & Options**

An initial discussion of threats and opportunities for each scenario provides a lead-in to a discussion of strategic issues and options.

The scenarios serve to raise the issues and provide context and perspective on what the issue is and what strategic responses are available.

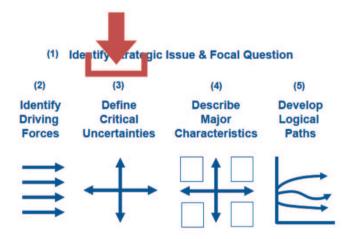


**Descriptors of each scenario:** ☐ Threats and opportunities **☐** Winners/losers ☐ Friends(allies)/enemies(opponents)

Ex	pecte	ed output from each partner is a short report including:				
	☐ Description of the two Critical Uncertainties particularly relevant for the					
	local context:					
		Name				
		What it is (in 1-2 sentences)				
		Possible outcomes over the next 5-10 years				
		What other forces influence it?				
		What other forces are influenced by it?				
	Sch	eme of Scenario Framework relevant for the local context				
		title and short description (few sentences explaining the titles)				
	Des	cription of two extreme Scenarios (1 and 3):				
		List of variables/forces and plausible outcomes in 2030				
		Short narration, approx. half-page, of the two possible worlds (scenarios) in				
		2030 (referring to realistic persons/roles in that reality)				
	Des	2030 (referring to realistic persons/roles in that reality)  cription of the related implications and issues:  Threats and opportunities  Winners/losers  Allies/Opponents  BY September 15  BY September 15				
		Threats and opportunities				
		Winners/losers tenth and the second s				
		Allies/Opponents Sev				
		BY				



### The task for partners starts at the step 3: Critical Uncertainties





#### 3. Critical Uncertainties

Reconsider the 10 clustered variables/forces from the previous step (done at the workshop June 21-22) and <u>divide them into the 2 groups</u> (*Predetermined* or *Uncertain*), considering THE SELECTED AREA (social, economic, territorial conditions) and the common DECISION FOCUS (defined in the workshop) In other words:

ask yourself if each cluster of forces can be considered as "pre-determined" or "uncertain" for the local context

Predetermined	(truly) Uncertain
With a narrow range of future outcomes or to some extent knowable, with adequate data or knowledge	With a wide range of future outcomes or completely unpredictable



### 3. Critical Uncertainties

Predetermined	(truly) Uncertain
With a narrow range of future outcomes or to some extent knowable, with adequate data or knowledge	With a wide range of future outcomes or completely unpredictable
agri-policies family issues education systems public services migration issues land use dynamics public services	local politics connecting technologies international relations



### 3. Critical Uncertainties

Consider only the *truly Uncertain variables* 

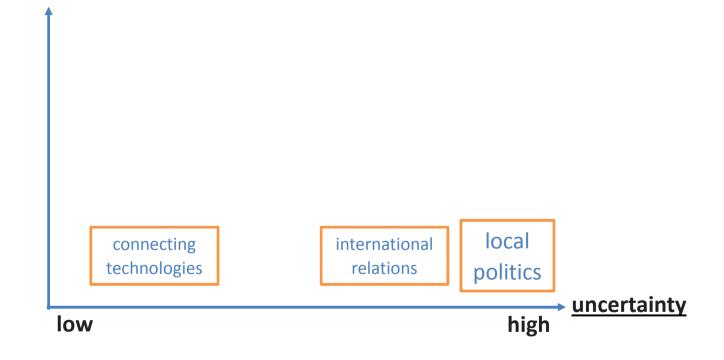
Predetermined	(truly) Uncertain
agri-policies family issues education systems public services migration issues land use dynamics public services	local politics connecting technologies international relations



#### 3. Critical Uncertainties

Considering only the *truly Uncertain variables for* the selected area and DECISION FOCUS, first order **them by their uncertainty** 

- local politics
- connecting technologies
- international relations

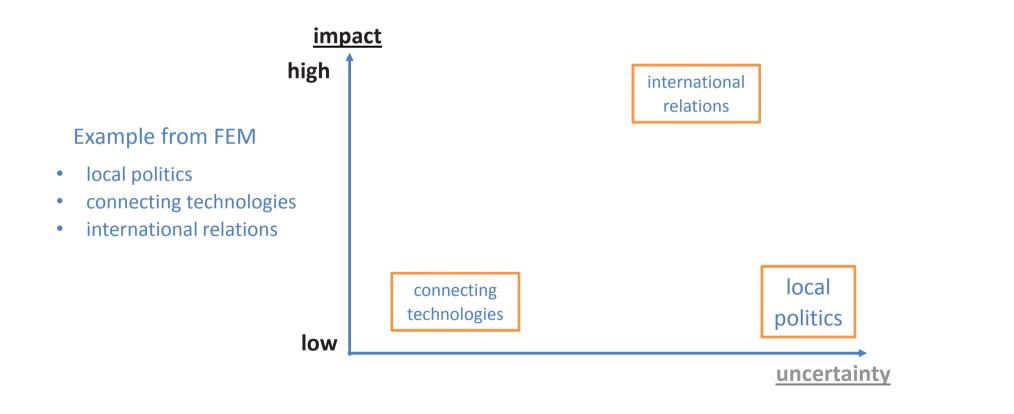




# Low uncertainty High impact Predictable impacts Low uncertainty High impact Critical uncertaintes Low uncertainty Low impact Low impact Increasing uncertainty

### 3. Critical Uncertainties

Then, order them by their impact (in future)

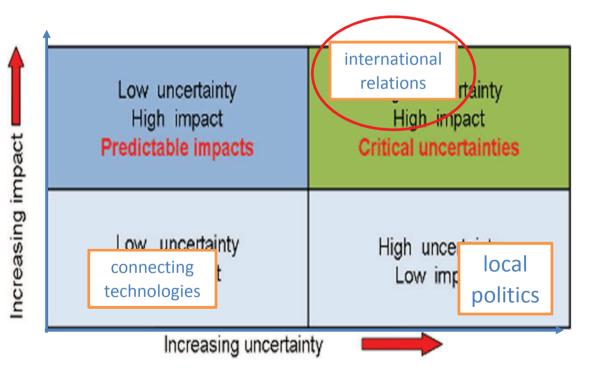




#### 3. Critical Uncertainties

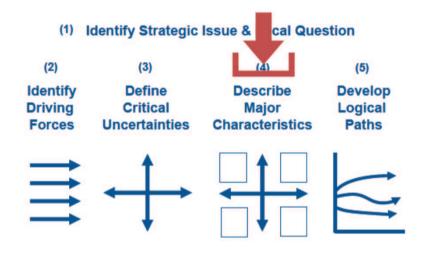
Considering the most uncertain and most impacting variable for the selected your selected area, re-define the **quadrant of scenarios**, in which one axe is equal for all partners: **connecting technologies** 

- local politics
- connecting technologies
- international relations





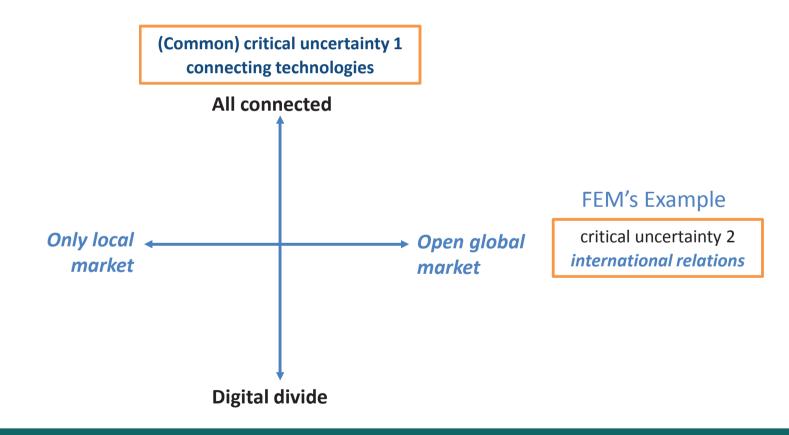
# The task for the partners continues with step 4: describe major characteristics





#### 4. Scenario Framework

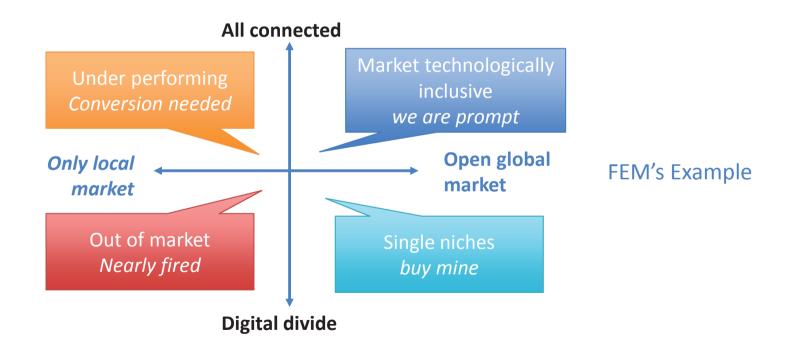
Set the framework by identifying the two plausible extreme outcomes for each critical uncertainty





#### 4. Scenario Framework

Find an inspiring title (or slogan) for each quadrant





#### **5. Scenario Characteristics**

Write up a paragraph or two to describe each possible world (or explaining the titles)

FEM's Example

#### All connected

Local companies are at the forefront from the technological point of view, all well connected and collaborating with each other, but limited to the regional market due to difficulties in the international one.

competitive settings they would have difficulty competing for jobs.

In this scenario the international relations are open and easy, the local firms interact with others abroad and receive orders from abroad, the technology and connectivity is equivalent as in urban and more industrial areas. Almost all local young people are employed and well prepared or close to it.

### Only local market

Due to difficult international relations (or high costs), local businesses operate in a local or national market, the most rely on traditional organizational and production models. Many young people do not have technologically up-to-date skills, in more

Open global market

Few distinct companies are well connected and innovative, with profitable relationships with others abroad. But locally there are no interactions or poorly inclusive. Many young people are integrated into local companies, but many with fewer resources are not skilled in new technologies (e.g. IoT, robotics)

**Digital divide** 



### 6: Scenarios to Strategy - Implications, Issues & Options

For only two opposite scenarios\* (1 and 3) define the related descriptors in relation with DECISION FOCUS (see slide 7) and your selected area:

Threats and opportunities

### Scenario 3 "Out of market - Nearly fired"

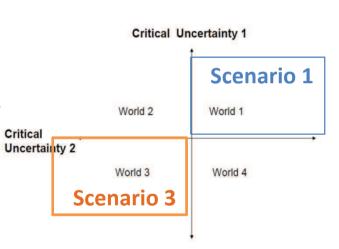
#### **Threats**

 Unemployment → emigration or several small jobs/part-time are required → less time for community services

 Firm closing → decreasing values in the real estate sector

#### **Opportunities**

- Decreasing price of productive or residential buildings
- Workforce easily available (in the short period)



### Scenario 1 "Open global market - We are prompt"

#### Threats

- The local education system could remain obsolete
- Public authorities and educational authorities could be resistant to change

#### **Opportunities**

- Informal education can establish new alliances between businesses and schools
- Creation of a new innovation center that connects companies in the value chain

FEM's Example

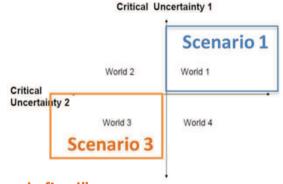
<sup>\*</sup> In the project, we are using a simplified version of the original method; this requires to consider all four scenarios.



### 6: Scenarios to Strategy - Implications, Issues & Options

For only two opposite scenarios\* (1 and 3) define the related descriptors in relation with DECISION FOCUS (see slide 7) and selected area:

- Threats and opportunities
- Winners/Losers



Scenario 1 "Open global market - We are prompt"

#### Winners

- Youngers more skilled
- Firms and municipalities

#### Losers

Non-skilled people

#### Scenario 3 "Out of market - Nearly fired"

#### Winners

- Speculators
- Few competing companies

#### Losers

- · Employees, linked to value chain firms
- Public administrations

\* In the project, we are using a simplified version of the original method; this requires to consider all four scenarios.

FEM's Example



### 6: Scenarios to Strategy - Implications, Issues & Options

For only two opposite scenarios\* (1 and 3) define the related descriptors in relation with DECISION FOCUS (see slide 7) and selected area:

- Threats and opportunities
- Winners/Losers
- Allies/Opponents

Critical Uncertainty 1

Scenario 1

World 2

World 1

World 3

World 3

Scenario 3

### Scenario 3 "Out of market - critical Uncerta

#### Allies

 Public authorities (providing subsidies for companies and unemployed)

#### **Opponents**

- Education authorities (closing schools)
- Education system (incapacity to respond to change/challenges)

### Scenario 1 "Open global market - We are prompt"

#### Allies

- Local Firms (developing local innovation projects)
- Education authorities (developing cooperation with privates)

#### **Opponents**

 Education and public bureaucracy (hampering cooperation between companies and schools)

=EM's Examples

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