



3rd LEARNING JOURNEY Monitoring and indicators

Susanna Longo Finpiemonte SpA Susanna.longo@finpiemonte.it

Outline



Design of monitoring system, gathering and data analysis

Design of the monitoring system

- The logic process
- Indicators in Piedmont S3

Data gathering and analysis

- IR2 Industrialisation of research results
- Fabbrica Intelligente (Technology Platform)
- Poli d'innovazione (innovation clusters)
- ERANETS and MPMI



Put the bases for a monitoring system

CONTEXT

Have clear the profile of the Region and the context

FOCUS

Set the focus on your area of interest (focus your strategy)

CHANGE

Define the change that you aim to introduce (general, specific)

VARIABLES

Identify the variables that will represent the change (indicators)

ANALYSE

Analyse progressively (and measure) the distance from the expected changes and what really happened

REVISE

Indicate how the strategy should be revised. Indicate the elements that attribute the results to the regional context (endogenous/exogenous factors) or to the action effectiveness.

Example from Piedmont



CONTEXT

Context Analysis for S3 and lessons learnt from previous programming

FOCUS

R&D/Innovation (one of the 5 EU2020 Strategic Objectives)

CHANGE

- > Stronger productive system and new entrepreneurship
- More attractive innovation ecosystem
- > Wellbeing for citizens and facing demographic change

S3 Innovation Areas

VARIABLES

Increase of investments in R&D/Innovation

ANALYSE

- ✓ STRATEGY indicators (3 out of 7 relevant for AM policy mix)
- ✓ SECTOR indicators
- ✓ RESULTS indicators + OUTPUT indicators

Quantitative/qualitative analysis (implementation, effectiveness)

REVISE

Process for the revision/updating of S3



Strategy Indicators (applicable to AM)

S3 INNOVATION AREAS	STRATEGY INDICATORS	DEFINITION AND SOURCE	
STRONGER PRODUCTIVE SYSTEM AND NEW ENTREPRENEURSHIP	Researchers employed in enterprises on the total of employees	Number of researchers on total employee (%) Source: Istat – National Statistics Institute	
	Capacity to export	Value of export on GNP (%) Source: Istat – National Statistics Institute	
MORE ATTRACTIVE INNOVATION ECOSYSTEM	Intensitivity in Patenting	Number of registered patents at EPO per million of inhabitants Source: Istat – National Statistics Institute	

From ISTAT Exogenous factors IR2 – Industrialisation of research results Poli d'innovazione (innovation clusters) Fabbrica Intelligente (Technology Platform)



Sector Indicators (applicable to AM)

Aimed to classify the sectors of economic activity according to their capacity to generate industrial innovation.

They provide further evidence regarding the possible effects of the Strategy on regional economic dynamics and pave the way to possible modifications to the S3 areas:

SECTOR INDICATORS

Number of employees

Number of local units

Specialization index (measuring the propensity to export)

AEROSPACE, AUTOMOTIVE, GREEN CHEMISTRY, MECHATRONICS, MADE IN



Annual survey on the sectors currently qualified as innovative (industrial innovator sectors)

Deferred analysis (three years) on the whole of the regional productive structure

Comparison of performances among sectors, to suggest possible changes in the areas of specialization.



Result and output indicators

RESULT INDICATOR	POLICY MIX	OUTPUT INDICATOR	S 3
Companies that have carried out R&D activities in collaboration with external organisations, out of the total of companies that do R&D (%)	IR2	N. companies that receive support	Ir
		N. of companies supported to introduce new products that are new to the market	in
		N. beneficiaries supported to introduce products that are new to the company	as Ra
		N. companies that receive support	e o &D/
Source: Istat	INNOVATION	N. of companies that cooperate with research institutes	
	CLUSTERS	Private investments combined with public support for R & D projects and innovation	inv
		Employment growth in companies receiving support	es va
Incidence of total R & D expenditure on GDP (%)	TECHNOLOGY	N. companies that receive support	tio
		N. of companies that cooperate with research institutes	1el
Source: Istat	PLATFORMS	Private investments combined with public support for R & D projects and innovation	nts

Baseline valueFrom ISTAT



Target value

Poli d'innovazione (innovation clusters)

ERANET projects (MANUNET)

Innovazione MPMI

EX-POST Evaluation

(based on previous programming period 2007-2013)

Outline



Design of monitoring system, gathering and data analysis

Design of the monitoring system

- The logic process
- Indicators in Piedmont S3

Data gathering and analysis

- IR2 Industrialisation of research results
- Fabbrica Intelligente (Technology Platform)
- Poli d'innovazione (innovation clusters)
- ERANETS and MPMI



Data gathering and data analysis

Dare indicazioni su come vengono raccolti e analizzati gli indicatori di strategia, di Settore, di risultato e di output.

I dati del rapporto di innesco a quali indicatori si legano (strategia, risultato output...)?

Specificare per ogni misura la parte relativa al data analysis (come viene in concreto effettuata l'analisi indicata nella methodology)



IR2 - Industrialisation of research results

Objective:

Understanding which sectors is affected by the project and which type of companies are involved

When: in-itinere, while the funding measure is running

Data sources:

- Information and administrative documents collected through the measure managers (e.g. Finpiemonte)
- Data from official statistical databanks
- Information collected from beneficiaries through interviews

Methodology: Implementation analysis + Study of cases.



IR2 – Industrialisation of research results

Objective:

Verifying the successful completion of the project, its anchorage to the territory with the planned industrial investments and its impacts.

When: at the end of the funding measure (ex-post)

Data sources:

- Information and administrative documents collected through the measure managers (e.g. Finpiemonte)
- Data from official statistical databanks
- Information collected from beneficiaries through interviews (preferably web based) and ad-hoc surveys

Methodology: qualitative-quantitative techniques (possibly counterfactual methods, qualitative analysis)

Fabbrica Intelligente (Technology Platform)



Objective:

Verifying the main aspects of the process and the results achieved (application presented/ admitted/ rejected, number of projects realized, typology of projects realized)

When: in-itinere, while the funding measure is running

Data sources:

- Information and administrative documents collected through the measure managers (e.g. Finpiemonte)
- Data from official statistical databanks
- Information collected from beneficiaries through interviews and ad-hoc surveys

Methodology: Process analysis, qualitative techniques and case studies

Fabbrica Intelligente (Technology Platform)



Objective:

Verifying the effects (the difference between what is observed at the end of the funding measure and what would be observed in its absence

When: at the end of the funding measure (ex-post)

Data sources:

- Information and administrative documents collected through the measure managers (e.g. Finpiemonte)
- Data from official statistical databanks
- Information collected from beneficiaries through interviews and ad-hoc surveys

Methodology: Controfactual analysis + Beneficiary survey (due to the small number of large projects) + case studies

Poli d'innovazione (innovation clusters) 2014/20



Objective:

❖ Verifying the measure working progress with particular attention to beneficiaries and projects presented

When: in-itinere, while the funding measure is running

Data sources:

- Information and administrative documents collected through the measure managers (Piemonte Region, Finpiemonte, Innovation clusters)
- Data from official internal and external (statistical) databanks

Methodology: implementation analysis



Poli d'innovazione (innovation clusters)

ERANET projects (MANUNET)

Innovazione MPMI

EX-POST Evaluation

(based on previous programming period 2007-2013)

Poli d'innovazione (innovation clusters) 2007/13



Objective:

Accountability: give back an information heritage on what has been done

Data sources:

- Data from official internal and external databanks
- Information collected from beneficiaries through interviews and ad-hoc surveys

Methodology: Case study analysis + Analysis of results without qualitative evaluation + Quantitative methodologies (study on the networks + counterfactual analysis and spatial descriptive statistics) + impact evaluation

ERANET projects (MANUNET)



Objective:

Evaluation on effectiveness, impact and "administrative quality" of funding measures incentivising innovation in SMEs

Data sources:

On line platform with questionnaire including:

- A specific section dedicated to beneficiaries
- A section dedicated to both beneficiaries and SMEs from a reference sample

Methodology: Qualitative analysis + comparative analysis on performances and attitude to innovation



Innovazione MPMI

Objective:

Evaluating impact of funding measures on turnover, investments, labour productivity and occupation

Data sources:

- Information and administrative documents collected through the measure managers (e.g. Finpiemonte)
- Data from official statistical databanks (Aida and Istat Asia)

Methodology: Quantitative counterfactual analysis on the results of the previous programming (2007-2013)

Data Analysis

The impact assessment requires to compare the turnover, investment, employment and labor productivity etc in companies financed (beneficiaries) with the same variables that would have been produced in the same period in companies non financed (non beneficiaries).