

Come massimizzare l'impatto in Horizon 2020.

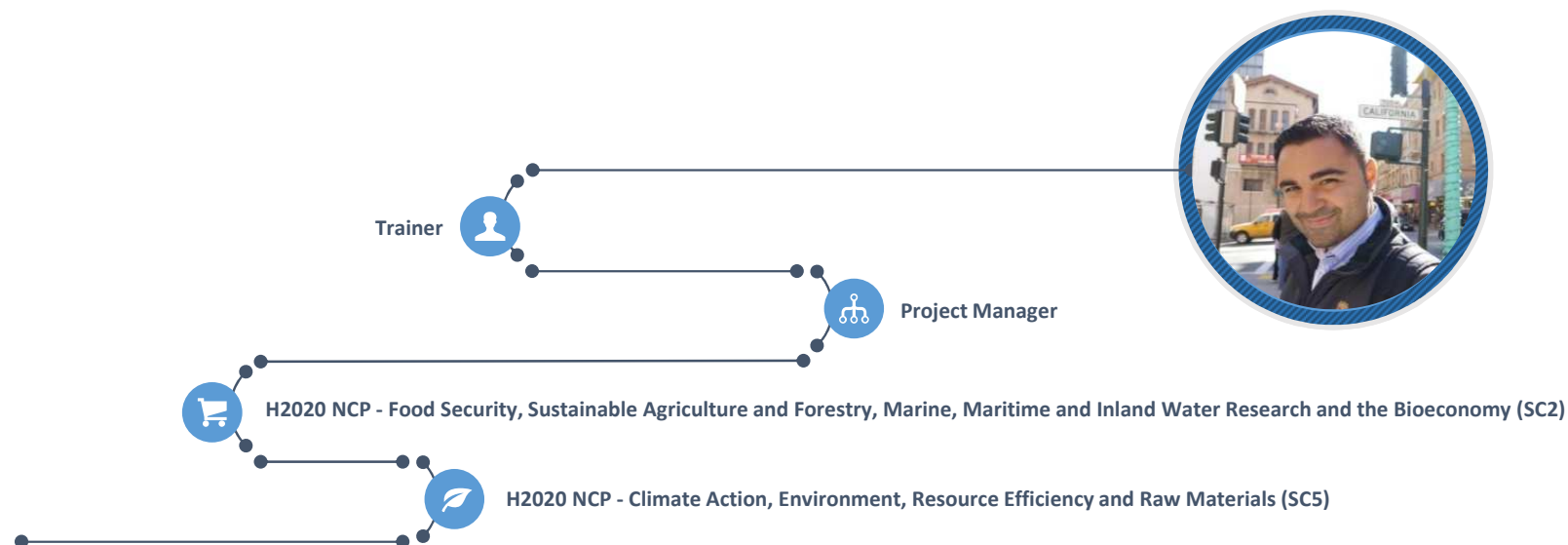
Matteo Di Rosa

H2020 National Contact Point for:

Climate Action, Environment, Resource Efficiency and Raw Materials (SC5)

*Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water
Research and the Bioeconomy (SC2)*

Chi sono



🎓 Bachelor Degree in Natural Science

🎓 Master Degree in Communication and Fundraising

i miei contatti

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Agenda

Quali argomenti tratteremo oggi

Gli argomenti di questa giornata...

Mattina

- Alcuni concetti: Impatto e valorizzazione
- Analisi del Template: Cosa c'è da imparare
- Impatto atteso e altre forme di impatto
- Disseminazione, Comunicazione e sfruttamento: differenze e come strutturare un piano
- Open Access e Open Data
- Standards
- Cenni di IPR
- Public Engagement
- Cosa sbagliare per fallire: prospettive di un valutatore

Pomeriggio

- Esercitazione

Impatto e Valorizzazione

Impatto

Impatto = misura del beneficio che deriva dall'Innovazione

- Più grande sarà il beneficio maggiore sarà l'impatto
- Ogni tipo di beneficio
- Non deve essere necessariamente finanziario
- ...ma anche sociale, tecnico, commerciale, ambientale...

Deve andare al di là della durata del progetto

Innovare = creare Valore

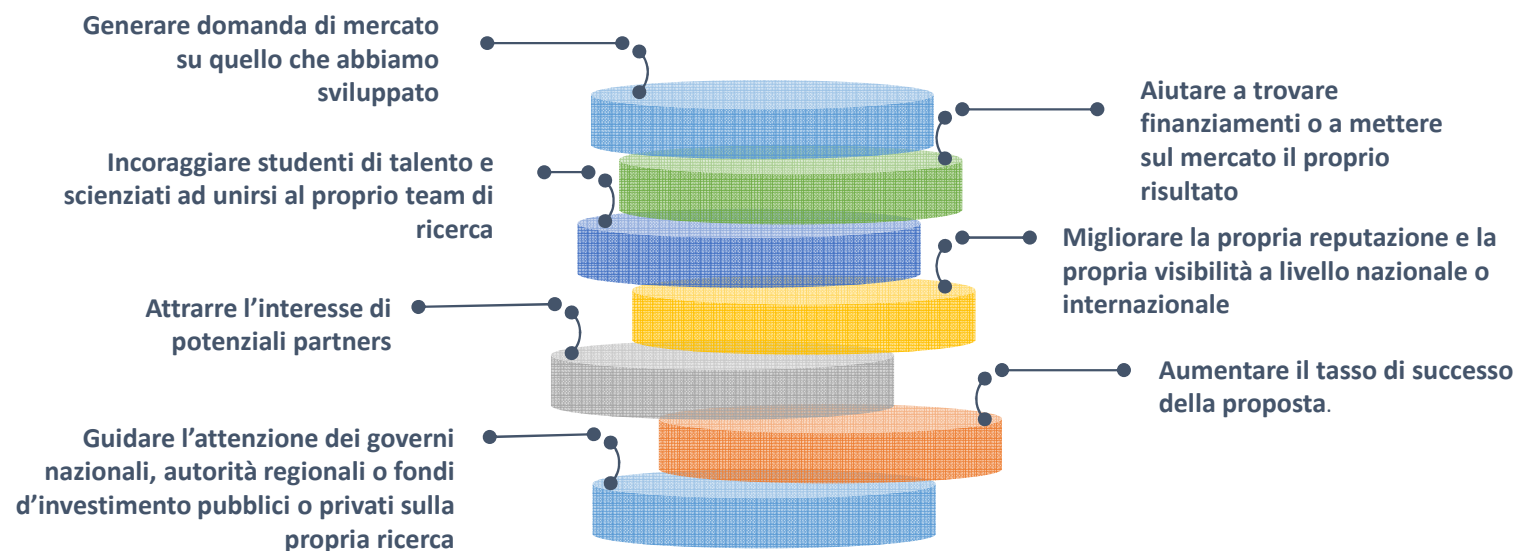
Portare qualcosa di nuovo e di utile nell'uso comune:

- novità in assoluto
- migliorare qualcosa già esistente
- trasformare idea in fatturato, profitto, o qualcosa di utile
- cambiare le "regole del gioco"

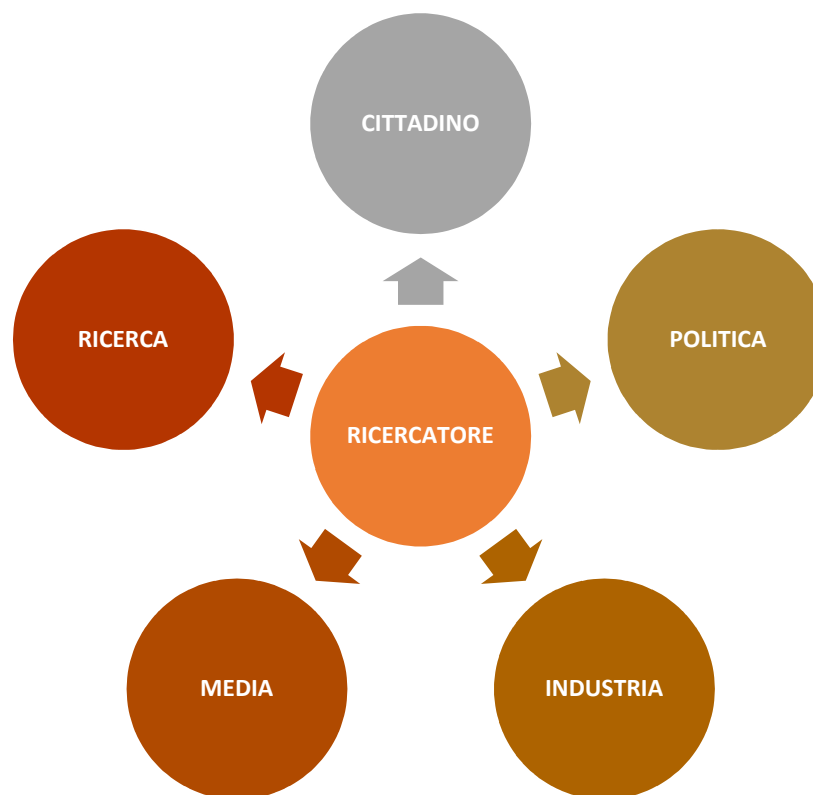
Valorizzare per impattare meglio



Perché creare valore?



Scienziati e Torre d'Avorio



Si valorizzava già nel passato



Galileo: accusato dalla chiesa perché scriveva in volgare



Faraday: che ogni venerdì teneva delle conferenze alla Royal Institution per raccontare i progressi della scienza

Ed oggi?



Richard Dawkins



Stephen Hawking



Edward Osborne Wilson

in Italia...



Piero e Alberto Angela



Mario Tozzi



Samantha Cristoforetti

L'impatto in horizon 2020

HORIZON 2020

Initial Commission proposal for a
€80 billion research and
innovation funding programme
(2014-2020); now just over
€70 billion (79 billion in current
prices including inflation)

La struttura di Horizon 2020

Excellent science

- European Research Council
- Future and Emerging Technologies
- Marie Skłodowska-Curie actions
- European Research Infrastructures, including e-Infrastructures

Industrial leadership

- Leadership in enabling and industrial technologies
 - Information and Communication Technologies
 - Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology
 - Space
- Access to risk finance
- Innovation in SMEs
 - The SME Instrument
 - The Eurostars programme

Societal challenges

- Health, demographic change and wellbeing
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, environment, resource efficiency and raw materials
- Europe in a changing world - inclusive, innovative and reflective societies
- Secure societies - protecting freedom and security of Europe and its citizens.

Fast Track to Innovation Pilot (2015-2016)

Spreading Excellence and Widening Participation

Science with and for Society

European Institute of Innovation and Technology (EIT)

Euratom

Caratteristiche di Horizon 2020



Inoltre, per l'EU è così importante...

GIUSTIFICARE

- Per valutare l'impatto a livello europeo della ricerca finanziata con i soldi dei contribuenti

CONDIVIDERE

- Per garantire che vi sia un beneficio per i cittadini europei

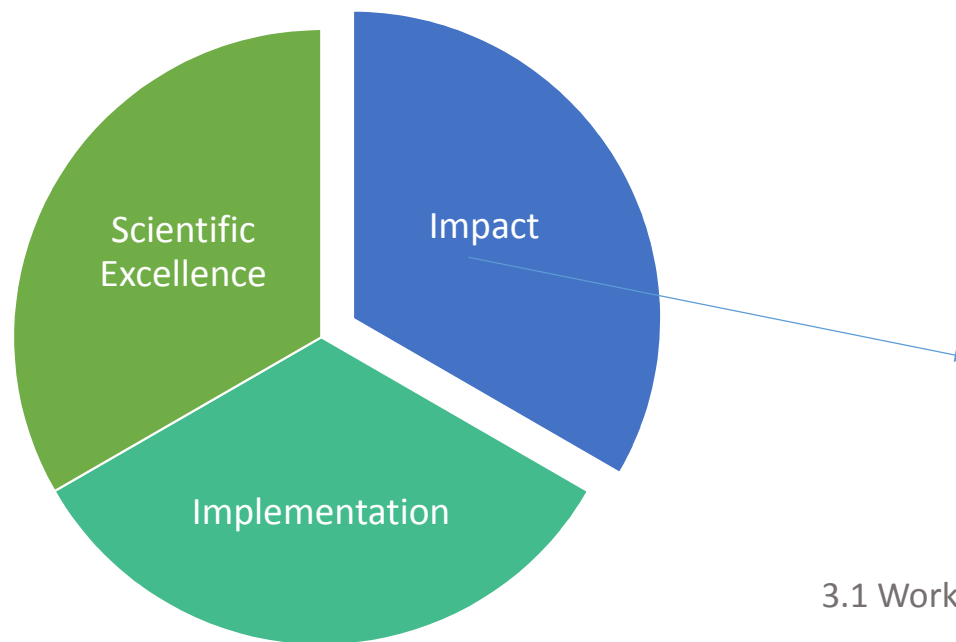
AUMENTARE LA CONOSCENZA

- Per supportare le politiche europee e le decisioni nei diversi settori

Analisi del template

Cosa c'è da imparare

Impact Section



1: Excellence

1.1 Objectives

1.2 Relation to work programme

1.3 Concept and methodology

1.4 Ambition

2. Impact

2.1 Expected impacts

2.2 Misure to maximise impact

a) Dissemination and exploitation of results

b) Communication activities

3. Implementation

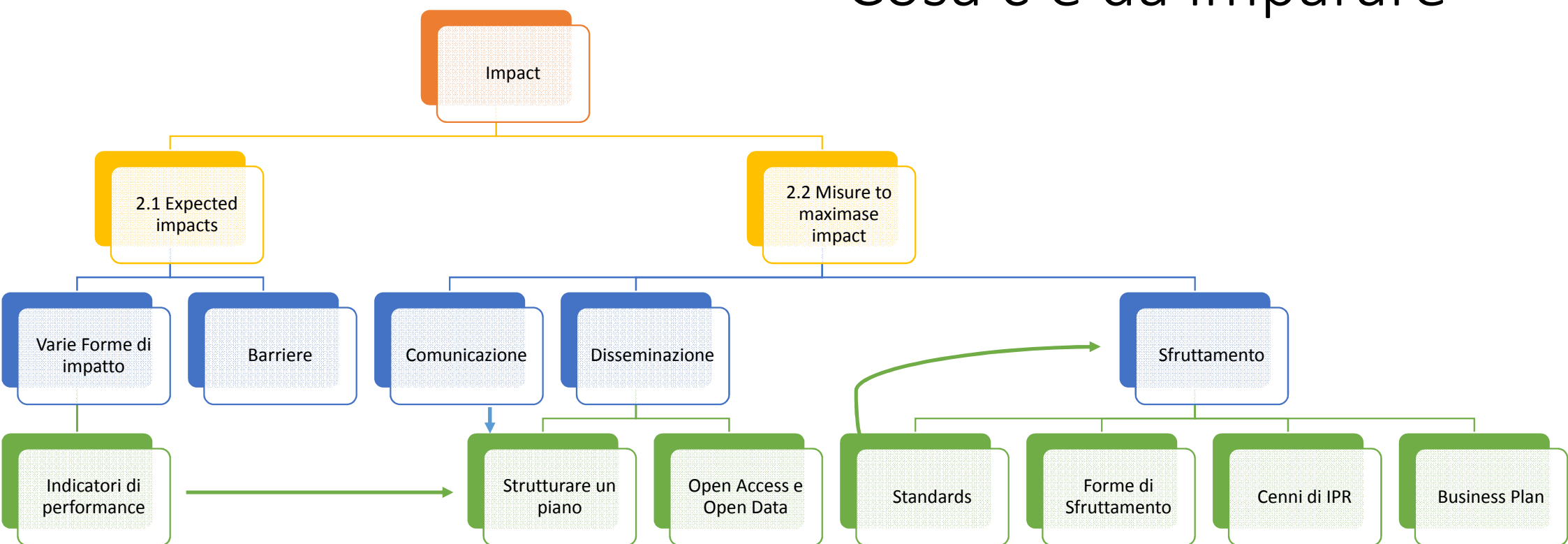
3.1 Work plan – work packages, deliverables and milestones

3.2 Management structure and procedures

3.3 Consortium as a whole

3.4 Resources to be committed

Cosa c'è da imparare



Expected Impact

E altre forme di impatto

Prima di iniziare...

Pensa out of box

- Quali sarebbero i cambiamenti apportati , introducendo la vostra innovazione sul mercato?
- Qual è il potenziale di crescita atteso dalla soluzione in termini di fatturato, occupazione, aggressione del mercato, gestione della proprietà intellettuale, le vendite, il ritorno sugli investimenti e profitto , ecc?
- Quale dovrebbe essere il finanziamento o le condizioni per poter raggiungere il mercato?

Conosci lo scenario

- IPR
- Ambiente
- Mercato
- Standard
- Etica
- Competitors
- Società
- Tecnologia

Impact

2.1 Expected impacts

Describe how your project will contribute to:

- each of the expected impacts mentioned in the work programme, under the relevant topic;
- any substantial impacts not mentioned in the work programme, that would enhance innovation capacity; create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society

Example PHC 10 – 2014: Development of new diagnostic tools and technologies: in vitro devices, assays and platforms

Expected impact:

- Innovative, more accurate, more reliable and cost effective in vitro **diagnostic tools** and technologies for earlier disease diagnosis, patient stratification and/or prognosis of disease outcome leading to improved clinical decisions and health outcomes.
- Contribution to the sustainability of **health care systems**.
- Growth of the European diagnostics sector, in particular for **SMEs**.

Il template in dettaglio

each of the expected impacts mentioned in the work programme, under the relevant topic;

Aiutati con:

- Tabella comparativa

Considera sempre:

- Informazioni quantitative
- Indicatori Misurabili
- Giustificare le ragioni per cui hai risposto a quanto chiesto nel topic



Il template in dettaglio

any substantial impacts not mentioned in the work programme, that would enhance innovation capacity;

Ricorda l'impatto:


- ambientale
- sociale
- economico
- scientifico

• **Innovation Capacity**

- Which further innovations will be stimulated by your project results --> increase the amount of benefits delivered?
- Potential to be used in other areas beyond project objectives? (© Eugene Sweeney)

• **Innovation Potential**

- How much benefit (innovation) can project results potentially deliver? (© Eugene Sweeney)



address issues related to climate change or the environment, or bring other important benefits for society;

Impatto ambientale

Climate action and sustainable development

- As key Horizon 2020 objectives, climate action and sustainable development are relevant to all areas of the programme. At least 35% of Horizon 2020's total budget is expected to address climate action, while at least 60% is expected to involve sustainable development.
- When drafting your proposal, please specify your project's expected contribution to climate action and sustainable development objectives, if applicable.

A polar bear is shown from the side, standing on a dark, jagged rock formation. It is looking out towards a turbulent sea with white-capped waves. The sky is dark and filled with heavy, dramatic clouds, suggesting an approaching storm. The overall mood is somber and urgent, reflecting the theme of climate change.

Climate action includes:

- mitigating climate change (helping to cut greenhouse gas emissions)
- adapting to the impact of climate change by building resilience to phenomena such as flooding, droughts and other extreme weather events
- contributing to understanding the causes of climate change.

Sustainable Development:

- development that meets the needs of the present without compromising the ability of future generations to meet their own needs within the planet's physical boundaries.
- Sustainable development has economic, social and environmental dimensions.

Il template in dettaglio

Describe any barriers/obstacles, and any framework conditions (such as regulation, standards, public acceptance, workforce considerations, financing of follow-up steps, cooperation of other links in the value chain), that may determine whether and to what extent the expected impacts will be achieved. (This should not include any risk factors concerning implementation, as covered in section 3.2.)

Considera:

- Legislazione e standard
- Publica accettazione
- Considerazioni sulla forza lavoro
- Finanziamento degli step di follow-up
- Cooperazione dei diversi elementi che compongono della value chain)

Coffee Break

15 Minuti



Comunicazione, Disseminazione e sfruttamento dei risultati

Maggiori Differenze

Impact

2.2 Measures to maximise impact

a) Dissemination and exploitation of results

- Provide a draft '**plan for the dissemination and exploitation of the project's results**'. Please note that such a draft plan is an admissibility condition, unless the work programme topic explicitly states that such a plan is not required. Show how the proposed measures will help to achieve the expected impact of the project. The plan, should be proportionate to the scale of the project, and should contain measures to be implemented both during and after the end of the project. For innovation actions, in particular, please describe a credible path to deliver these innovations to the market.
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- Outline the strategy **for knowledge management and protection**. Include measures to provide **open access** (free on-line access, such as the 'green' or 'gold' model) to peerreviewed scientific publications which might result from the project

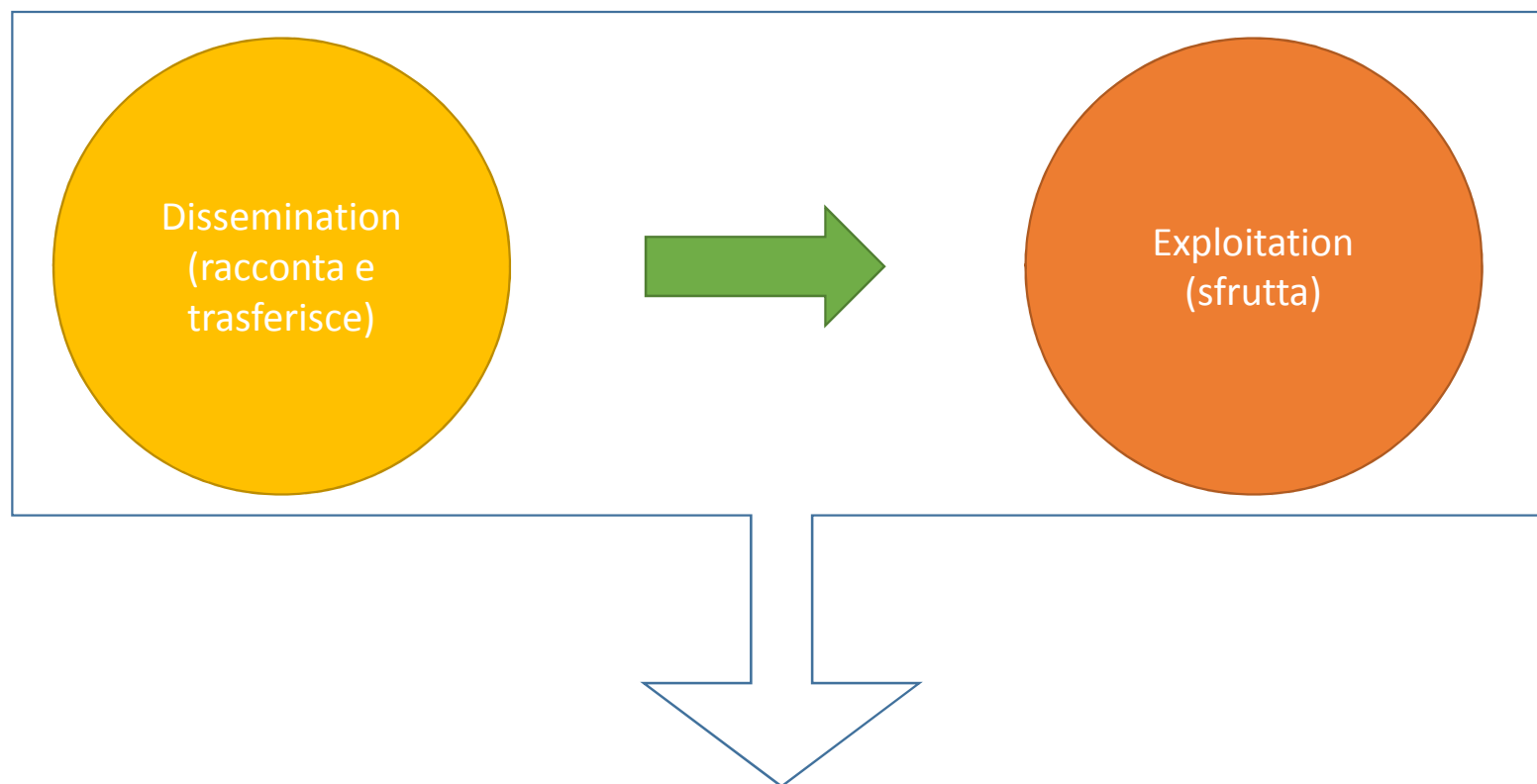
Impact

b) Communication activities

- Describe the proposed communication measures for promoting the project and its findings during the period of the grant. Measures should be proportionate to the scale of the project, with clear objectives. They should be tailored to the needs of various audiences, including groups beyond the project's own community. Where relevant, include measures for public/societal engagement on issues related to the project.

- 
- Dissemination
 - Communication
 - Exploitation

Tutto insieme



Comunicazione

(Ingaggia e aumenta visibilità)

www.apre.it

07/11/2017

Impact

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I punti fissi di un piano di Disseminazione, Exploitation e Comunicazione

Il template in dettaglio

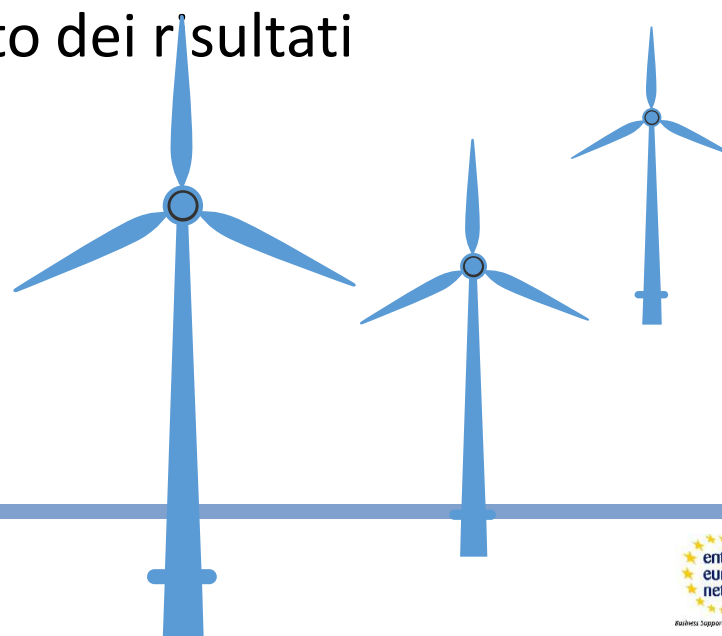
*Provide a draft '**plan for the dissemination and exploitation of the project's results**'. [...]. For innovation actions, in particular, please describe a credible path to deliver these innovations to the market.*

A cosa serve

- Raccogliere le informazioni
- Analizzare le informazioni raccolte
- Pianificare le azioni
 - Massimizzare l'impatto
 - Evitare lo spreco di risorse
- In fase di proposta: obbligatorio e in bozza
- In fase di progetto: sviluppato per intero (M3)

Il piano di Comunicazione, Disseminazione e Sfruttamento

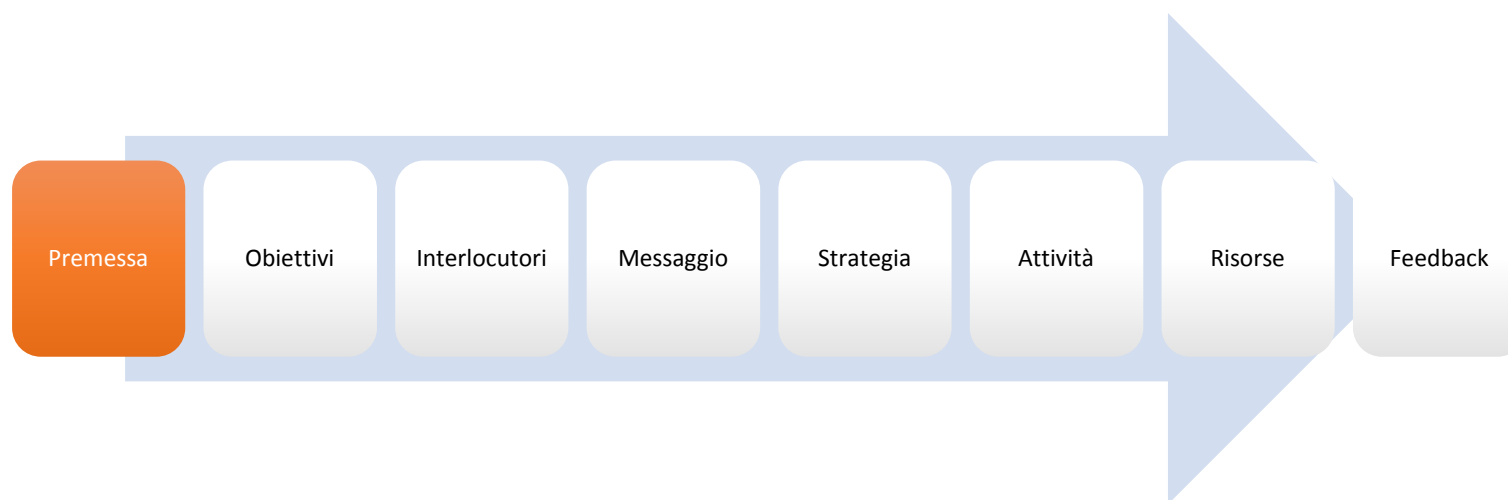
- Proporzionale al progetto e ai suoi risultati
- Coordinare le attività
- Evitare di inviare messaggi conflittuali
- Stabilire la strada per lo sfruttamento dei risultati
- Monitorare l'impatto del progetto



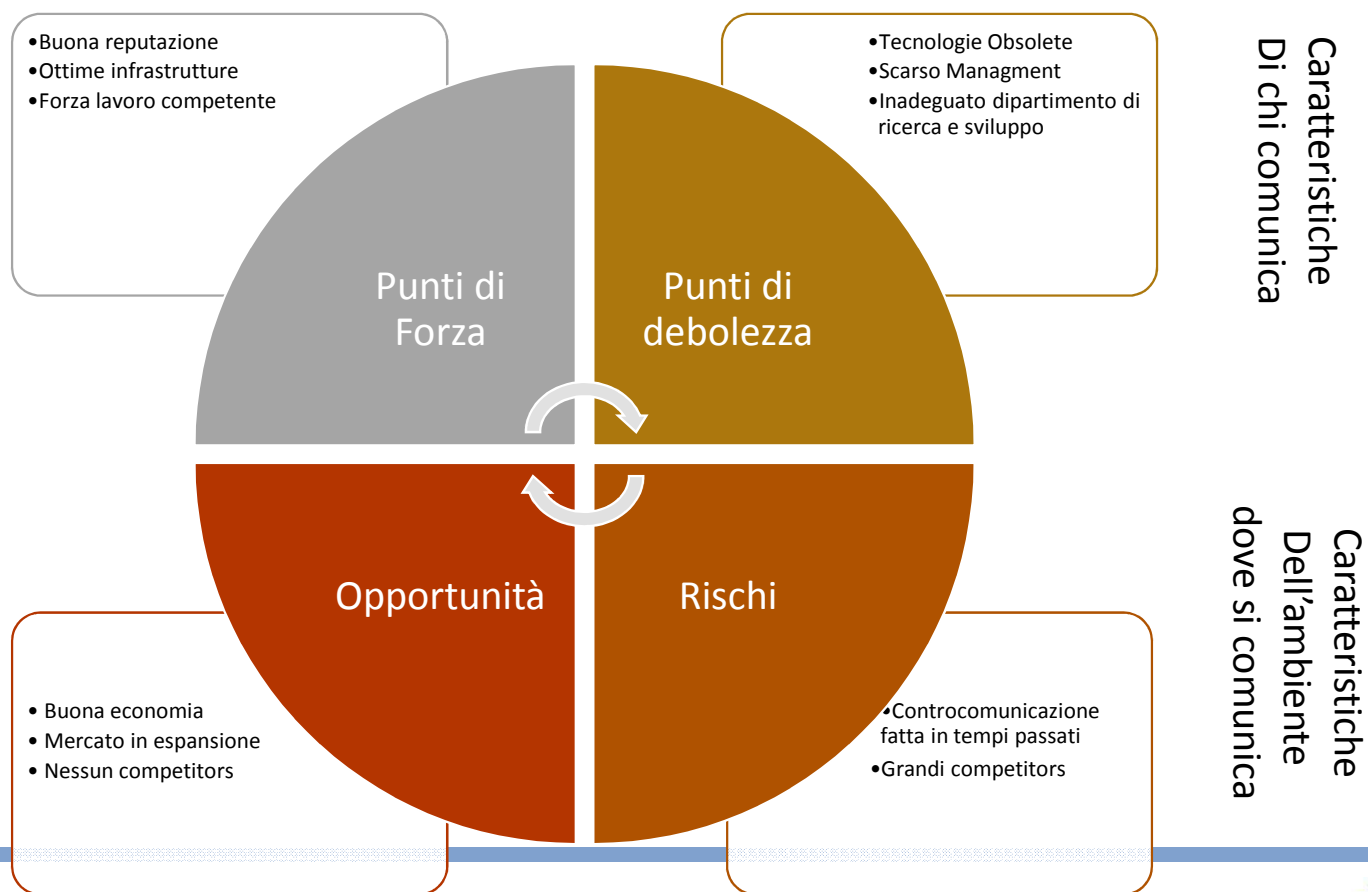
Il piano di comunicazione e disseminazione



Il piano di comunicazione e disseminazione



SWOT Analysis

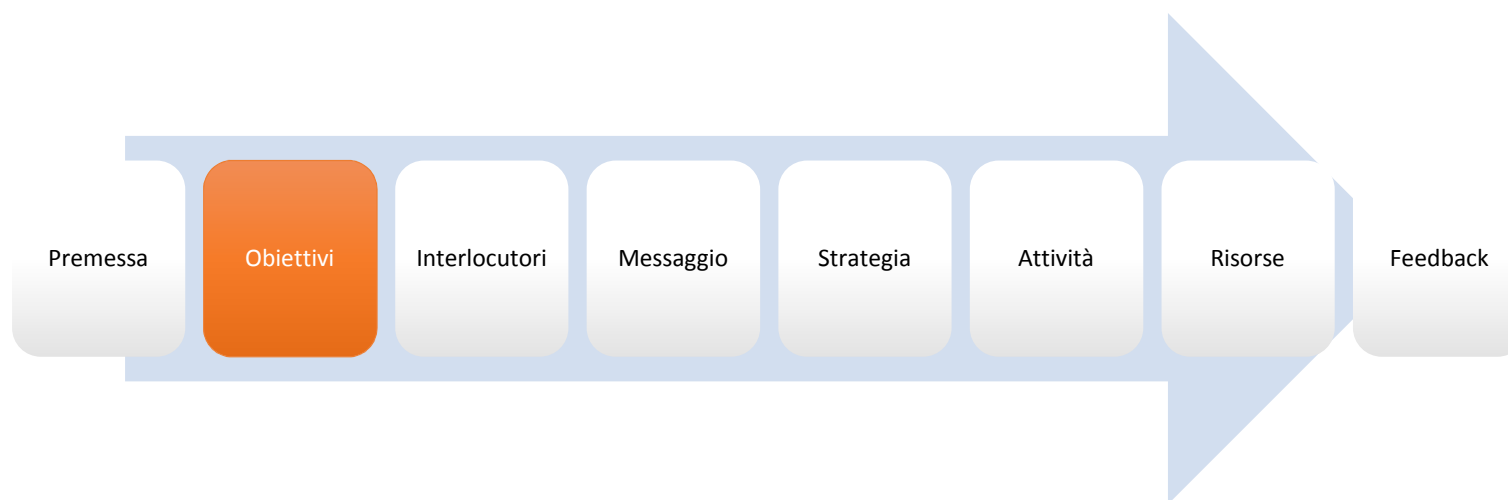


Premessa

Elementi importanti che condizionano in modo rilevante le attività di comunicazione

- gli elementi caratterizzanti dell'oggetto della nostra comunicazione (attributi oggettivi)
- Cosa è stato fatto di simile (in termini di comunicazione)
- Elementi di scenario rilevanti (sociali, politici, legislativi)

Il piano di comunicazione e disseminazione



Obiettivi

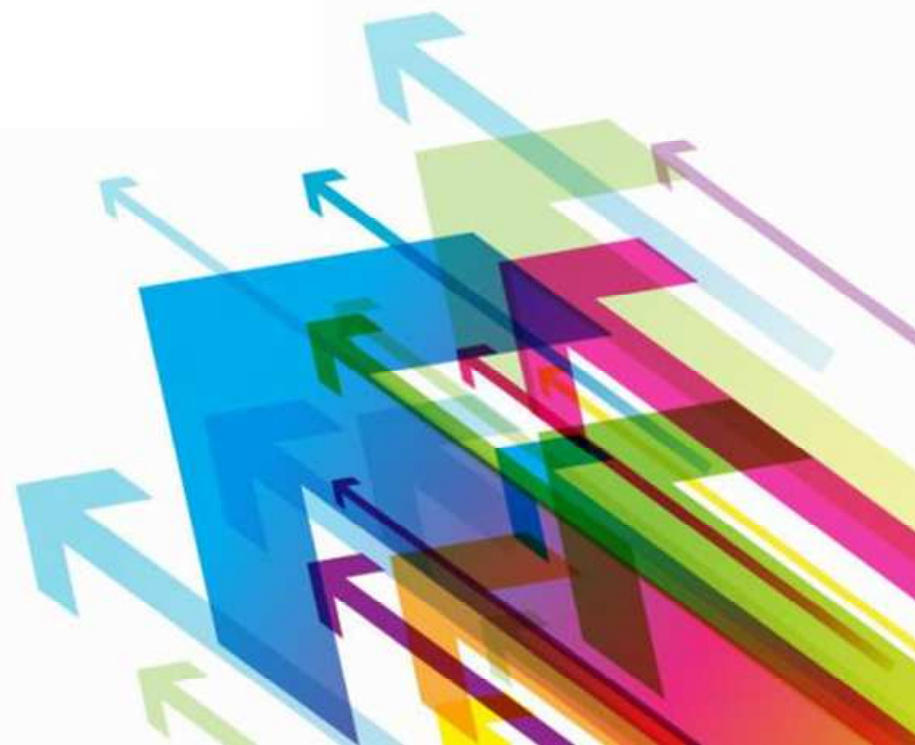
Obiettivi: quali risultati vogliamo raggiungere? Perché comunicare?

Obiettivi di comunicazione

- *trasferimento d'informazione*
- *visibilità / awareness*
- *dialogo*
- *Persuasione*

Obiettivi di Disseminazione

- *Trasferimento del risultato*
- *Favorimento dell'exploitation*

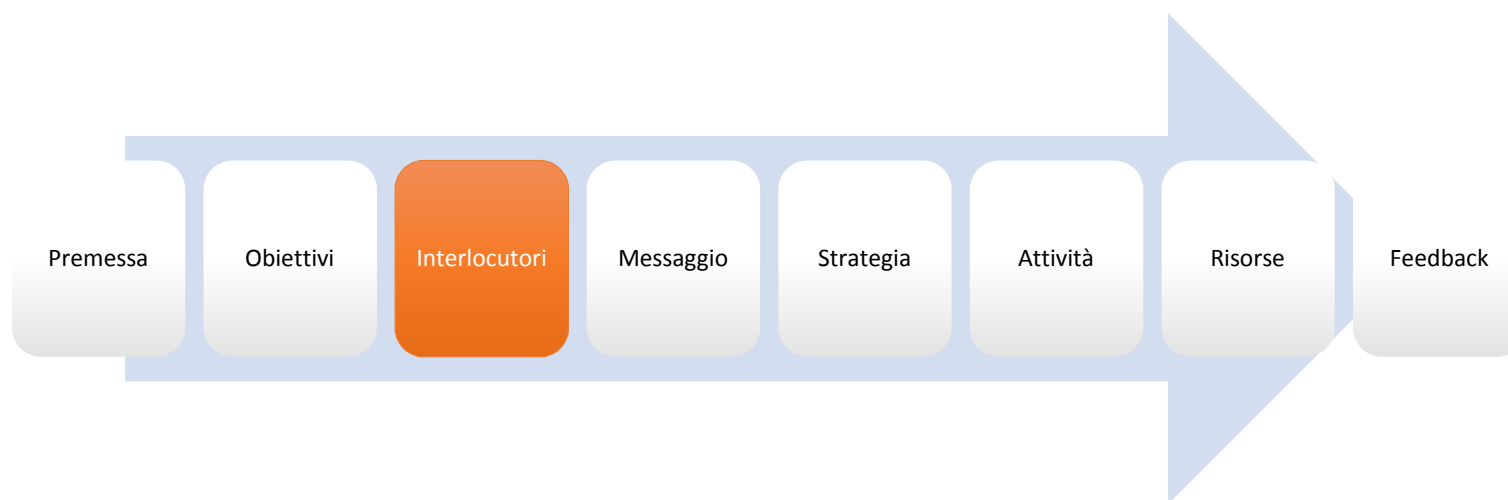


Obiettivi S.M.A.R.T

- **S**pecifico, cioè che non lascia spazio ad ambiguità;
- **M**isurabile senza equivoci e verificabile in fase di controllo;
- raggiungibile (dall'inglese **A**chievable), poiché un obiettivo non raggiungibile demotiva all'azione allo stesso modo di uno facilmente raggiungibile;
- **R**ilevante da un punto di vista organizzativo, cioè coerente con la mission aziendale;
- definito nel **T**empo.



Il piano di comunicazione e disseminazione



Interlocutori

- Interlocutori primari: a chi parliamo?
- Interlocutori secondari: chi ha influenza sul target primario

Es.

Interlocutori primari: Policy Maker

Interlocutori secondari: Giornali e media, lobbisti e la seduta parlamentare



Interlocutori



Disegna il tuo target

- Conosci tutto del tuo target (consumi, conoscenze, competenze)
- Cerca di capire dove puoi incontrarlo.
- Successivamente sulla base del punto precedente puoi identificare il linguaggio e i canali da utilizzare

Target audience

Evita di essere generico come per es:

- the public at large' or 'all stakeholders

Cerca di essere specifico

- *from 'the general public' to 'female citizens commuting by train to work in one of the EU-10 countries' or from 'decision-makers' to 'Europarlamentarians involved in the design of the new transport policy 2013'.*

Target audience

Per le attività di Disseminazione

- *Cerca di capire a chi vorresti trasferire o raccontare del tuo risultato*

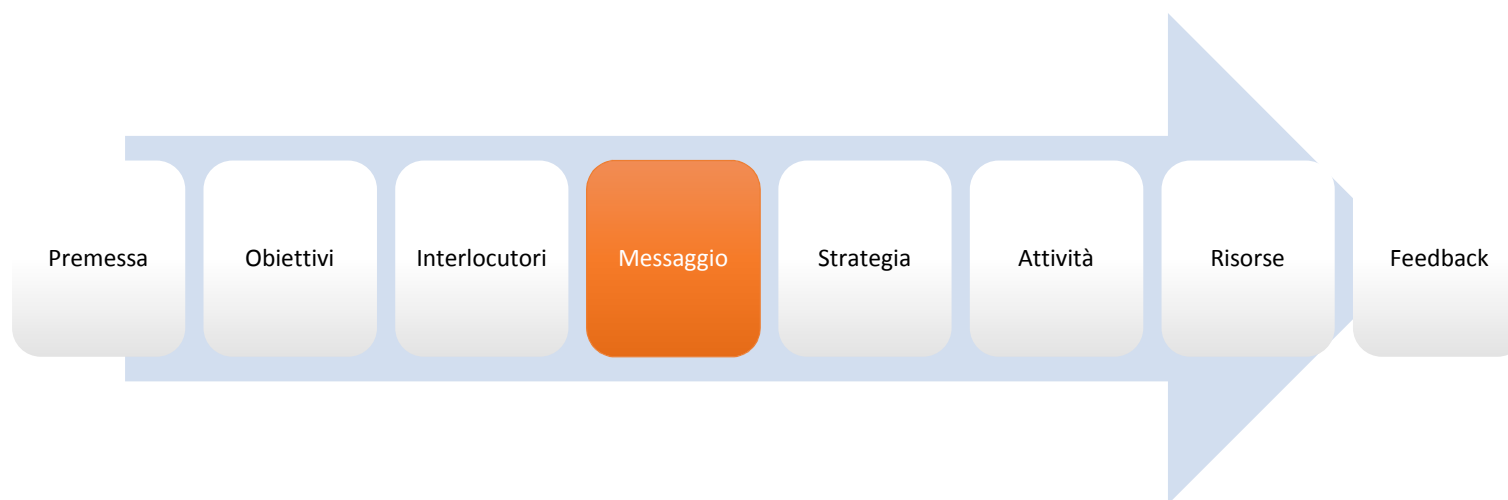
Per l'Exploitation

- *Chi potrebbe usare il tuo risultato*

Per la Comunicazione

- *A chi vorresti coinvolgere o a chi vuoi illustrare i risultati o le azioni del progetto*

Il piano di comunicazione e disseminazione

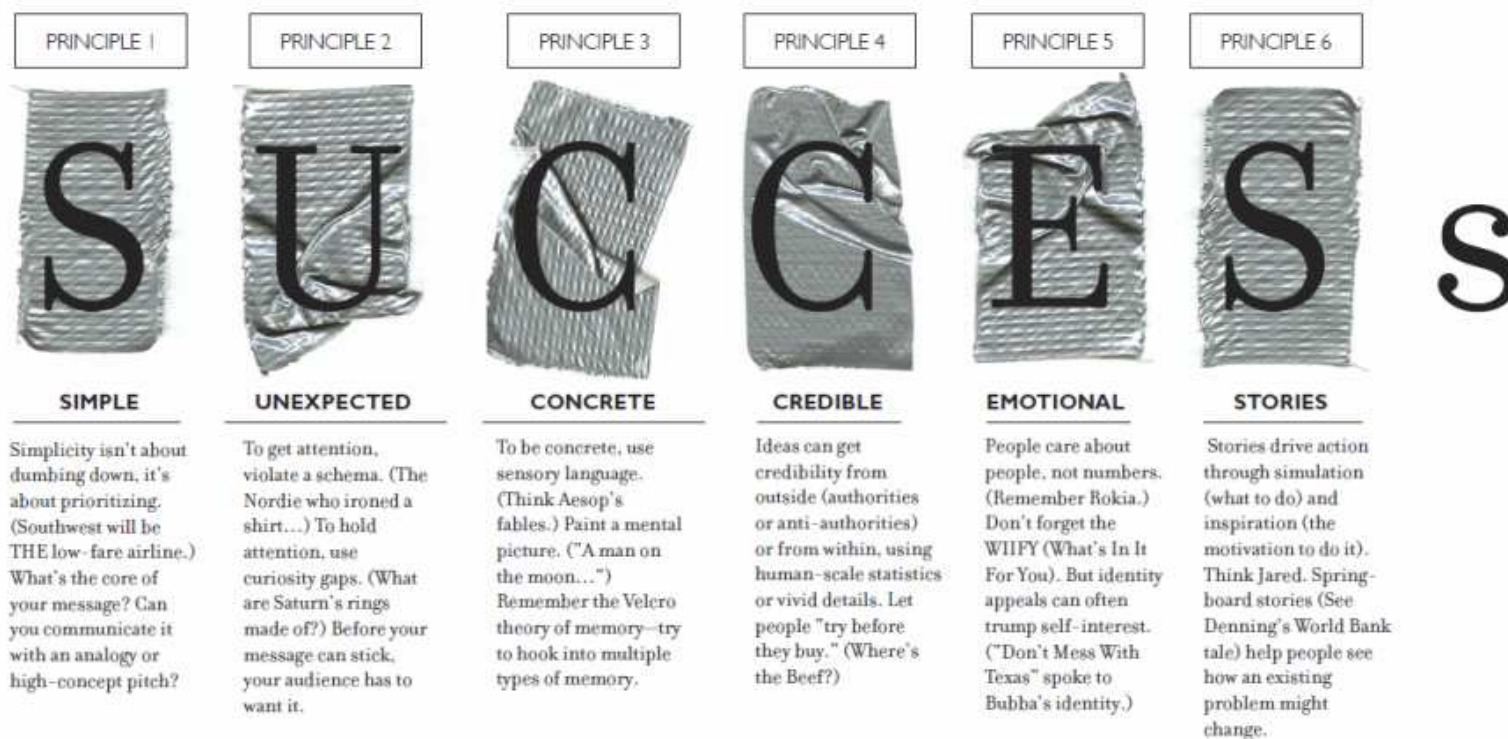


Messaggio

- Identifica cosa vuoi trasferire al tuo / ai tuoi target o cosa dovrebbero sapere
- Una buona strategia è di evidenziare uno o più concetti chiave che esprimono il raggiungimento di un beneficio o, più in generale, di un aspetto positivo.
- E' fondamentale ricordare però che la comunicazione è efficace soltanto se emittente e ricevente danno lo stesso significato al messaggio
- Modula i messaggi sulla base dei tuoi obiettivi e del target con cui

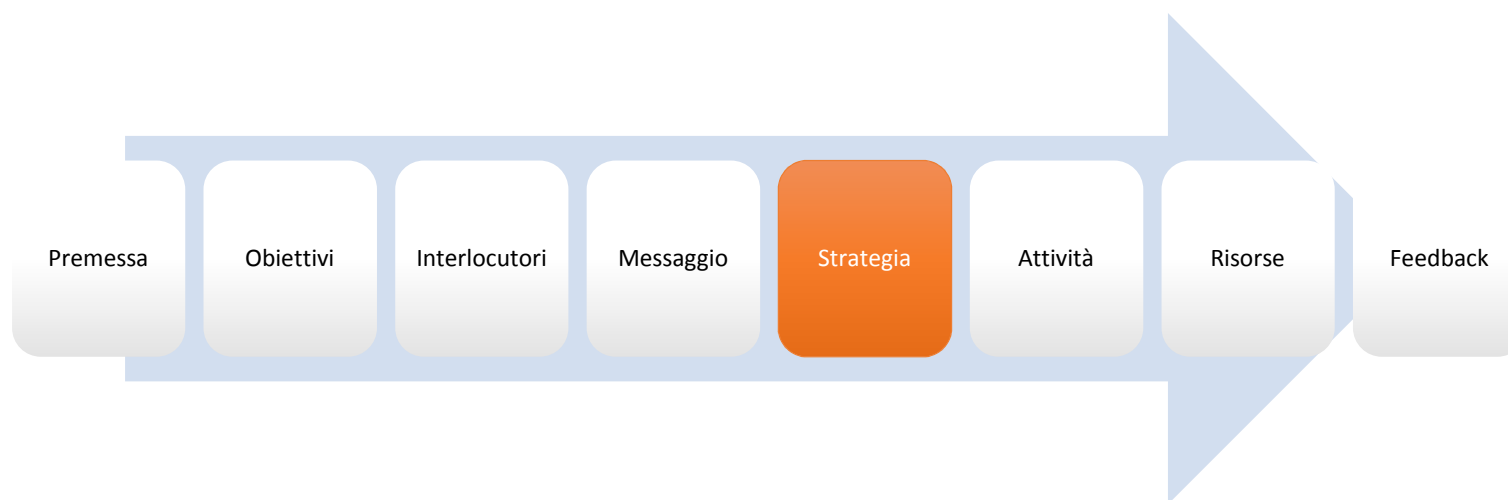
Non è sufficiente essere chiari ma anche immedesimarsi con chi riceve il messaggio che stai inviando

Idea: Il SUCCESS Model

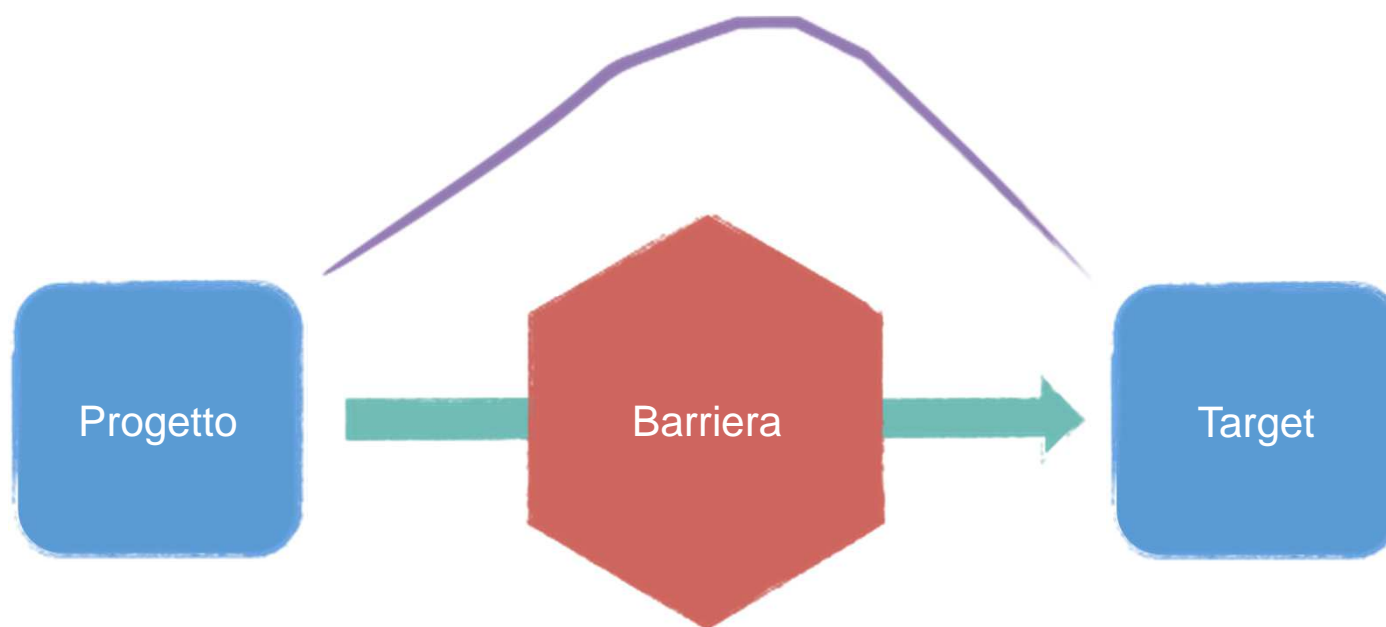


Modello Made to Stick di Dan e Chip Heath

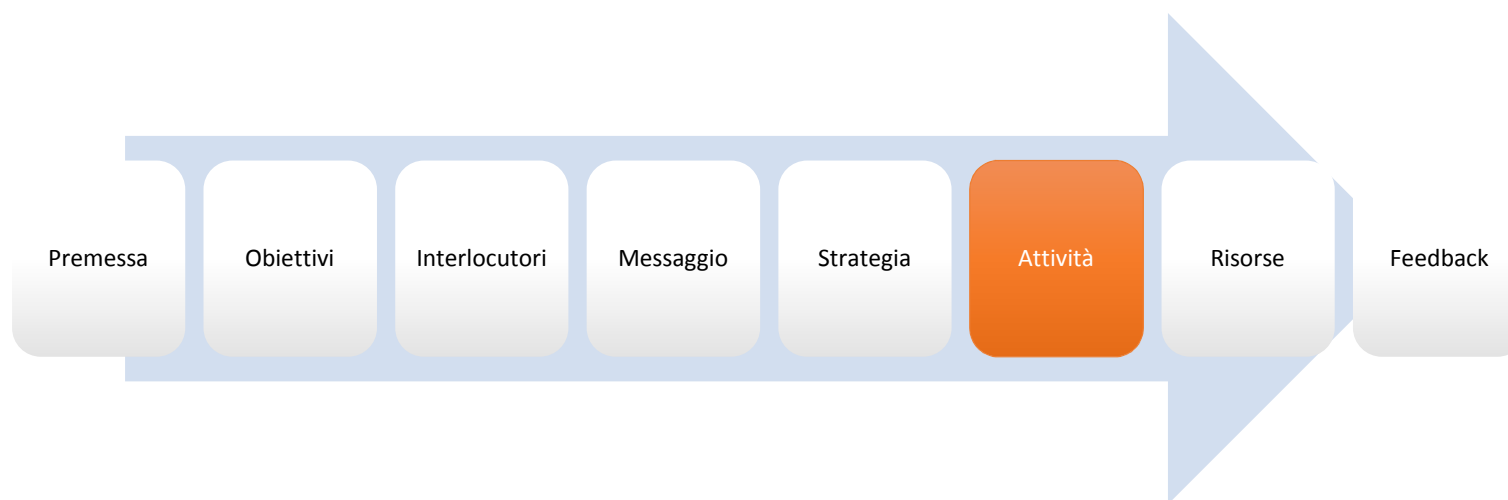
Il piano di comunicazione e disseminazione



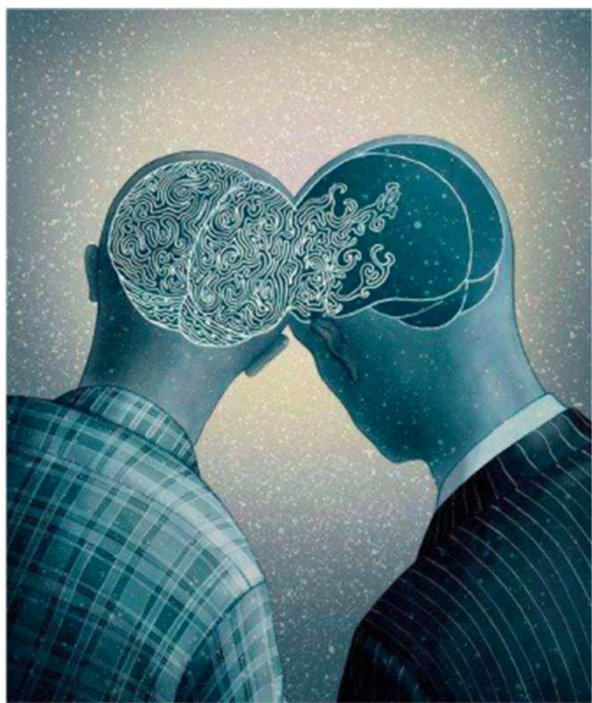
Strategia



Il piano di comunicazione e disseminazione



Attività



Quali sono le azioni concrete che, in coerenza con la strategia, dobbiamo realizzare per raggiungere gli obiettivi?

In questa fase è essenziale anche definire il *timing*

Attività

Alcuni esempi di azioni che possono essere adottate:

- Advisory Board
- Campagna pubblicitaria
- Conferenza stampa
- Brochure**
- Congresso/Convegno/Brokerage**
- Sito Internet & Social Media**
- Ufficio stampa
- Direct mailing**



Tecniche di trasferimento

- Pubblicità (Adv, Advertising)
- Ufficio stampa (Media Relations)
- Pubbliche Relazioni (Public Relations)
- Tecniche di relazione (Direct)
- Web



Pubblicità

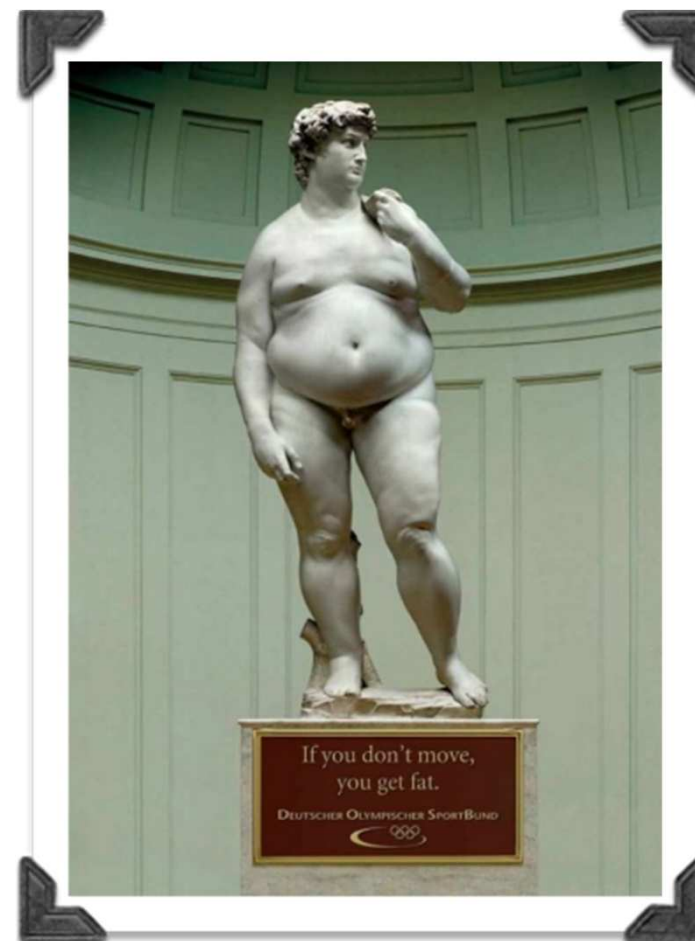
Acquisto di spazi sui media: giornali, tv, radio...

Punti di forza:

- Controllo
- Efficacia (notorietà)

Punti di debolezza

- Costi
- Credibilità



Attività da ufficio stampa

Far apparire sui media notizie,
posizioni di interesse

Punti di forza

- Costi
- Credibilità

Punti di debolezza

- Assenza di controllo
- Necessità di catturare l'interesse dei media



Pubbliche relazioni

Contatti diretti con un numero limitato di interlocutori
(convegni, congressi, eventi)

Punti di forza

- Coinvolgimento
- Personalizzazione

Punti di debolezza

- Costi (per contatto)
- Numero limitato di contatti



Direct

Costruzione di una relazione diretta con gruppi selezionati di interlocutori (meglio se multiplier o stakeholders)

Punti di forza

- Segmentazione degli interlocutori
- Buon rapporto costo contatto

Punti di debolezza

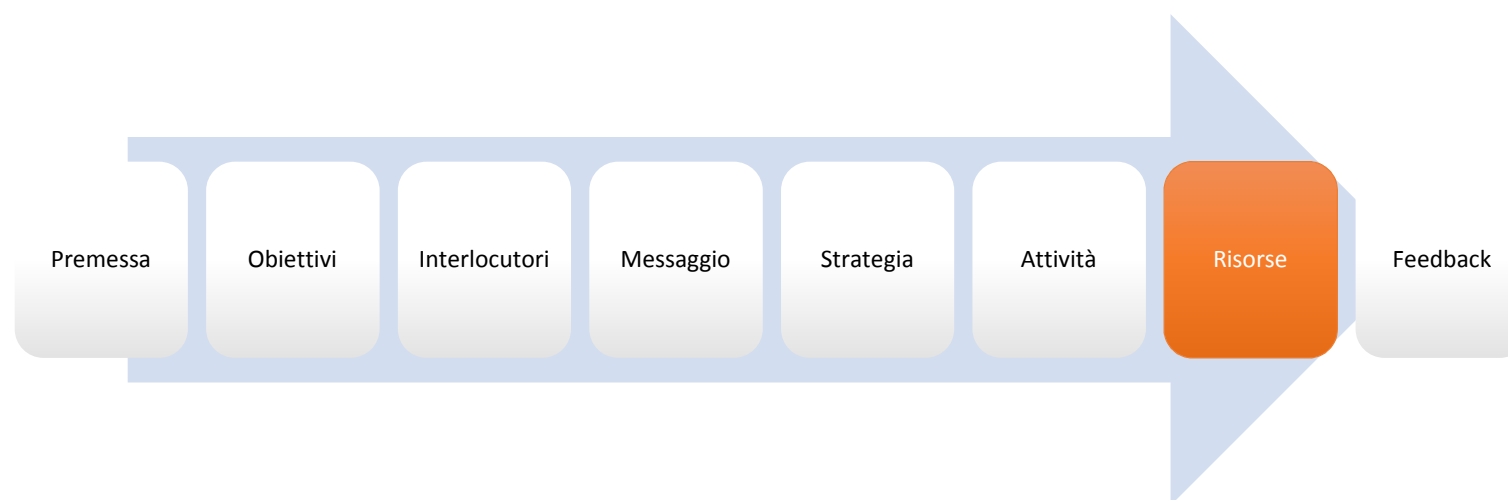
- Coinvolgimento di una parte limitata dei miei potenziali interlocutori



Canali

- La scelta dei canali viene fatta in virtù dei passaggi precedenti
- E' essenziali essere realistici e adattare la scelta dei canali sul suo target e in base al messaggio che vuoi veicolare
- Considera anche le risorse necessarie per gestire i canali in termini di costi e tempi
- Alcuni canali possono essere utilizzati per più obiettivi

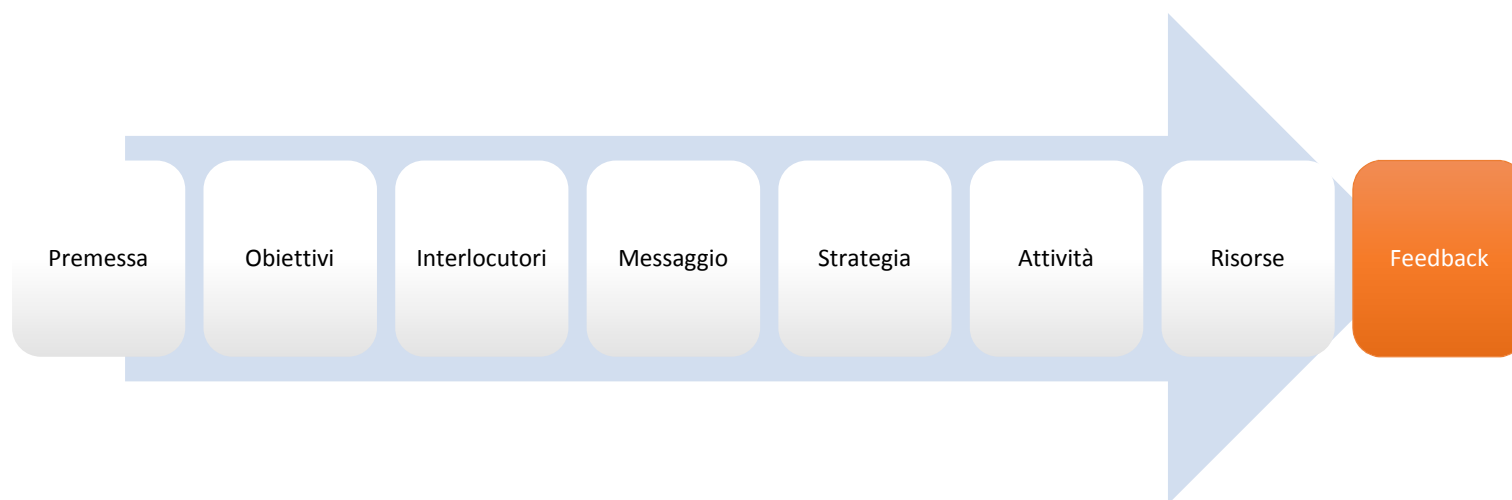
Il piano di comunicazione e disseminazione



Risorse

- Distribuisci il budget sulle varie attività e sui vari partner
- Considera sempre il costo del personale che per alcune attività può essere molto alto
- Sii realistico
- Considera anche i costi di exploitation

Il piano di comunicazione e disseminazione



Feedback

- Utilizza indicatori per misurare l'efficienza del tuo piano
- Non utilizzare indicatori facilmente raggiungibili ma nemmeno irraggiungibili
- Analizza le performance dei tuoi competitor e/o del mercato per avere dei valori di riferimento

Impact

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Include a business plan where relevant.

Alcuni esempi di EXPLOITATION



Esempi di exploitation

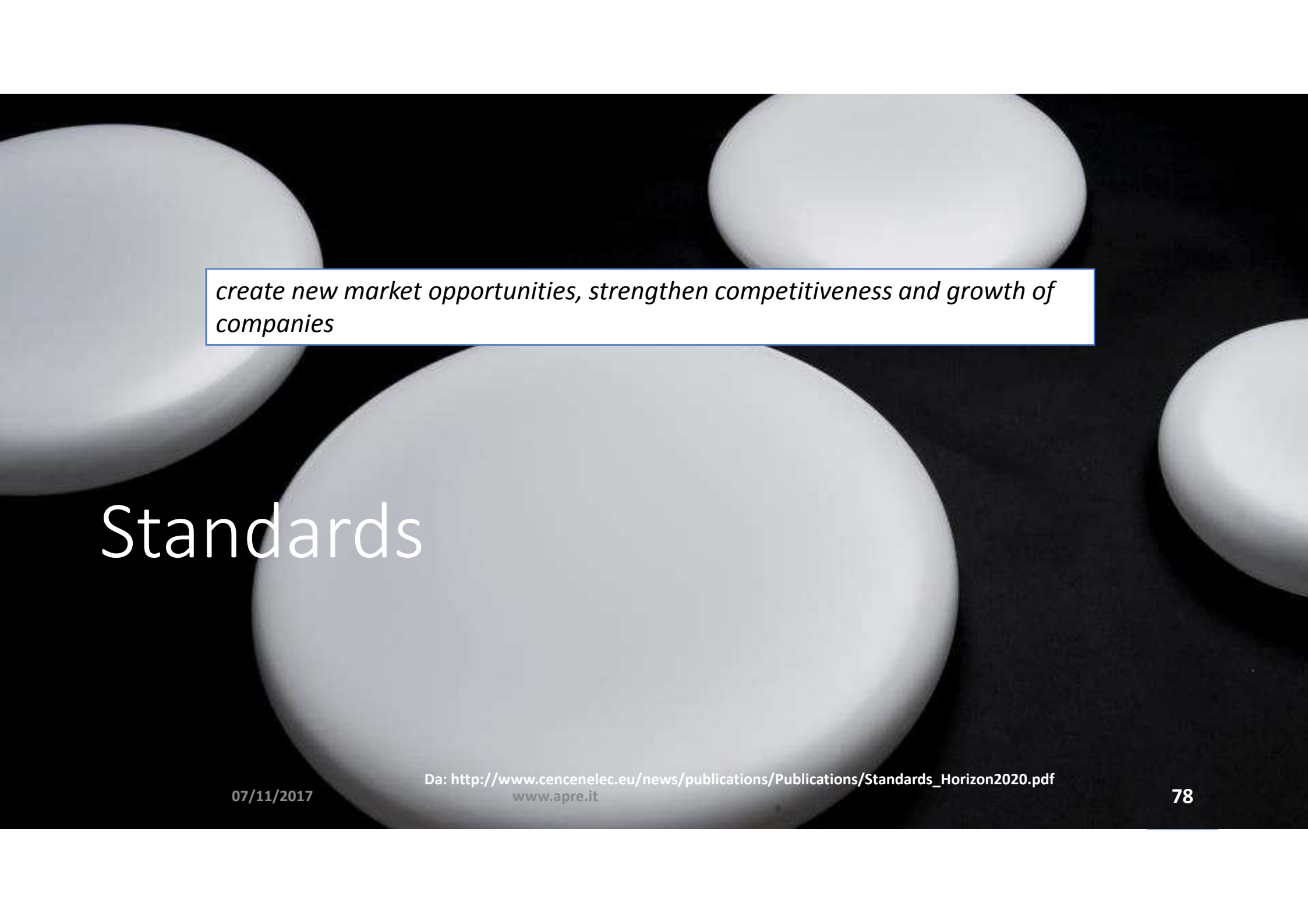
- Ulteriore ricerca
- Il risultato diventa background per un altro progetto
- Il risultato diventa un prodotto o un servizio da commercializzare
- Il risultato dà vita ad uno spin-off o/e start up
- Licenze, Join Venture e Assegnazione

Il template in dettaglio

- **Business Models (e.g. CANVAS):**
- **Key partners: Think about the motivation of partnerships!**
 - Who are you key partners, key suppliers?
 - Which resources do you need from them?
 - Which key activities will they perform?
- **Other aspects to be considered:** *Value proposition* (which of our customer's problems are we helping to solve and which needs are we satisfying?) *Relationship to your customers, costs & revenue streams*

Consigli utili

- Definire una **exploitation strategy** che contenga 4 elementi fondamentali:
 1. analisi del mercato (e possibile impatto sullo stesso),
 2. management della proprietà intellettuale,
 3. innovation management
 4. business plan
- Creare **una connessione** tra le azioni di **disseminazione** e di **exploitation** al fine di operare in vista di una futura commercializzazione del prodotto/servizio oggetto della proposta (a tal fine, eventualmente sviluppare una SWOT analysis).



create new market opportunities, strengthen competitiveness and growth of companies

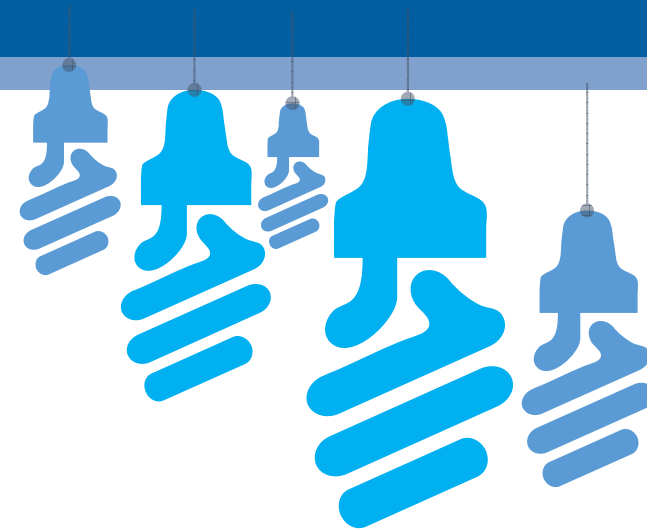
Standards

Standards

- La definizione formale di standard è un “**documento, condiviso e approvato da un organo riconosciuto, che fornisce, per un uso comune e ripetuto, regole, guide linee o caratteristiche specifiche per attività o suoi risultati, con l’obiettivo di raggiungere un ottimo livello di ordine in un specifico contesto**”
- Ci sono diversi tipi di standard . In sostanza , gli standard sono i **requisiti e / o le raccomandazioni** in materia di prodotti, sistemi , processi o servizi . Gli standard possono anche essere un modo per descrivere un metodo di misura o di prova o di stabilire una terminologia comune all'interno di un settore specifico .
- Gli standard sono sviluppati e definiti attraverso un processo di condivisione delle conoscenze e costruiti su un consenso tra gli esperti tecnici nominati dalle parti interessate e altri stakeholders - tra le imprese, i consumatori e le associazioni ambientaliste, o altri .
- Un esempio di standard largamente usato è il formato A4 dei fogli.

Gli standard in Horizon

- **Standardization is identified in Horizon 2020 as one of the innovation-support measures.** Standardization can help bridge the gap between research and the market, by enabling the fast and easy transfer of research results to the European and international market.
- **Standards are agreed definitions or specifications of units, methods, tests products, processes or services.** They provide people and organizations a basis for mutual understanding.



La standardization nel proprio progetto

- Screen existing standards
- Contribute to ongoing standardization activities
- Develop new standardization activities
- Involve the right standardization partner
- What if your project is up-and-running?

Standards

→ What are your needs?

- Ensure methodological robustness and understand the state of the art
- Have a starting point for the project

- Improve the quality of my project's activities and outputs
- Develop new technologies
- Ensure broad applicability of project results

- Long-term dissemination of research results
- Ensure market acceptance of project results or solutions results

→ What can standardization bring?

Give you access to the state of the art

Ensure comparability of your results with what is already on the market

Help you comply with health and safety legislation or other regulatory requirements

Support you in making your results available to a wide range of companies and research organizations

Give you access to discuss and promote your project outcomes with stakeholders and potential customers

Ensure that the project results are used by the market well beyond the duration of your project

→ What should you include in your proposal?

- A standardization partner

- A task related to the screening of existing standards

- A liaison with the relevant Technical Committee in order to link with standards in real time

- A standardization partner

- A work-package on standardization, aimed at developing a new standard

And/Or

- A liaison with the relevant Technical Committee

And/Or

- A task to analyse which standards are needed

- A task to define a standardization roadmap or strategy

07/11/2017

www.apre.it

European Standardization Organizations

Three European Standardization Organizations (ESOs) are recognized by the European institutions as having the necessary ability and expertise to develop European Standards – identified by the code EN. These are:

- CEN – European Committee for Standardization
- CENELEC – European Committee for Electrotechnical Standardization
- ETSI – European Telecommunications Standards Institute

Impact

2.2 Measures to maximise impact

a) Dissemination and exploitation of results

- Provide a draft '**plan for the dissemination and exploitation of the project's results**'. Please note that such a draft plan is an admissibility condition, unless the work programme topic explicitly states that such a plan is not required. Show how the proposed measures will help to achieve the expected impact of the project. The plan, should be proportionate to the scale of the project, and should contain measures to be implemented both during and after the end of the project. For innovation actions, in particular, please describe a credible path to deliver these innovations to the market.
- Include a business plan where relevant.
- If you will take part in the pilot **on Open Research Data** , include information on how the participants will manage the research data generated and/or collected during the project.
- Outline the strategy **for knowledge management and protection**. Include measures to provide **open access** (free on-line access, such as the 'green' or 'gold' model) to peerreviewed scientific publications which might result from the project



Open Access & Open Data

Outline the strategy for knowledge management and protection. Include measures to provide open access (free on-line access, such as the 'green' or 'gold' model) to peerreviewed scientific publications which might result from the project

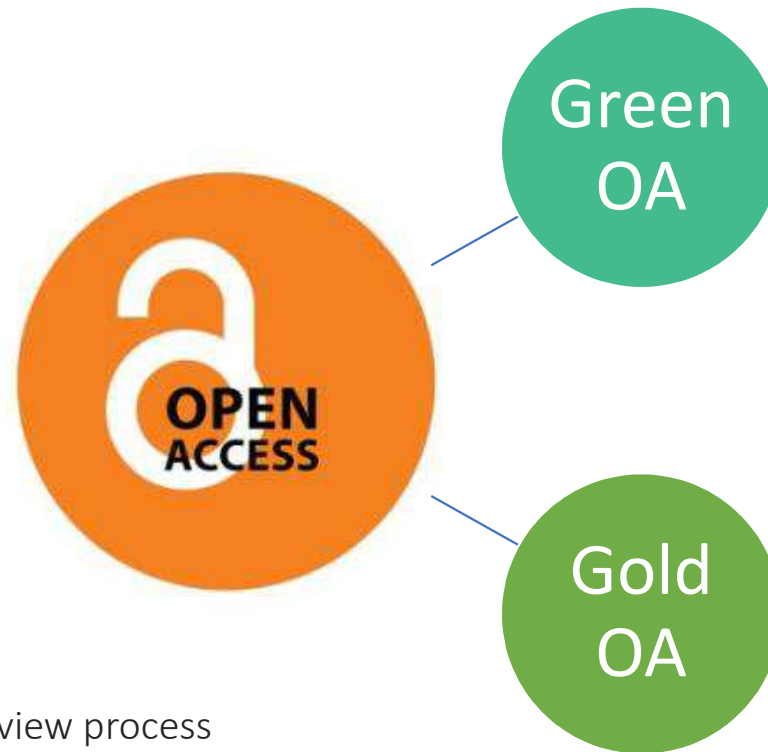
What is open access?

- The article is universally and freely accessible via the Internet
- The authors retain copyright to their article
- Deposited immediately upon publication, a internationally recognized open access repository (such as PubMed Central).
- Milestone definitions of open access include those of the: Budapest Open access Initiative (BOAI) and the Berlin Declaration (October 2003) on Open access

Why open access in summary

- build on previous research results (improved quality of results);
- foster collaboration and avoid duplication of effort (greater efficiency);
- accelerate innovation (faster to market = faster growth);
- involve citizens and society (improved transparency of the scientific process).

The two roads of the OA?



- Self Archiving
- Embargo

- Immediate Open Access

WHEN OA is NOT

Not an obligation to publish

Not at odds with patenting

OA publications go the same peer review process

Alcuni archivi...

Open Access in H2020

- Open access mandate in H2020
 - Obligation to provide OA to publications
 - All areas
 - Peer-reviewed publications
 - Allowed embargos: 6/12 months
 - Green and Gold OA supported
 - Beneficiaries must aim to deposit the research data needed to validate the results presented in publications ('underlying'/'linked' data)

Open access to research data

Research data' refers to information, in particular facts or numbers, collected to be examined and considered and as a basis for reasoning, discussion, or calculation.

- examples of data include
- statistics,
- results of experiments,
- measurements,
- observations resulting from fieldwork,
- survey results,
- interview recordings and images.

CHALLENGE

Wider access to scientific facts and knowledge helps researchers, innovators and the public find and re-use data, and check research results:

offers better value
for EU research funds



a public benefit

encourages research
across scientific fields



essential for solving
today's complex
societal challenges

SOLUTION

Horizon 2020 already mandates open access to **all scientific publications**



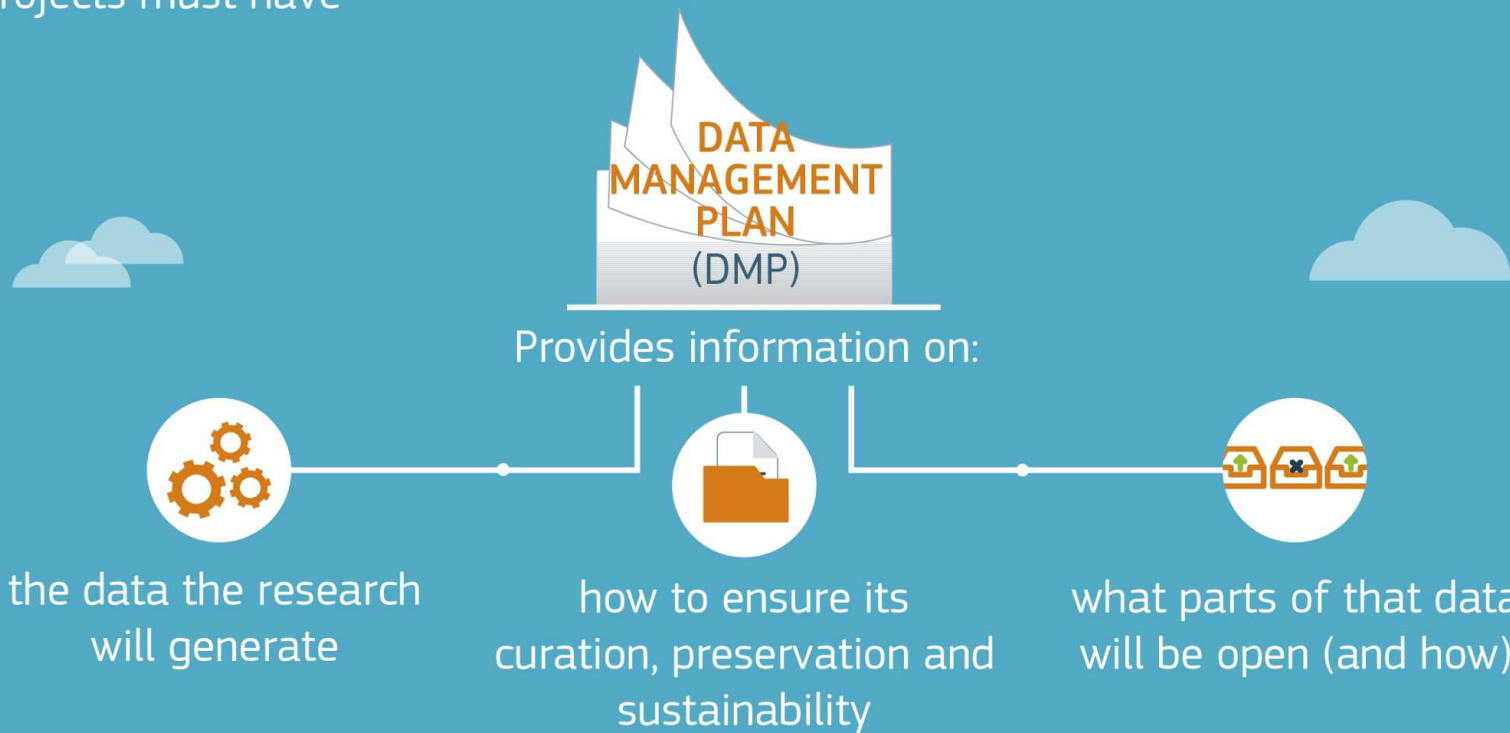
From 2017,
research data is **open by default**,
with possibilities to **opt out**

RESEARCH DATA - OPEN BY DEFAULT



RESEARCH DATA - OPEN BY DEFAULT

Projects must have



RESEARCH DATA - OPEN BY DEFAULT

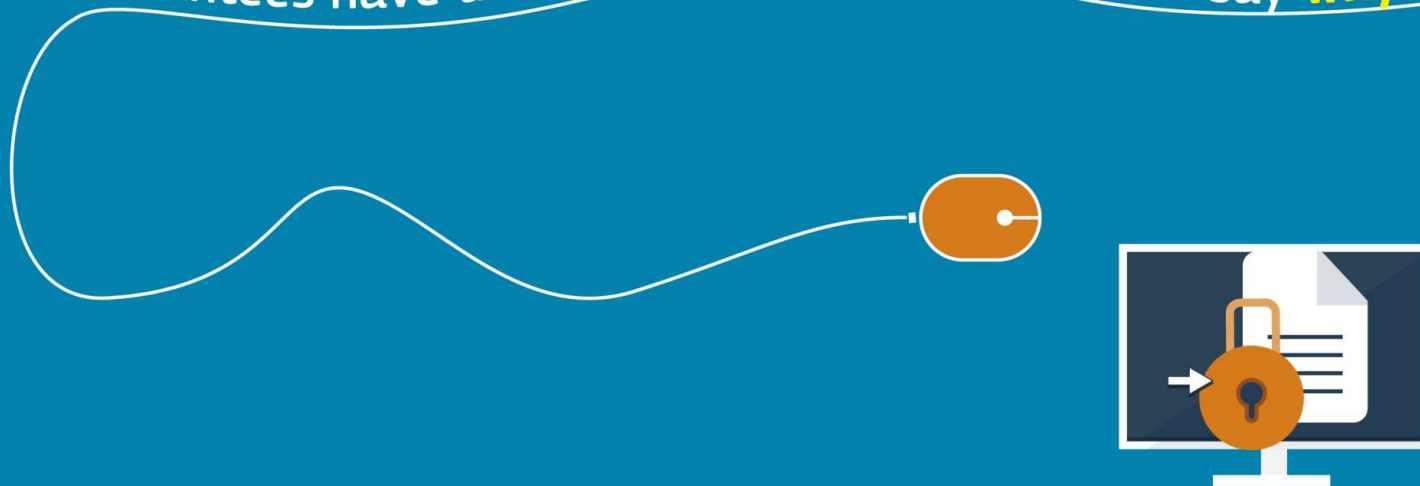
Data management costs are fully eligible for funding

No repository imposed: deposit data where you want



AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

Grantees have the right to **opt-out**, but need to say **why**

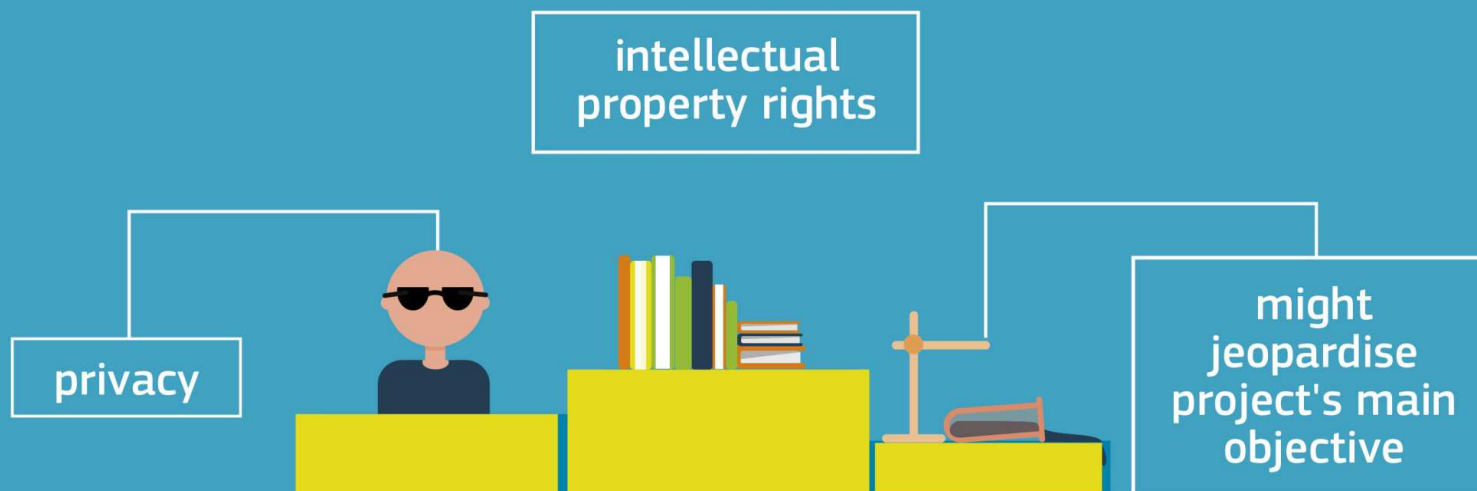


Opt Out

- The Commission provides robust opt-out possibilities at any stage, that is
- during the application phase
- during the grant agreement preparation (GAP) phase and
- after the signature of the grant agreement.

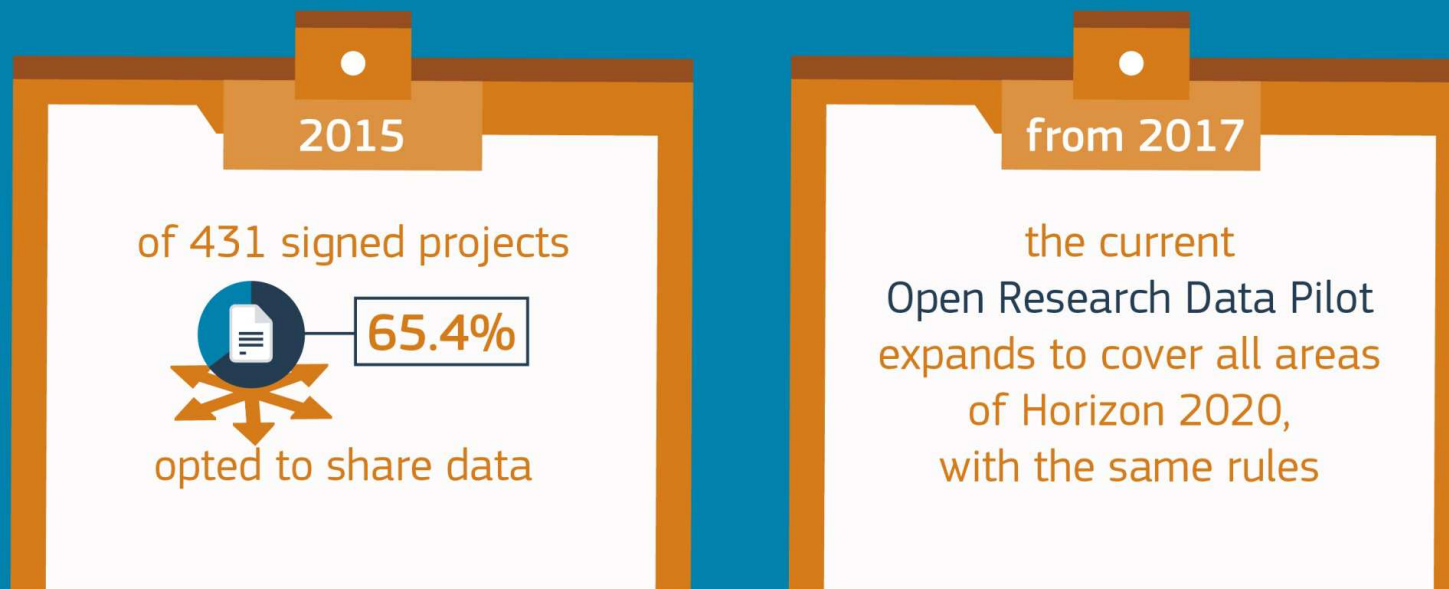
AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

Top three reasons for **opt-out**:



AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

The approach has been tested during a Horizon 2020 pilot action



HOW IT WORKS



Data management plan template

- In general terms, your research data should be 'FAIR', that is findable, accessible, interoperable and re-usable.
- These principles precede implementation choices and do not necessarily suggest any specific technology, standard, or implementation- solution.

Data Management Plan Structures

- Data summary
- State the purpose of the data collection/generation
- Explain the relation to the objectives of the project
- Specify the types and formats of data generated/collected
- Specify if existing data is being re-used (if any)
- Specify the origin of the data
- State the expected size of the data (if known)
- Outline the data utility: to whom will it be useful

Data Management Plan Structures

- 2. FAIR Data: 2.1. Making data findable, including provisions for metadata
- Outline the discoverability of data (metadata provision)
- Outline the identifiability of data and refer to standard identification mechanism. Do you make use of persistent and unique identifiers such as Digital Object Identifiers?
- Outline naming conventions used
- Outline the approach towards search keyword
- Outline the approach for clear versioning
- Specify standards for metadata creation (if any). If there are no standards in your discipline describe what type of metadata will be created and how

Data Management Plan Structures

- 2. FAIR Data: 2.2 Making data openly accessible
- Specify which data will be made openly available? If some data is kept closed provide rationale for doing so
- Specify how the data will be made available
- Specify what methods or software tools are needed to access the data? Is documentation about the software needed to access the data included? Is it possible to include the relevant software (e.g. in open source code)?
- Specify where the data and associated metadata, documentation and code are deposited
- Specify how access will be provided in case there are any restrictions

Data Management Plan Structures

- 2. FAIR Data: 2.3. Making data interoperable
 - Assess the interoperability of your data. Specify what data and metadata vocabularies, standards or methodologies you will follow to facilitate interoperability.
 - Specify whether you will be using standard vocabulary for all data types present in your data set, to allow inter-disciplinary interoperability? If not, will you provide mapping to more commonly used ontologies?

Data Management Plan Structures

- 2. FAIR Data: 2.4. Increase data re-use (through clarifying licences)
 - Specify how the data will be licenced to permit the widest reuse possible
 - Specify when the data will be made available for re-use. If applicable, specify why and
 - for what period a data embargo is needed
 - Specify whether the data produced and/or used in the project is useable by third parties, in particular after the end of the project? If the re-use of some data is restricted, explain why
 - Describe data quality assurance processes
 - Specify the length of time for which the data will remain re-usable

Data Management Plan Structures

- 3. Allocation of resources
 - Estimate the costs for making your data FAIR. Describe how you intend to cover these costs
 - Clearly identify responsibilities for data management in your project
 - Describe costs and potential value of long term preservation
- 4. Data security
 - Address data recovery as well as secure storage and transfer of sensitive data

Data Management Plan Structures

- 5. Ethical aspects
 - to be covered in the context of the ethics review, ethics section of DoA and ethics deliverables. Include references and related technical aspects if not covered by the former
- 6. Other
 - Refer to other national/funder/sectorial/departmental procedures for data management that you are using (if any)

Impact

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*Outline the strategy **for knowledge management and protection**. Include measures to provide **open access** (free on-line access, such as the 'green' or 'gold' model) to peerreviewed scientific publications which might result from the project*

Cenni di IPR

Gestione della conoscenza (IP)

- IP usata dal progetto
 - Background e foreground
- IP generata dal progetto
 - Capture/disclosure, ownership...
- IP assessment
- IP Protezione
 - Brevetti, copyright, trademark
- IP disseminazione e sfruttamento

Alcune forme di protezione

Copyright©

- Protects material, such as literature, art, music, sound recordings, films and broadcasts

Trade Marks®

- Protect signs that can distinguish the goods and services of one trader from those of another

Designs

- Protect the visual appearance or eye appeal of products

Patents

- Protect the technical and functional aspects of products and processes

Alcune forme di protezione

Semiconductor Topography Rights

- Three dimensional topographical design of 'silicon' or 'micro' chips to perform an electronic function

Plant Breeders

- The protection of new plant varieties. Protectable varieties must be distinct, uniform, stable and novel

Database Rights

- Two main bases for database protection: copyright protection (under the condition of creativity) and new sui generis protection (under the condition of substantial investment)

Trade Secrets

- IPRs kept secret within a company, use of employment contracts and confidentiality forms, NDAs

Impact

b) Communication activities

- Describe the proposed communication measures for promoting the project and its findings during the period of the grant. Measures should be proportionate to the scale of the project, with clear objectives. They should be tailored to the needs of various audiences, including groups beyond the project's own community. Where relevant, include measures for public/societal engagement on issues related to the project.



What is Public Engagement in Research & Innovation?

b) Communication activities

Describe the proposed communication measures for promoting the project and its findings during the period of the grant. [...] Where relevant, include measures for public/societal engagement on issues related to the project.

Public engagement (PE) è uno dei componenti dei progetti Responsible Research and Innovation (RRI).

Si tratta di co-creare il futuro con i cittadini e le organizzazioni della società civile portando a bordo la più ampia varietà possibile di attori che normalmente interagiscono tra loro, in materia di scienza e innovazione.


Il public engagement può essere incorporato nelle proposte con l'obiettivo:

- a) costruire un processo di Ricerca & Innovazione partecipata (citizen science)
- b) Fornire input per influenzare le agende di R&I (VOICES)
- c) Supportare lo sviluppo di policy tematiche (nel settore ambientale, dei trasporti o della salute)

Sintetizzando

- common language,
- two-way process
- feedback loops
- Researchers,
- policy makers,
- industry
- civil society organisations
- NGO,
- Citizens,





Evaluation:

Se il *public engagement* è indicato in maniera esplicita nel testo del topic questa sarà valutata sotto i criteri:

- ‘excellence’ (concept and methodology, and appropriate interdisciplinary considerations and where relevant stakeholder knowledge) and
- ‘impact’ (communication, dissemination and exploitation activities)

I valutatori esaminano de public engagment alcuni aspetti:

- Metodologia adottata
- Inclusione di expertise appropriate e allocazione corretta delle risorse
- Timing (— specialmente per lo sviluppo di policy dove le iniziative devono essere lanciate nei momenti giusti)
- Impatto durante e dopo il progetto

Different ways of engaging the public

- **acceptance criteria** include features of a method that make it acceptable to the wider public;
- **process criteria** refer to features of the process that are likely to make it work in an effective manner.

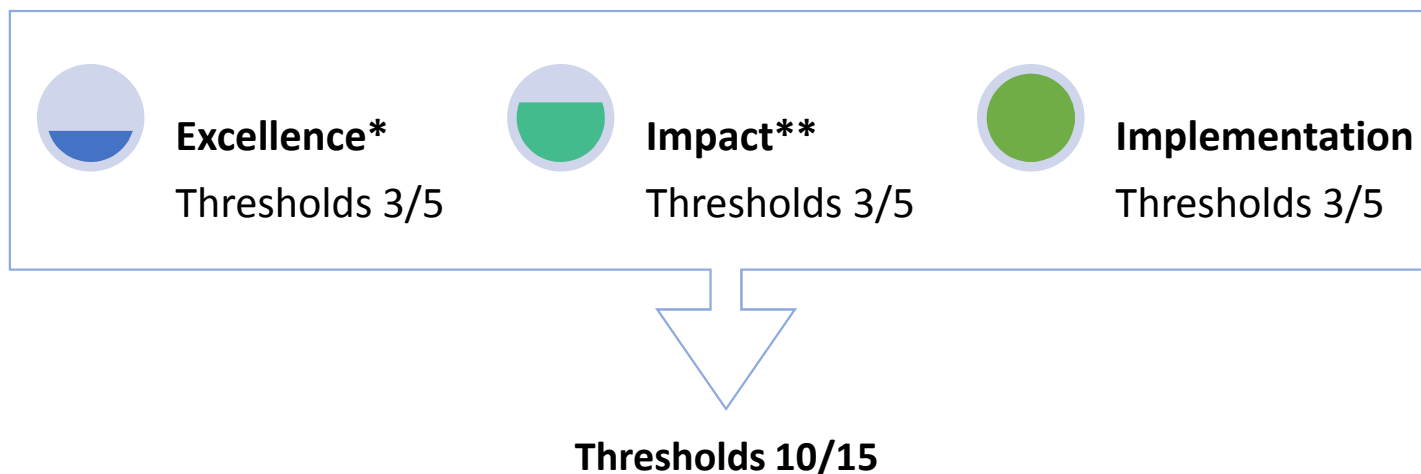
Acceptance Criteria	Process Criteria
Representativeness One approach to achieving good representativeness is to select a random stratified sample of the affected population. Another might could involve questionnaires to determine the spread of attitudes with regard to a certain issue, and using that as a basis for selection of members. (Link to chapter 1.3.1)	Necessary resources It is crucial that the sponsors of the process show commitment and provide the necessary resources (e.g. information; human, financial and time resources).
Independence Management of the participation process should be unbiased. Independence might be obtained through the appointment of a steering committee that incorporates members from diverse bodies or neutral organizations.	Task definition It is important to manage expectations and clarify from the start the scope of the participatory process.
Early involvement Public participation should occur as soon as is reasonably practical, particularly at the stage at the stage when value judgments become important. To have credibility the PE should be about underlying assumptions and agenda setting and not narrow, pre-defined problems. (Link to chapter 1.3.2)	Structured decision-making Examining the reasons behind a decision and documenting the process of reaching it and its outcome is likely to increase transparency and perceived credibility of the process, as well as its efficiency.
Influence The output of the procedure should have a genuine impact on policy. That's why political buy-in is crucial.	Cost-effectiveness The scale of the participatory method should be proportionate to the scope of the decision. A large citizens' assembly might be inappropriate to a minor decision.
Transparency The process should be transparent so that the public can see what is going on and how decisions are made.	Link to effective participation table

Link utili

- <http://engage2020.eu/media/D3-2-Public-Engagement-Methods-and-Tools-3.pdf>
- <http://engage2020.eu>
- <https://ec.europa.eu/programmes/horizon2020/node/766>

Impatto come criterio di valutazione

Award Criteria [Single and second stage]



Details, Weightings and thresholds to be laid down in WP

*Excellence

Sole criterion for ERC frontier research actions

**Impact

Higher weighting for innovation actions

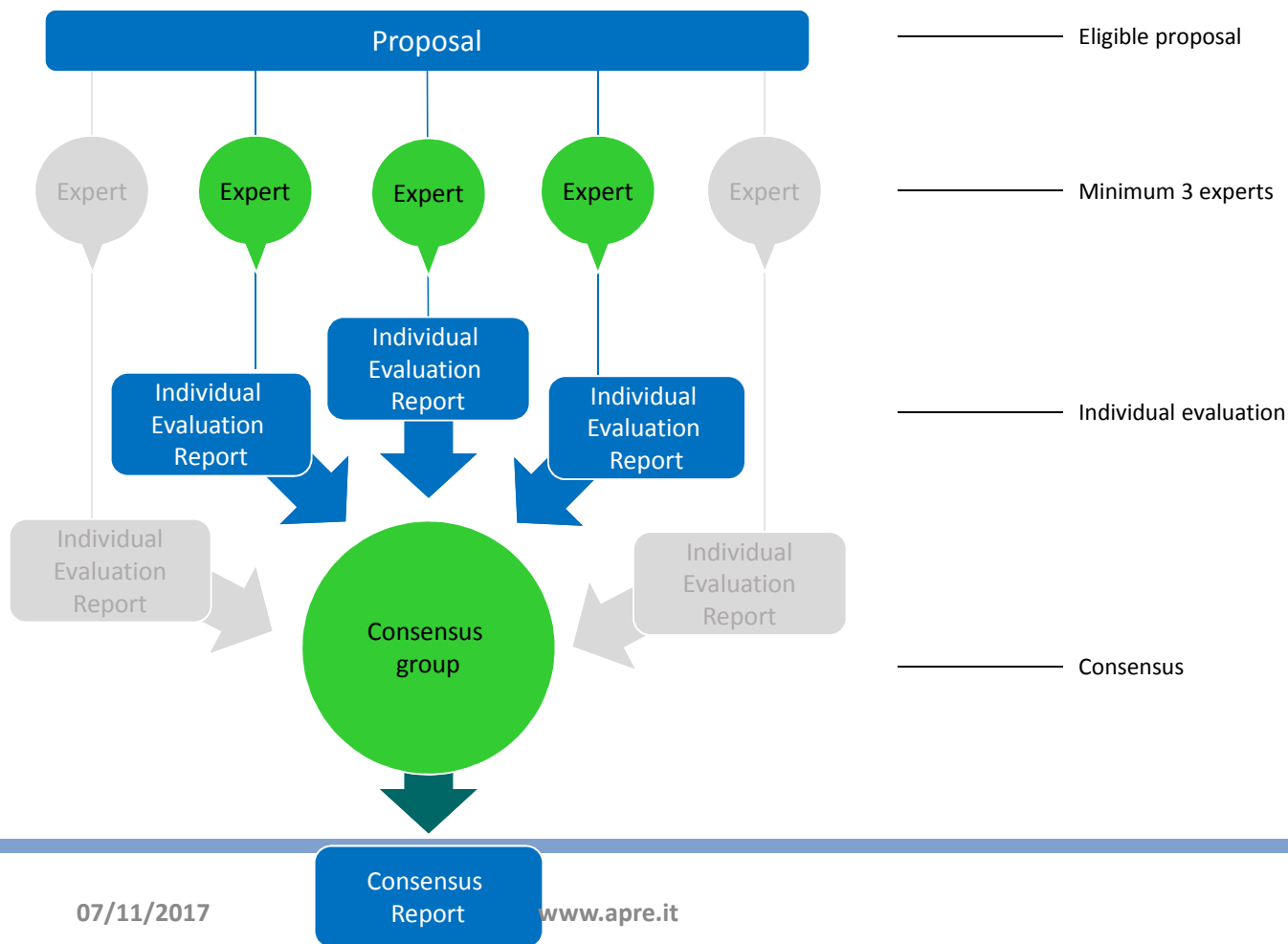
Award Criteria [first stage]



*Impact
Evaluated only the expected impact

Thresholds 08/10

Evaluation Process



Award criteria: RIA, IA and SME Instrument

Impact

The expected impacts listed in the work programme under the relevant topic;

Enhancing innovation capacity and integration of new knowledge;

Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets, and where relevant, by delivering such innovations to the markets;

Any other environmental and socially important impacts;

Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant.

Award criteria: CSA

Impact The expected impacts listed in the work programme under the relevant topic;

Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant.

Esempi di cattive valutazioni Per il criterio Impatto

ESR Analysis: Errori Tipici

Weakness

- Limited generation of new knowledge or the integration of new knowledge to existing remains unclear
- Limited engagement of stakeholders or limited research collaboration
- Lack of detailed IPR management
- The Impact after the end of the project is questionable, as only insufficient information how the results will be maintained, updated and exploited beyond the duration of the project has been provided. It is highly connected to the problem that in many projects the data management is inadequately addressed.
- The description of the dissemination strategy lacks precision
- Risk analysis improperly considered
- Quantification of impacts insufficiently justified and impact measurement missing/insufficient.
- Concrete measures/indicators how the impacts will be assessed are not elaborated and it stays unclear how the results are reaching the target audience and what it will change. Achievability of the impact is often not convincing. Impact addressed in a very narrow scale is also problematic. It is often too much concentrated on local level benefits/benefits only to consortium members/certain narrow target groups – does not have an EU added value/ impact to wider public or market/impact to several different relevant stakeholders.
- Restricted access to deliverables is restricting strongly the extent of the impact
- Replicability of proposed solutions or methods uncertain

Strengths

- The expected impacts are outlined well
- The proposed measures for exploitation, dissemination and communication of the project results are extensive and adequate. All partners are somehow included to dissemination activities and communication activities.
- Open access provided, data management well elaborated
- High potential to enable new knowledge integration and transfer
- High potential to enhance innovation capacity
- The project consortium is strong, e.g. project brings together different stakeholders and participation of each partner is well justified
- Convincing methodology/business model will ensure high impact
- Management of IPR is properly addressed

Valutazione dei valutatori

Main weaknesses in proposals	How to improve	Main strengths in proposals
<ul style="list-style-type: none"> Lack of quantification of the expected impacts. All the expected impacts described in the topic not taken into account. The impacts are not relevant and real. Expected impacts are not derived and justified on previous results. Lack of credibility, very optimistic impact section. Not focusing enough, using general descriptions. Doubtful effectiveness of the proposed measures to exploit and disseminate the project results. Dissemination of project results is not addressed adequately and not clearly explained. Sometimes dissemination confused with communication or exploitation. Repetition of required impact from the call without development appropriate to the proposal contents. Not understand that the impact is related to the particular concept, nor to the call fiche. Weak elaboration of business and market perspectives, e.g. potential market volumes. Lack of financial figures and business models. Lack of credible exploitation through a convincing commercialisation plan. 	<ul style="list-style-type: none"> Plan very concretely and precisely. Include more sub-criteria. Give more detailed explanations about the criteria. Define all relevant details in objectives with e.g. three headlines: technical, commercial/financial and market issues. Quantify the impact. Use financial figures. Use clearer expectations for impact dimensions (clearer "cause-impact" relations). Justify as much as possible the relevant characteristics of the solution, using also quantified data, clearly presented, as for example costs vs the other solutions. Indicate e.g. clear sales expectations/profits/investments/jobs for the next 3 to 5 years. Prepare an excellent dissemination plan (with diverse dissemination measures). It is not sufficient to reference a part of the work programme but to point out which particular effect will be generated by the project. Avoid copy paste of call fiche impact topics and concentrate on the impact of the proposed development. 	<ul style="list-style-type: none"> Accurate, sharp and clear structure. Clear outcomes and benefits of projects and targets definition. Some proposals (higher TRL levels) showed clear business plans. The expected impacts listed in the work programme under the relevant topic (Call impact). Dissemination, communication and exploitation section well elaborated. Dissemination plan is clear with many avenues for dissemination (i.e. not just publications). Well-planned and diverse dissemination measures. Usually the proposals are well addressed to a necessary impact. Proposals generally seem to be aware of what a genuine impact is. A good management structure with WPs/deliverables/milestones that are well explained. Environmental impacts are almost always well written. Most of the proposals attempt to maximize their impact by cooperating with a wide and large partnership, over multicentre areas.

Valutazione dei valutatori /2

Main weaknesses in proposals	How to improve	Main strengths in proposals
<ul style="list-style-type: none"> The local /regional end users are not identified and the cooperation with them is not planned from the beginning of the project. Relatively low implication of policy makers and/or SMEs in the proposal, which has the potential of negatively affect the applicability of the projects. Lack of suggestions for changes in policies. Lack of effective measures on territory/decision making processes. Strengthening the competitiveness and growth of companies is rarely addressed in the proposals missing market details: which markets, size of specific product group concerned, pricing details, missing global focus or details. Weak analysis of competition, segmentation and poor business plan to justify the potential growth. Insufficient concrete information about the environmental savings (i.e. kWh less electricity consumption, less waste products in tonnes / year, less amounts of water in m3, etc.). The European dimension is typically rather weak. Vague IPR management. 	<ul style="list-style-type: none"> Industrial uptake of research results is good to describe at greater length. Include collaboration with international institutes and SMEs, important is also collaboration with industry representatives. Discussions on impacts should be more firmly grounded with direct references to industrial processes that may utilize the outputs of the project. KPI's should be jointly developed with industry; only industry (e.g. the PPP or JTI industry circles) is able to estimate market impacts. Is good to involve someone of the business or sales areas in the company (or external advice) in the writing of the proposal and not just researchers. Encourage suggesting specific actions and policies to be implemented by governments and political institutions. Ask for evaluation of impacts (by professionals). Ask NCPs for cooperation and consultations. See guidelines and specialized trainings (e.g. IPR Helpdesk). 	<ul style="list-style-type: none"> Regarding SC5 in SME instrument: the business impact for the companies is typically very well described. Analysed every single impact of the call. The direct link with the environmental EU and Global policies; impact expected on making energy cheaper/more efficient/sustainable technologies, impacting in the future the quality of citizens life, contributing to improve the values of the democracy through the balanced access to the energy. Those proposals which focus on limited impact categories and/or addressing very important societal problems. The criterion covers all aspects of impacts (scientific, social, economic, etc.) Technical references, like IP, patents etc. are clearly given in proposal.

Fare e non fare

Criterion	DO	DON'T
Impact	<ul style="list-style-type: none"> • When planning be concrete and precise. • Quantify as much as possible. • Use financial figures and develop a business model and/or business plan. • Elaborate a convincing commercialisation plan. • Take into account all the expected impacts described in the topic. • Expected impacts should be derived and justified on previous results. • Plan a good cooperation with end users from the beginning of the project. • Involve policy makers, SMEs and industry in the proposal or plan a sustainable cooperation with them. • Describe industrial uptake of research results in details. • Develop an excellent dissemination plan (with diverse dissemination measures). • Address adequately and clearly explain dissemination of project results. • Ask for evaluation of impacts (by professionals). • Ask NCPs for cooperation. 	<ul style="list-style-type: none"> • Don't list irrelevant and unreal impacts. • Don't try to be very optimistic as it may cause the lack of credibility. • Don't use general descriptions, without any specific focus. • Don't use a weak or general analysis of the market and competition. • Don't miss concrete market details: potential market volumes, which markets, specific products, prices, etc. Don't copy proposal's parts (mainly IPR management) from your previous project proposals. • Don't forget that the impact should be related to the particular concept, not to the call fiche. • Don't repeat (or copy) required impact from the call instead of development of your own proposal content. • Don't confuse dissemination with communication or exploitation. • Don't forget to use concrete information about expected environmental savings.