Organizzare sistemi e distretti culturali.
Le sfide della progettazione
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From 'design' to 'designing' approaches in complex systems: The case of a cultural district
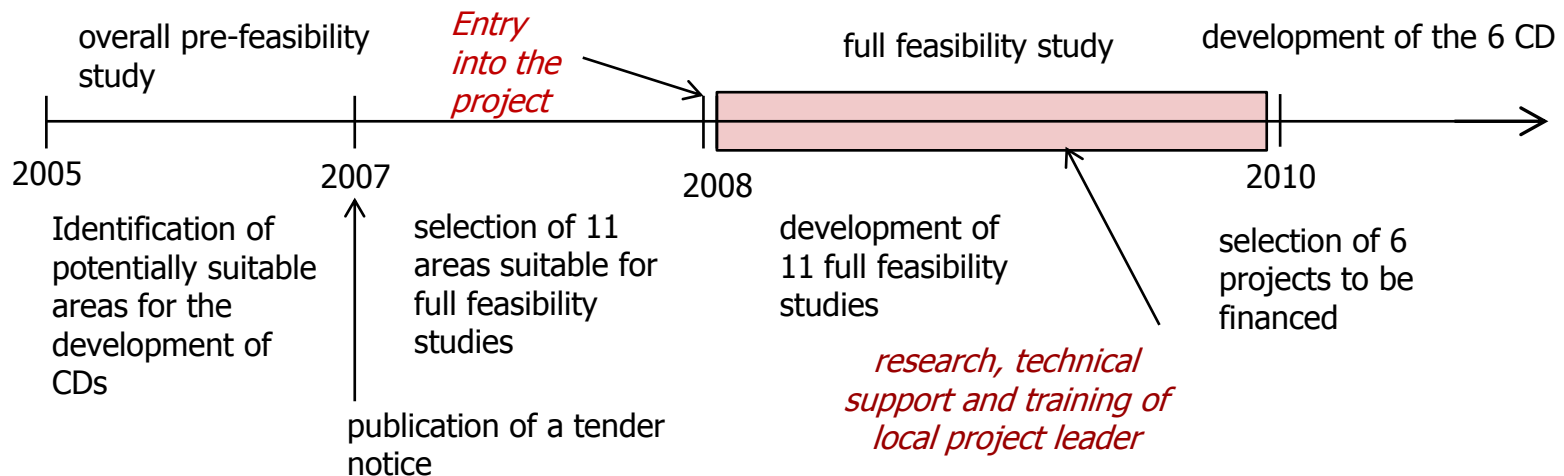
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Research aims

- In this paper we will focus on the issue of **organizational design in complex systems**

  - In a complex system the interaction among constituents of the system, and the interaction between the system and its environment, are of such a nature that the system as a whole cannot be fully understood simply by analyzing its components (Cilliers, 1998)

- We argue complex systems require a **shift from 'design' to 'designing' approaches**

- We try to provide insight into the dynamics of design(ing) exploiting the development process of a **cultural district**

Research method and context of analysis

- We exploit our experience as 'insiders'

  - **Participatory Action Research (PAR)** (Rahman, 2008; Chevalier and Buckles, 2013)

- to juxtapose what we have seen and what was prescribed by an 'external' and influential actor – the main funder, i.e. a foundation

- The authors have been involved for about 3 years in a **feasibility study** financed by a major Italian Banking Foundation aimed at designing a **cultural district** in Northern Italy, through a total investment of about **20 million euro**

overall pre-feasibility study

Entry into the project

full feasibility study

development of the 6 CD

2005

2007

2008

2010

Identification of potentially suitable areas for the development of CDs

selection of 11 areas suitable for full feasibility studies

development of 11 full feasibility studies

selection of 6 projects to be financed

publication of a tender notice

research, technical support and training of local project leader

The cultural district vs industrial district

Cultural district	Industrial district

• System with a 'variable geometry'
• Mainly complex and dynamic horizontal or transversal integrations among organizations
  ✓ which belong to different value chains and different industries
  ✓ either cultural and non-cultural
	• Mainly vertical integration of organizations
	• Mainly within the same value chain

• Requires an explicit intervention and support from both public and private actors	• Can arise spontaneously

- In a CD cultural heritage and related cultural sectors are conceived as **triggers** for the socio-economic development of a territory (e.g. Brooks &. Kushner, 2001; Valentino, 2007; Santagata, 2002; Lazzeretti et al., 2010; Francesconi & Cioccarelli, 2013)

- In a CD cultural activities can generate **positive externalities** also within **non cultural sectors**, acting as a 'glue', rather than a mere resource that generates profits per se, e.g. through cultural tourism (Sacco, 2006)

- **High complexity of the system** due to reciprocal and dynamic interdependencies among a multitude of actors and stakeholders, such as public administrators, entrepreneurs, educators, scientists and researchers, cultural agents and the whole civil society (Sacco, 2003; 2006)

Theoretical hints

- We believe the design of a complex system cannot be conceived as a process of design completely defined **a priori in a linear fashion**

- the process of design involves **pragmatic implementations, creative experimentation and contextual learning** at the same time (e.g. Romme, 2003; Dunbar and Starbuck, 2006)

- the process of design should be **iterative** and **start from 'open' and 'incomplete' goals**, seen as essentially **problematic** and non-deterministic (Dunbar & Starbuck, 2006)

- The **risk** is to ignore the emerging aspects and to focus on 'a priori' and a **crystallized set of goals and actions**

  - because designers nearly always misunderstand to some degree, they should view their efforts as experiments that might not turn out as predicted, and they should pay careful attention to the outcomes of these experiments (Dunbar & Starbuck, 2006)

Literature gap

In our knowledge, in CD's literature there aren't previous studies that explore the **'tension'** that can arise between an **overly rational and deterministic design approach** and the **actual process of design 'in action',** especially in large, complex and dynamic projects where the social dimension is very relevant

Data gathering

Comparison between the design process as emerging by **Foundation's guidelines** and our **experience 'on the field'**

- direct observation and participation

- interviews to key local players and to project partners

- document analysis (on more than 5,000 pages) on previous local projects, potentially related to the development of the CD [e.g. integrated local development projects (PISL), integrated territorial projects (PTI), all previous cultural projects and cultural interventions already completed or work in progress in the territory].

From 'design' to 'designing'

Traditional approaches to organization design

The organization design is **fixed in time and space** and modified only to accommodate exogenous environmental changes.

The **demarcation between designer and user** is conceived **clear** and **unambiguous**.

Clear and stable boundary between the entity being designed and the context for which it is being designed.

The boundary makes it possible to **fix the purpose of a design** based on a **stable set of user preferences** and **performance expectations**

Emergent approaches to organization designing

Focus on **emergent fits**, in contrast to 'traditional' fit of contingency approaches, seeks to understand how designs develop and respond to evolving situations

The results of design efforts depend not only on **relations among components,** but also on the **processes** used to arrange components, the **motivations of participants**, and their evolving over time.

As design situations evolve, designers need to create **new and contextually relevant responses** rather than to adhere to their predictions and plans (Dunbar & Starbuck, 2006)
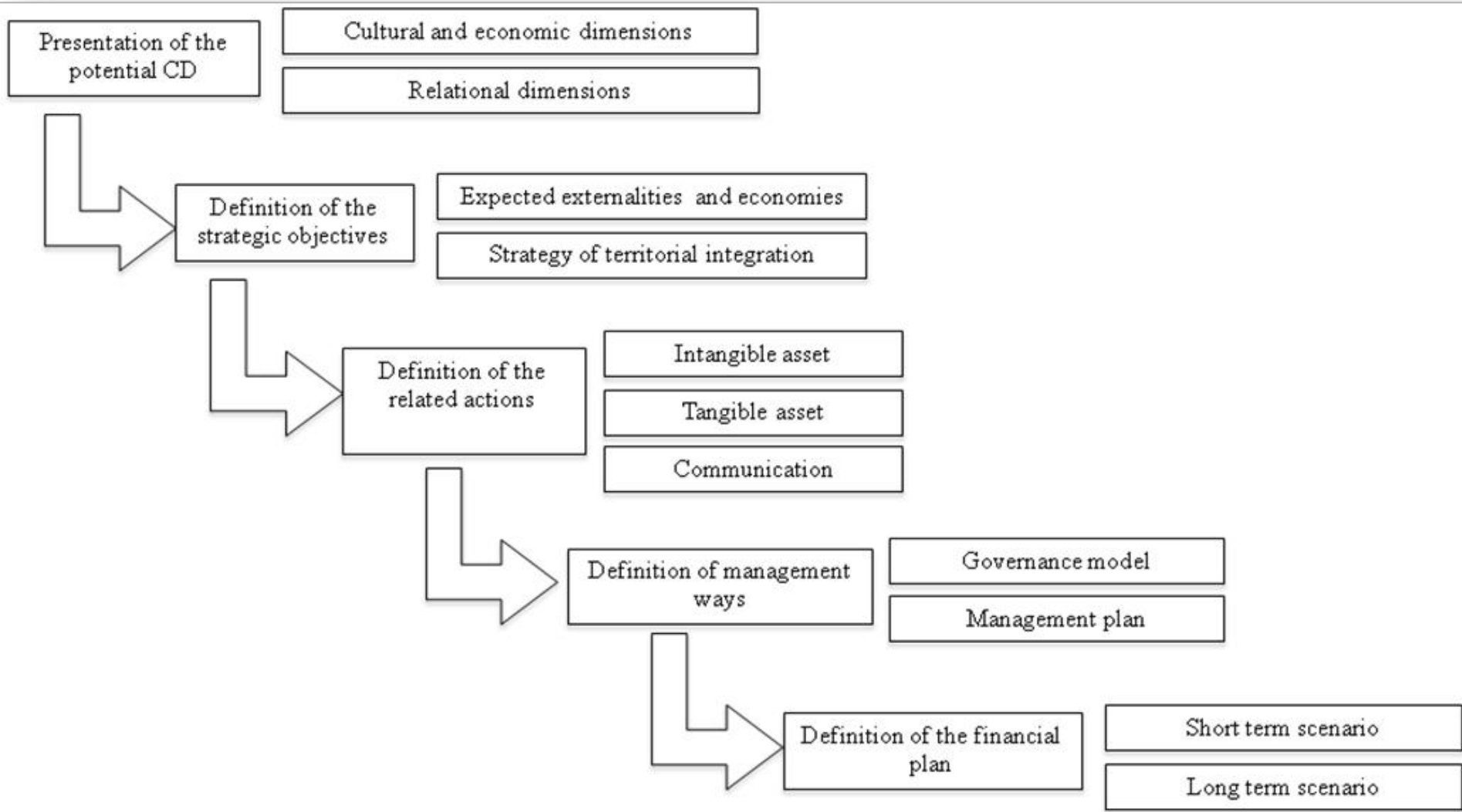
Concept of 'incompleteness' (Garud et al., 2013)

- ✓ When problems are **ill-defined**
- ✓ When **system boundaries** are often **unclear**
- ✓ When **user preferences** are both **heterogeneous** and **evolving**
- ✓ When the **goals and purpose** of the design are likely to remain a **continually moving target**

Design as a 'noun': organization is conceived as an 'artifact'

⇨ **Design as a 'verb'**: organization is conceived as a 'process' (organizing)
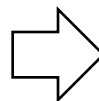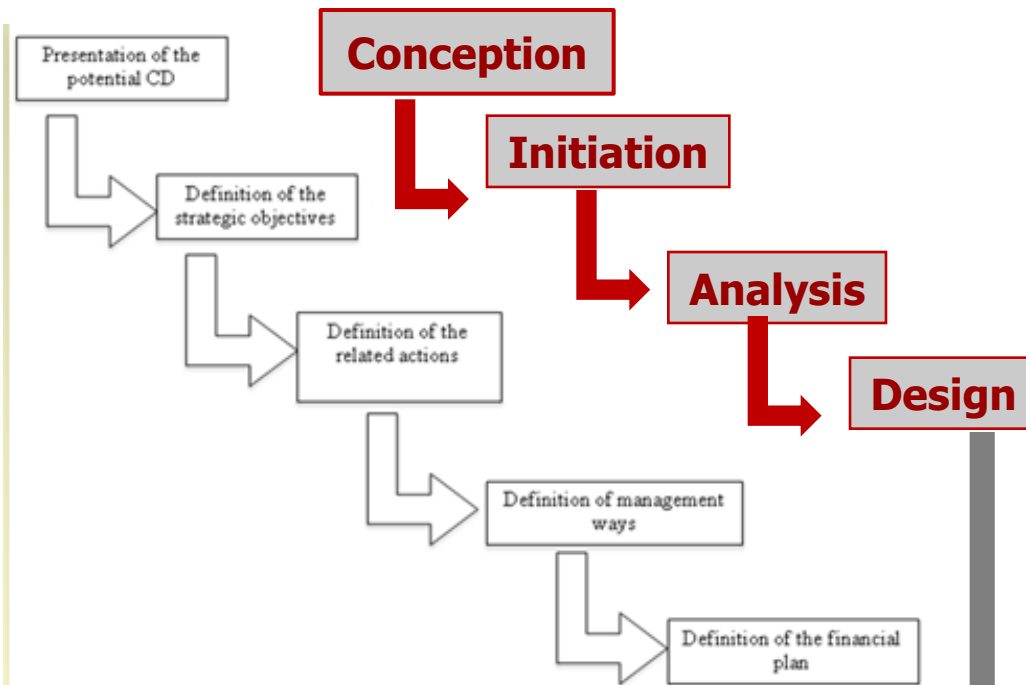
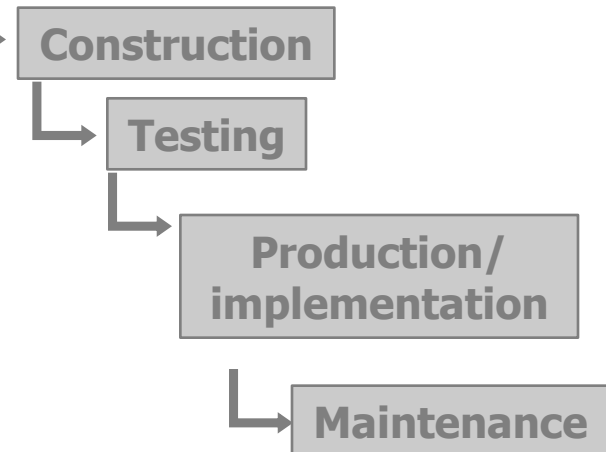## Results and discussion: The process suggested by Foundation

Source: Foundation's Guidelines.

Results and discussion: The process suggested by Foundation

Presentation of the potential CD

Definition of the strategic objectives

Definition of the related actions

Definition of management ways

Definition of the financial plan

Conception

Initiation

Analysis

Design

Waterfall model (as in sotware development)

Construction

Testing

Production/ implementation

Maintenance

Findings

The formal process (as depicted in the guidelines)	Tension	The process in action (as we experienced it)
The guidelines propose a scheme of 'next steps' (as in the waterfall model). The approval of the feasibility study is intended to unlock the entire co-financing of the foundation		The phases of the feasibility study were carried out in parallel. The financial plan represented the first real starting point, with a real risk of transposition of means (financial resources) with purposes (organize a CD)
The guidelines make no reference to the possibility of conflicts and complex negotiations in the definition of the strategic objectives (nor how to address and report them)		The 'conception, initiation, analysis and design' of the CD arose from complex power negotiations among multiple stakeholders, conflicts, ongoing review of problems and alternative solutions with important processes of 'reflections' and 'learning by doing'
The guidelines require a clear vision of the project from the earliest stages as well as the identification and a wide involvement of stakeholders		Some fundamental aspects of the project emerged only at the end. Only few important stakeholders were involved
The guidelines requires 'completeness' in all parts. The feasibility study must lead to the conception, initiation, analysis, and design of a CD to be then constructed and maintained		The project constantly evolved over time. The CD is difficult to be perceived as something concrete, tangible (as a reified object)
The feasibility study *must clearly present* the project objectives in terms of externalities of the system, economies of scale and / or economies of scope, etc.		Many output and benefits of the project (in terms of negative and positive impacts on the territory) can only be estimated very roughly, being emergent
The guidelines seem to hypothesize that the designer has an 'absolute' rationality		We experimented on the field a very 'bounded' rationality

Limitations and further researches

❑ In spite of the **limitation** of a **single case**, a proposition for further research opportunities have been suggested:

> **Research proposition**
>
> **In non-trivial projects of cultural district development, the adoption of a 'designing' approach is more effective than the traditional 'design' approach.**

❑ We plan to analyze more case studies to strengthen our argumentations and to give empirical evidence to our research proposition

❑ Moreover, possible questions for further research could be:

- ✓ How can a 'designing' approach be concretely instilled within the development of a CD?

- ✓ Which are the situational elements that mainly affect such a development (e.g. the way in which stakeholders are involved, the dialogue among actors, the geographic size, the population involved, the level of investment, the number of firms and sectors involved, the role played by institutional and public actors, and so forth)?

Thank you!

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