

The economic theory of entrepreneurial discovery

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Changing patterns of territorial policy : smart specialisation
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S3 in the industrial policy space

- #1 – industrial policy – moderate intervention, sector neutral
 - Fixing general market failures/providing public inputs
 - Variations at # 1
- # 1 not always sufficient to help an economic system to move towards new and specific domains of inventive activities – hence #2
 - Case of societal needs (Grand Challenges) to accelerate innovations in a particular domain but this will not happen spontaneously..
 - Case of small countries/regions which need to build capacities and critical mass to develop competitive new activities but this will not happen spontaneously..
 - Case of high tech strategy
- # 2 : A major difference is the degree to which intentionality is required (more centralization and more prioritization or specialisation)
- But it is a delicate game – how to make it smart?

Two solutions to the information problem

- I.Kirzner – « Entrepreneurial discovery... » - JEL, 1997; K.Morgan
- The omniscient State can acquire all the required information *ex ante*
 - ‘*Optimal information search*’ solution
 - ‘Principal – agent Governance’ (C.Sabel)
- « *What if, as I and many others assume, there are no principals...with the robust and panoramic knowledge needed for this directive role?* » (Sabel)
- One cannot know everything *ex ante* (knowledge is incomplete, dispersed, divided)
 - The ‘experimentalist State’ (Sabel, Morgan)

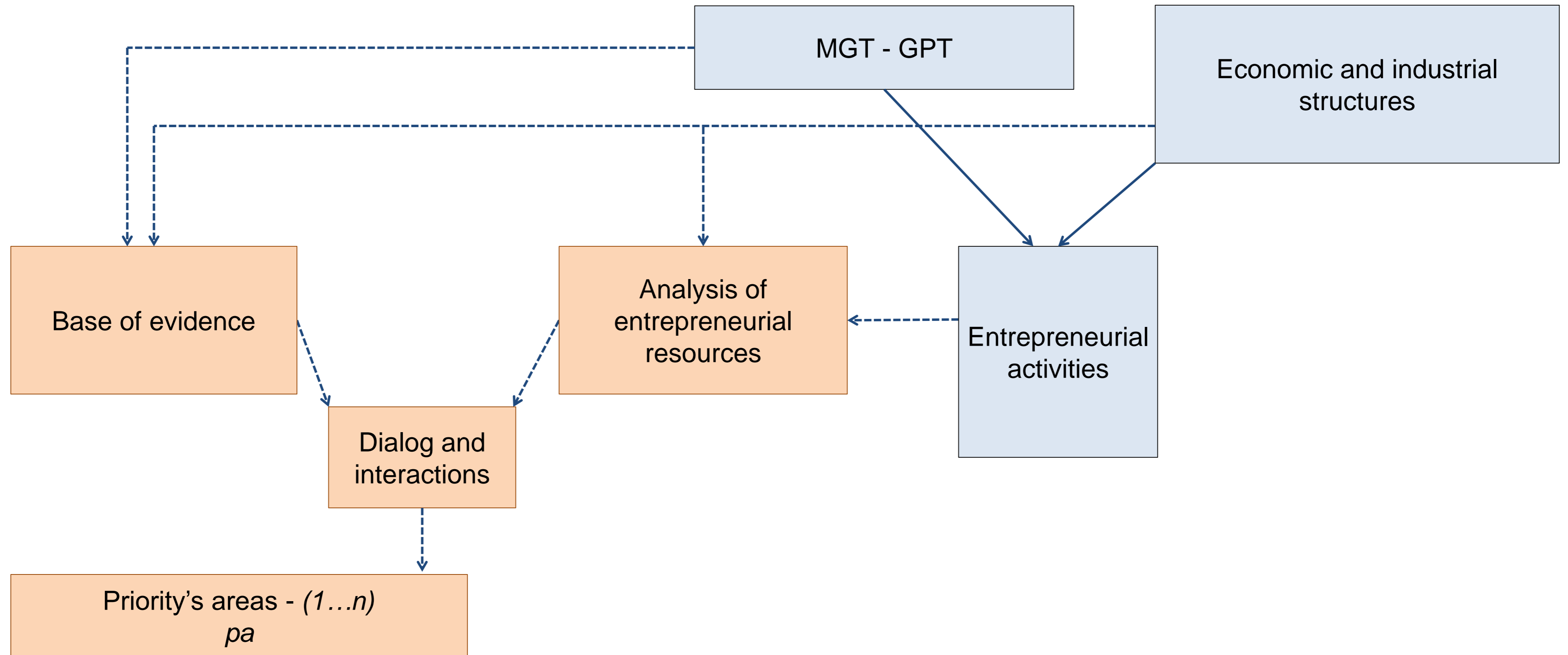
- Why is the second solution superior?
- Informal evidence – the failures of the ‘Grand Plan’
- Conceptual argument : the experimental dimension of industrial policy # 2
 - S3 is experimental in nature : a few bets are placed in various domains
 - This is different from policy # 1 where the bets are safe – and the omniscient planner solution can work well
- By definition experiments imply discoveries and surprises
 - At project level but also at priority level

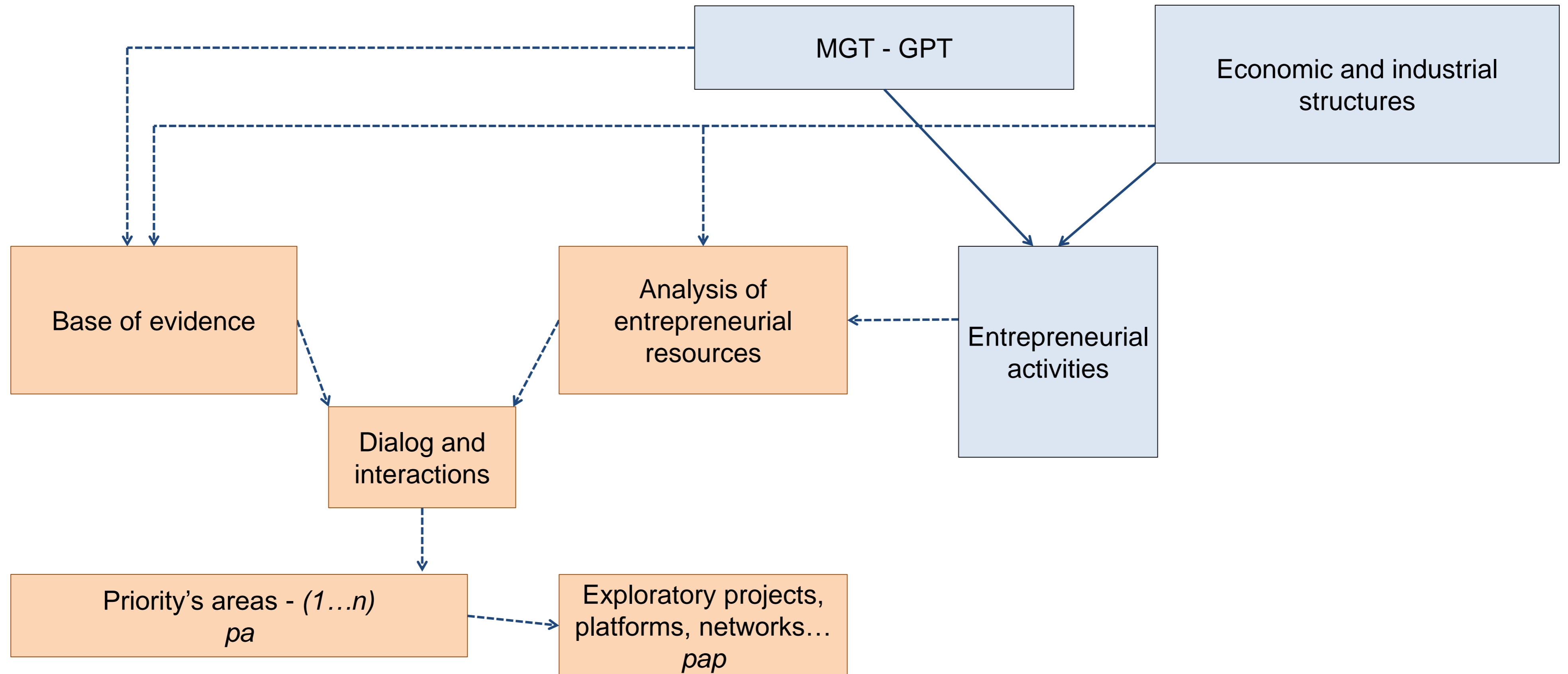
Not confusing...

- The idea of full information *ex ante* aiming at building a complete plan
- The idea of information *ex ante* to guide the process of entrepreneurial discovery
 - Stylized facts:
 - « *Countries that promote exports of more 'sophisticated' goods grow faster* » (Rodrik)
 - « *Proximity between the product spaces is an important variable to determine the feasibility of diversification* » (Hausmann, Hwang and Rodrik)
 - Knowledge and evidence on the economic structures and the entrepreneurial resources of the Region
- The *ex ante* information is by definition insufficient for policy # 2

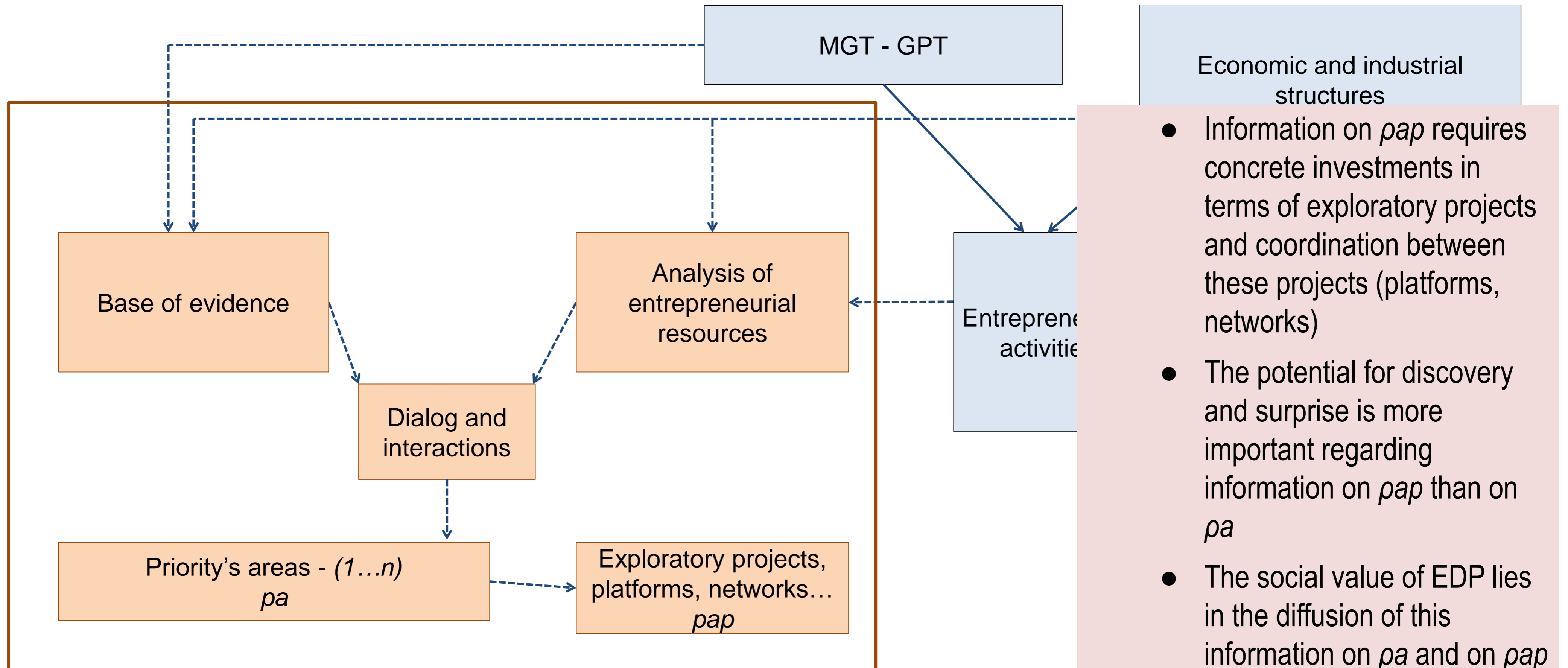
Structure of discovery information

- Information to be discovered is structured by the objective of the policy
- The discovery information is a compound event (Hirshleifer):
- Is this domain strategic?
 - ρ_a
- Does this strategic domain could be exploited with success?
 - ρ_{ap}
 - ρ_{ap} discovery implies concrete investments in exploratory projects and coordination instruments

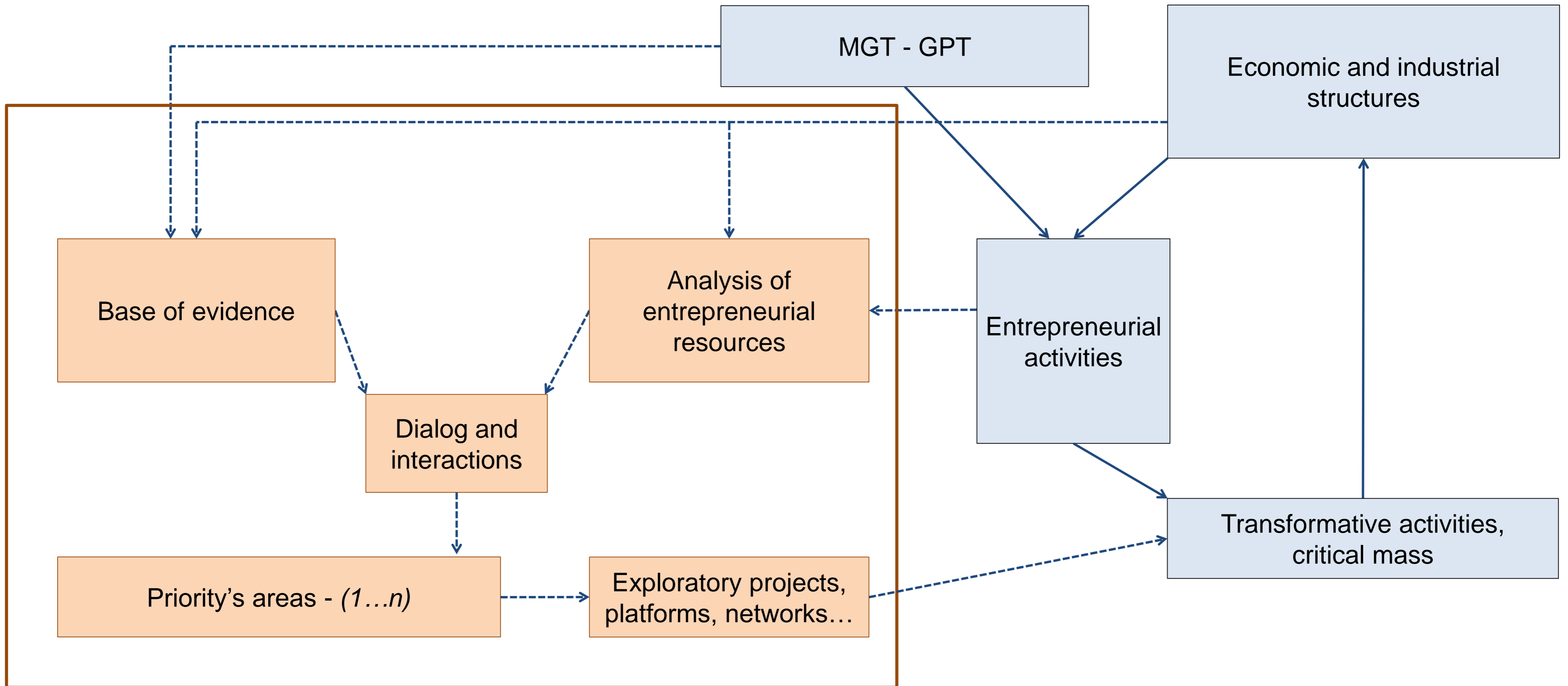




The process of entrepreneurial discovery

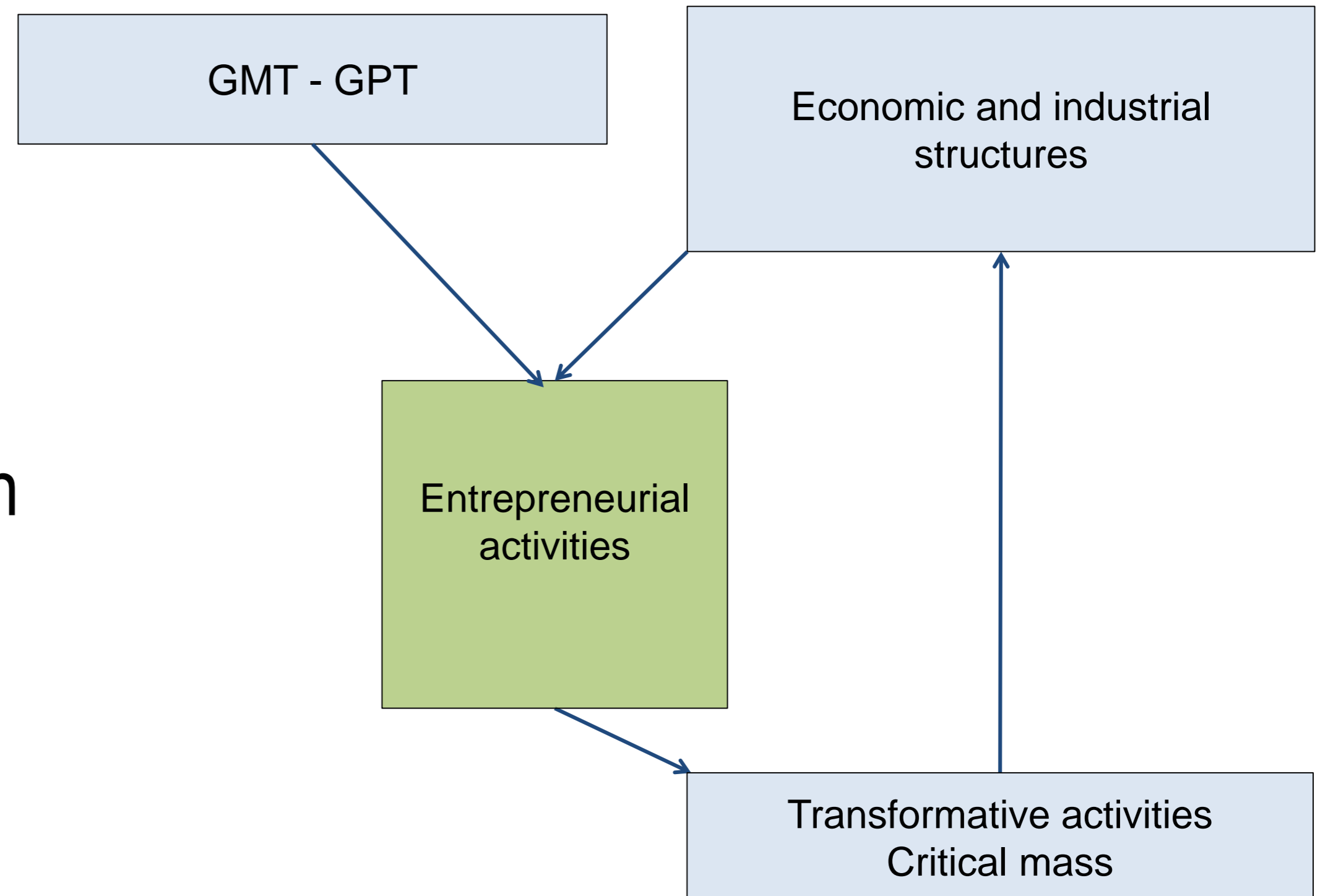


From EDP to the growth of new activities



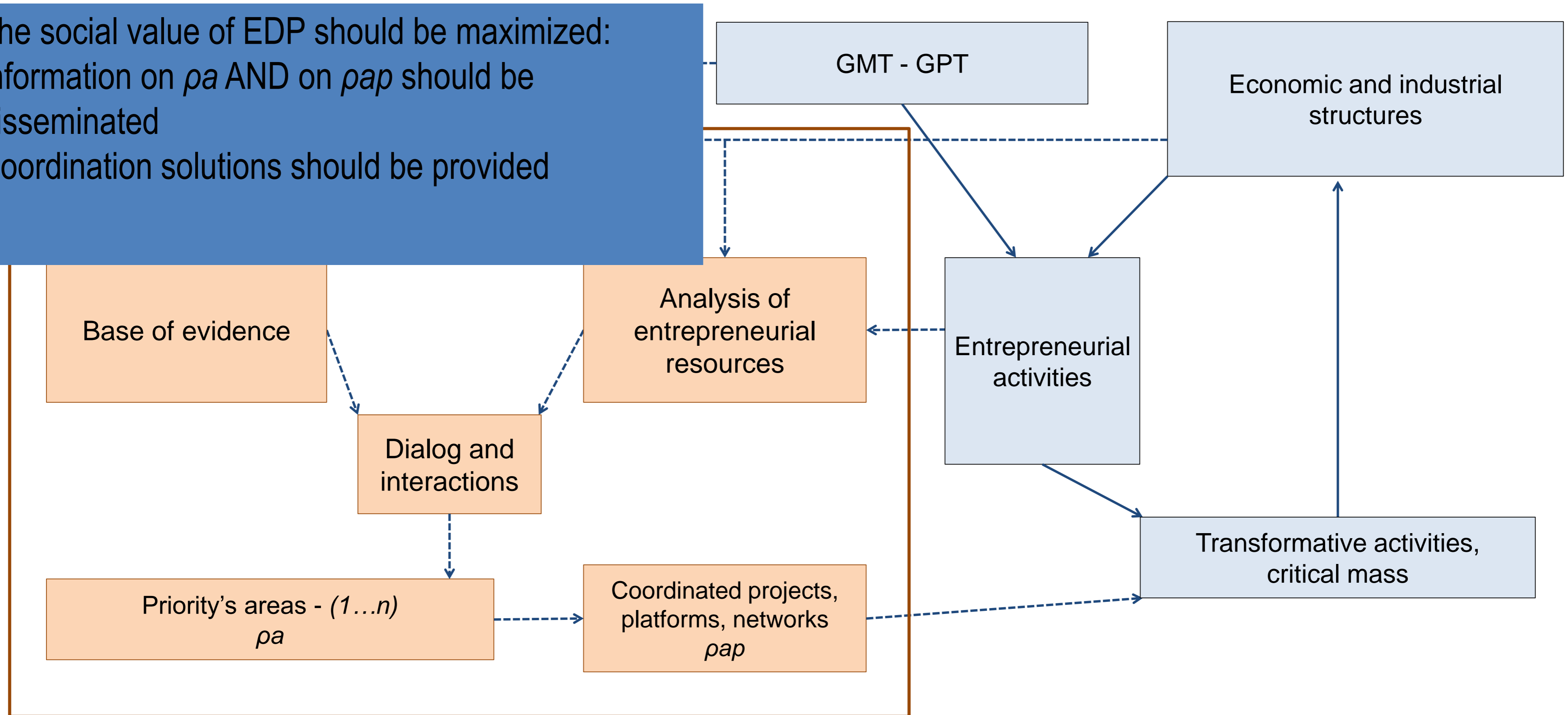
Firms know how to internalize the EDP

- Large firms
- SME – whose collective action is facilitated by an institution
- But the social value is smaller: the firm will reveal the information on ρa , not on ρap

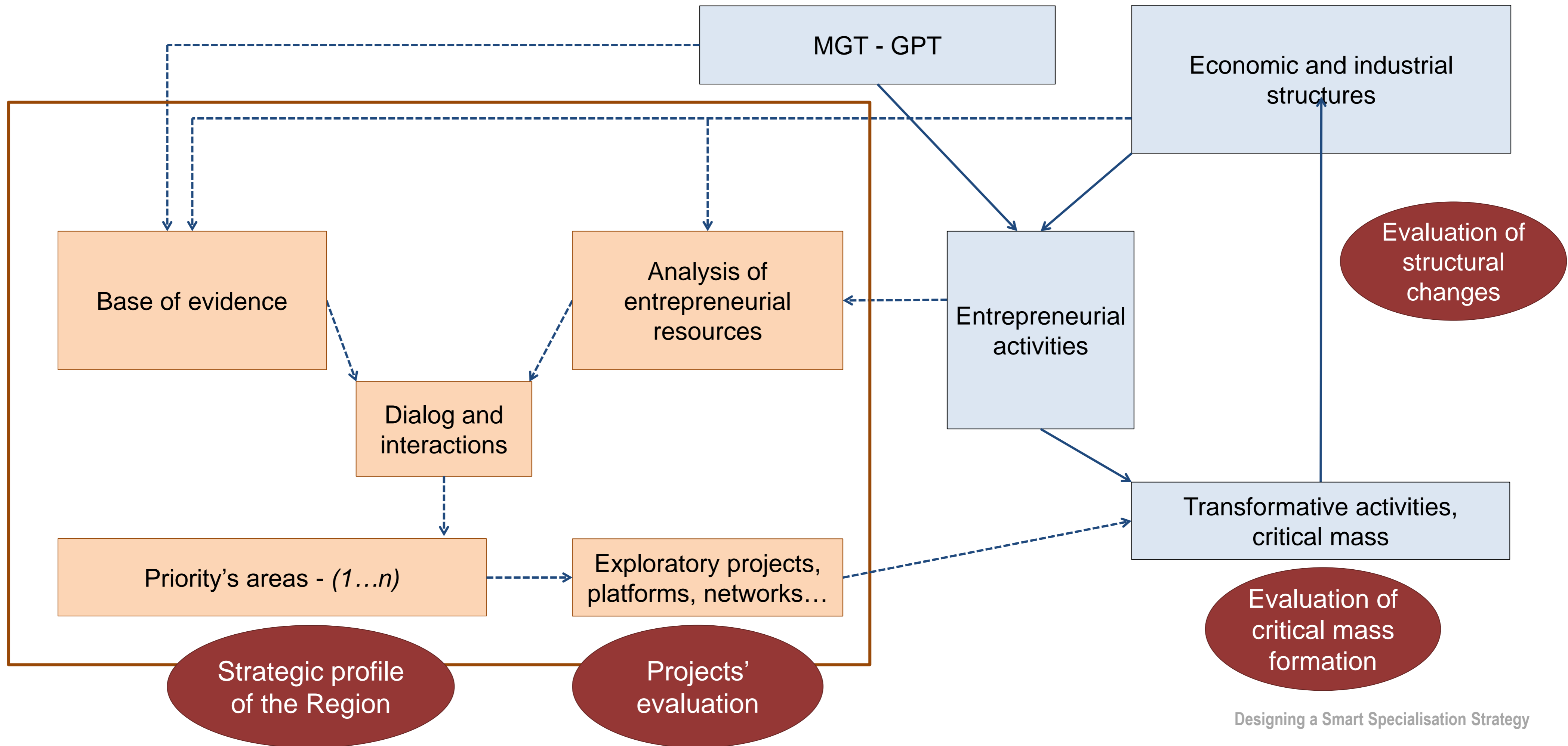


EDP supported through a policy

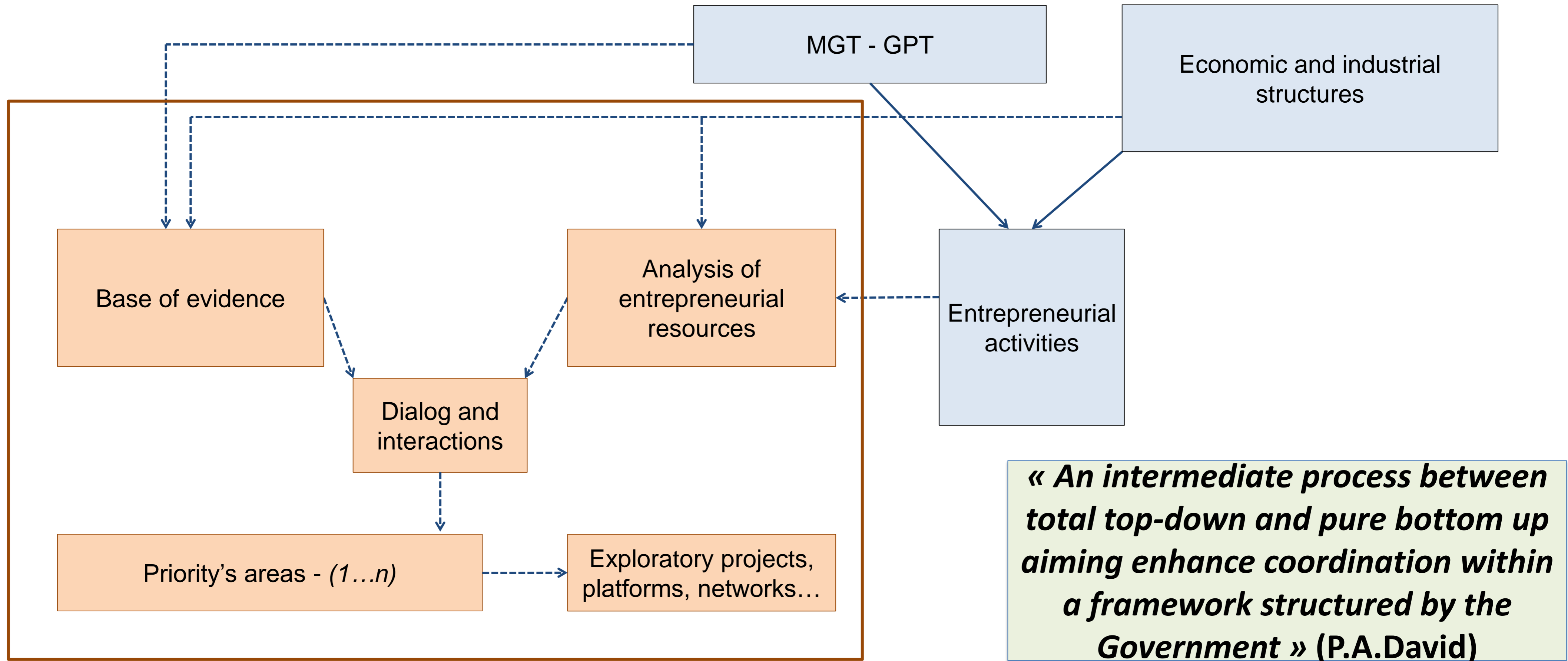
The social value of EDP should be maximized:
Information on ρa AND on ρap should be disseminated
Coordination solutions should be provided



Evaluation and monitoring



Between pure *bottom up* and total *top down*!



« Countries and regions should put more efforts into choosing, in detail and for the future, the direction of R&D – on what products, what processes, into what markets » (Enos, 1980)

- Research : addressing all the institutional design issues and implications of EDP as a policy process
 - Informational spillovers versus incentives
 - Coordination problems
 - Evaluation & monitoring