

BUSINESS INNOVATION SYMPOSIUM (E6)
Innovation, Entrepreneurship & Investment: The Macroscopic Perspective (3)

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ISAAC: INFERENCE SEMANTIC ANALYSIS FOR THE AGGREGATION OF COMPANIES

Abstract

ISAAC is a software platform created for the analysis of the Aerospace Companies anywhere in the world. It is based on a deep semantic analysis of the Companies webpages, from which it identifies and extracts the Company key parameters, re-aggregates them, and finds the degree of matchability, partnerability, cooperability or competition between Companies or Groups of Companies (clusters, districts, etc.). ISAAC can be used by Companies, especially SMEs, to look for partners internationally; by Institutions, to monitor the position of their Districts or Clusters compared to other Districts or Clusters; and by Associations, to support the partnership activities of their Associates. ISAAC works in three steps: first, it uses a specific, deep semantic engine to create a profile of each single Company, directly from its website, extracting its key-parameters and their weight, without external inputs, and profiling every Company in a peculiar multidimensional, weighted space; second, it creates a sectorial dedicated dynamic taxonomy, harmonising it with the main International taxonomies; third, it makes an analytic and statistic elaboration creating the coefficients of matchability between each Company, Group or Cluster in answer to specific queries. ISAAC is a valuable tool for Space Industry able to identify innovative products and technology transfer outside the Space value chain: The Companies subscribing to ISAAC are profiled, inserted into the system and weigh-matched. Every new entrance generates the complete, automatic recalculation and reaggregation of the Companies, the Groups or Clusters: ISAAC is therefore a living platform which follows the evolution of the Companies and the international markets. It is therefore especially useful to aggregate Companies, Districts, Clusters and Associations which have a low degree of reciprocal knowledge, and are located all over the world. The ISAAC outputs are slices of the multidimensional data space created by the system, which can be therefore cut for analysis structured following each specific requirement of each specific user, acting as a powerful, flexible and quick service upon request, without geographical limits. ISAAC has been started inserting all the Italian Aerospace Companies and starting the comparison within them, their Clusters and Groups. Other National Aerospace Companies are entering the system. The structure of ISAAC is such, that increases its power more and more with new entries.