



# AN ONTOLOGY FOR PSYCHOLOGICAL OWNERSHIP TO PREDICT ORGANIZATIONAL AMBIDEXTERITY

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**Problem Definition** The tendency to explore versus exploit is affected by an organization's history captured by its age, size, slack resources, absorptive capacity, organizational structure, and culture. Finally, cognitive and behavioral inclinations of the senior management team may drive the organization toward exploration and/or exploitation (Lavie 2010). Based on previous literature, there has been little discussion on the influence of psychological ownership in decision making.

## Terminology

**Organizational Ambidexterity:** A balance between exploration and exploitation.

**Exploration:** The ability to experiment and employ newer approaches.

**Exploitation:** The ability to utilize and refine known methods.

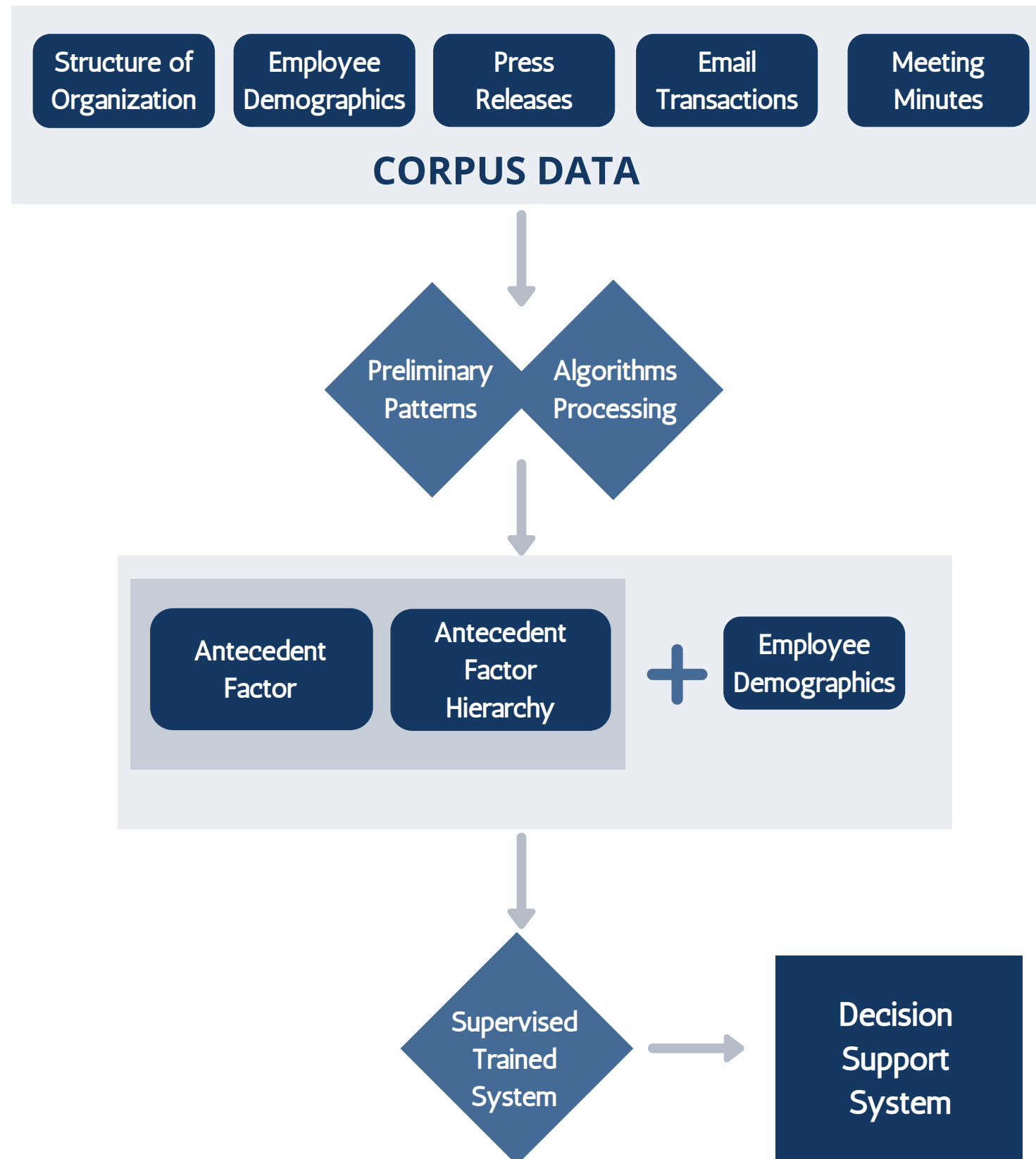
**Psychological Ownership:** In the context of an organization, it is a phenomenon in which an employee develops possessive feelings/attachment towards the organization (job, team, work).

## Research Objective

While exploitation includes choice, refinement, production, selection, execution, efficiency and implementation, exploration encompasses search, knowledge creation, risk taking, flexibility, discovery and innovation. Maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity (March 1991). Exploration drives radical change, and in general, is a risk-bearing venture to undertake since the results are unknown. This is why, in the event of limited resources, organizations tend to exploit the methods they already have, rather than leaping towards exploratory activities.

Our research recognizes psychological ownership to be a potential driver of decision making to explore or exploit, and presents an ontology of psychological ownership that can be used as a framework to predict their inclination towards change.

## Methodology



**Data Collection:** This involves collecting organizational data like employee demographics, hierarchical structure within the organization teams, any press releases or minutes of meetings, and project based emails. This is, by no means, a comprehensive list. For specific organizations, there may be more or less of such indicators of employee records/involvement.

**Data Processing:** Algorithms like k-means clustering, anomaly detection based on text mining such as Natural Language Processing could be applied to find preliminary patterns for this kind of unsupervised data.

**Identifying Antecedents of Psychological Ownership:** Based on the preliminary patterns, several antecedents could be studied, including, but not limited to duration of employment, projects that an individual has worked on, and their salaries. In this phase, it is crucial to analyze the hierarchy of those antecedent factors, and the level of impact they have on ownership. While antecedent identification could also vary between teams within the same organization (for example, short-term project vs. long-term project teams), our study only focuses on individual organizations as a whole. If a particular factor holds stronger than its counterpart for the whole employee pool, then it is a stronger antecedent for psychological ownership.

**Basis for Decision Making:** Based on the established ontology, a supervised model can be trained to predict the employees' inclination towards change.

## Benefits of Model

- This model would help identify individuals to build a guiding coalition for exploratory activities.
- It would also provide insight into what drives psychological ownership.

## Contributions to Future Research

- This study presents an initial conceptual model that provides room for future research on how psychological ownership might drive change.
- While this model is organization specific, it gives the opportunity to implement this across multiple organizations and capture the industry specific antecedents for psychological ownership.