Digital Transformation behaviors in the agri-food context: an exploratory analysis

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Theoretical background

Previous literature focused on:

1. Digital transformation strategies (Ferreira, Fernandes, and Ferreira 2019; Hess et al. 2016);
2. Change in the firm organizational structure (Schwarzmüller et al. 2018; Singh and Hess 2017);
3. Alteration of the business model (Berman 2012);
4. Digital transformation maturity levels (De Carolis et al. 2017);
5. Adoption of new technologies (Pankewitz 2017).

Letterature Gaps

Two main gaps:

1. No explanation of how agri-food firms are digitally transformed;

2. No explanation of how agri-food firms exploit digital data for product development.

Research questions

1. How are agri-food firms digitally transformed?

2. How do these firms exploit digital data to develop their products?

Methodology – Qualitative methods

Multiple Case Study (Eisenhardt and Graebner 2007);

| Case Study	Business Area	Size*	Respondent
1	Vegetables processing	Medium business	CEO
2	Fruits processing	Small business	CEO
3	Olive oil production	Large business	IT specialist
4	Dairy products	Medium business	CEO
5	Dairy products	Medium business	CEO; IT specialist
6	Dairy products	Small business	CEO
7	Dairy products	Medium business	Marketing Director
8	Poultry products	Large business	Head of IT; Head of R&D
9	Pasta and sweet products	Small business	CEO
10	Fresh pasta	Small business	CEO
11	Fresh pasta	Small business	CEO
12	Dry pasta and rusks	Large business	Quality manager; Head of R&D
13	Food supplements	Medium business	Technical director
14	Cured meat	Large business	Managing director

Data collection and analysis

Data analysis process
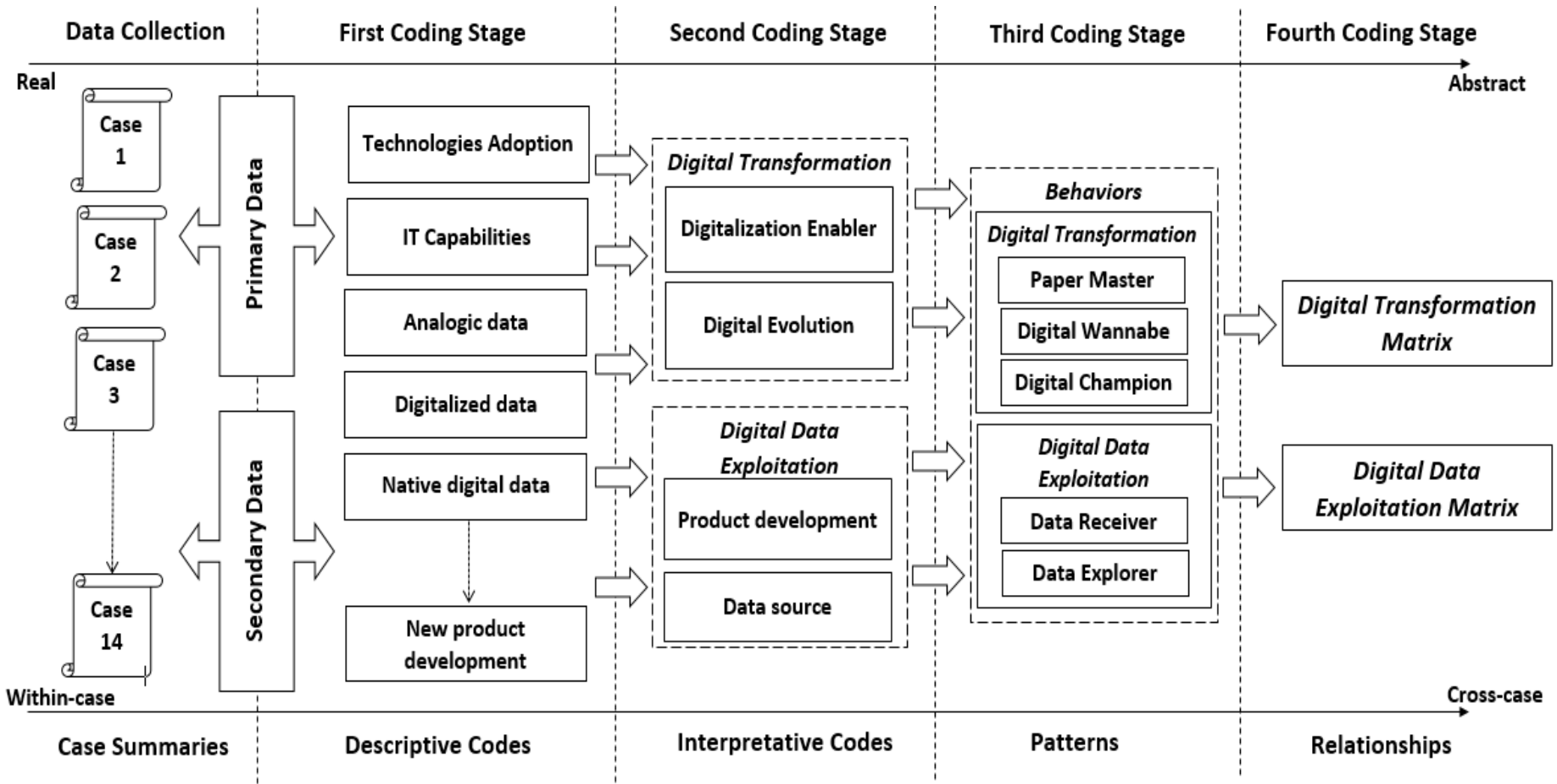
+ Findings

Digital transformation behaviors
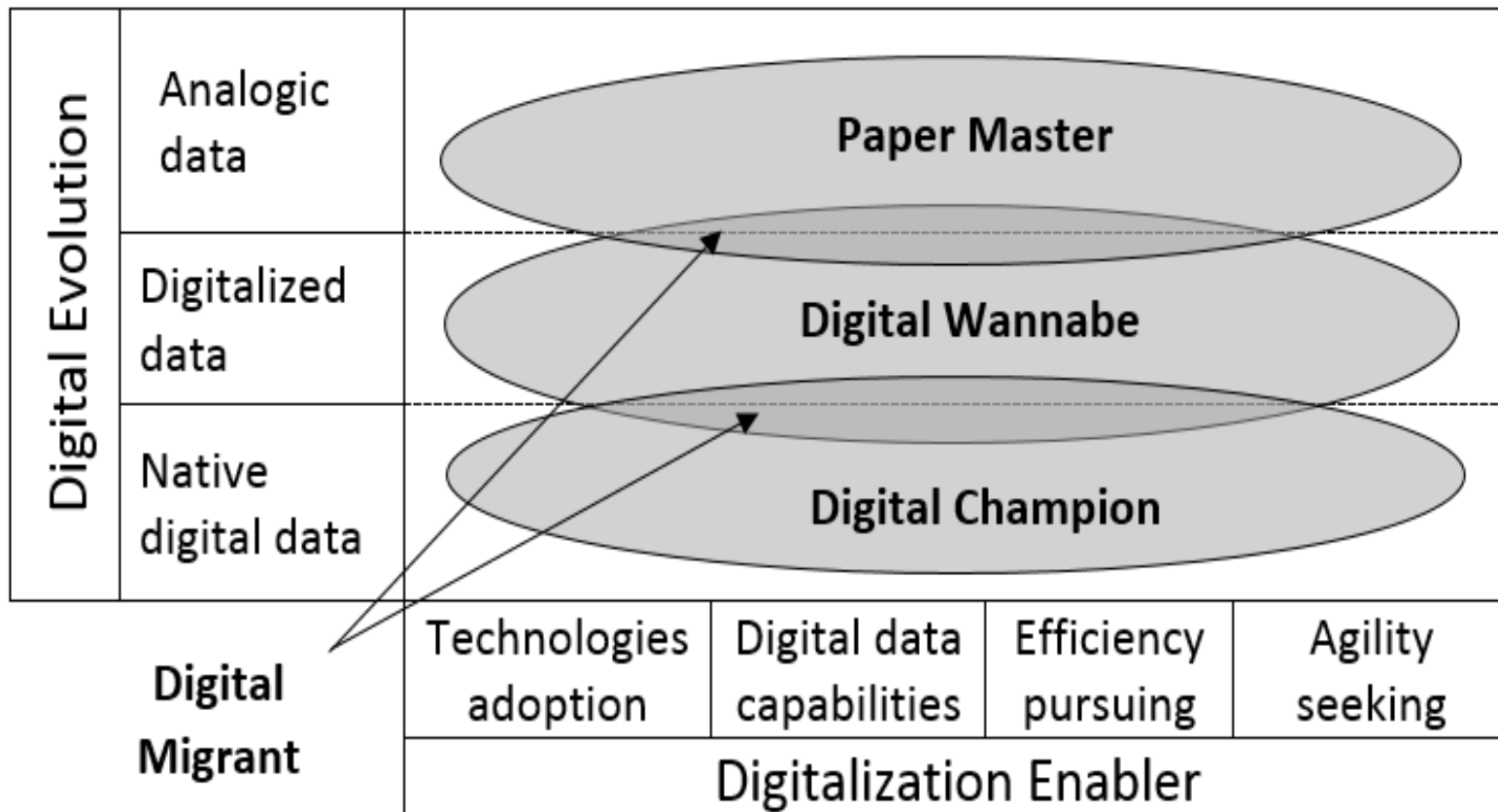
+ Findings

Digital Data Exploitation Behaviors
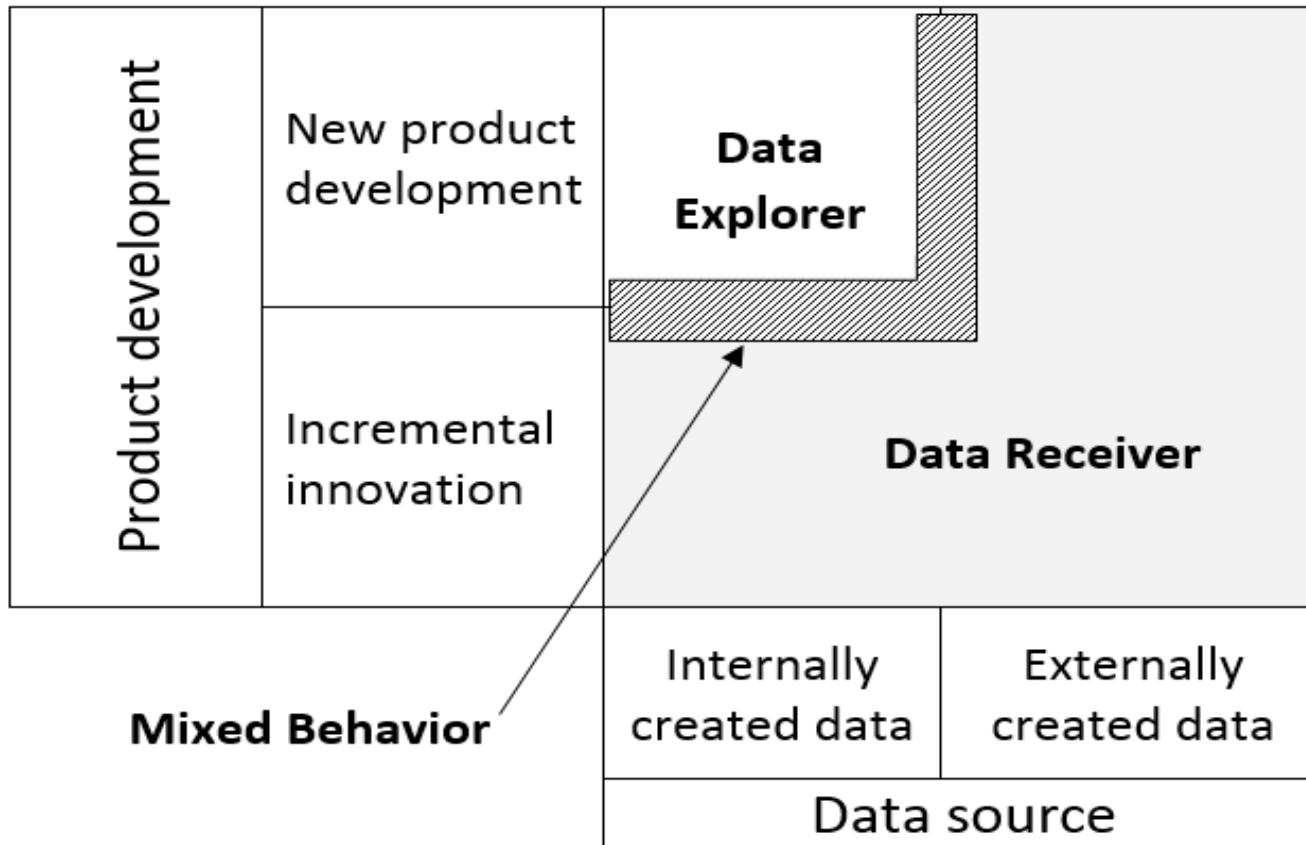
+ Discussions

Previous studies

■ Recognize digital data as the key outcome of the digital transformation;

■ Shed light on how agri-food firms utilize technologies and what new products have been developed due to the new technologies.

Discussions

This research

- Extends previous research by identifying digital data behaviors and theorizing how these behaviors change according to the data sources and the kinds of product development process.

- Integrates previous literature by pinpointing three behaviors adopt by agri-food firms during the digital transformation.

Thanks for your attention

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