

# Harnessing data analytics for firm innovation: the role of organizational arrangements

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We investigate the extent to which the firms' resort to data analytics (DA) in business operations is correlated with their innovation capacity and whether this effect is stronger in presence of specific organisational arrangements. By extending recent work on data analytics for innovation in decentralised/centralised R&D structures, we posit that the range of relevant organisational arrangements also encompasses the firm's level of decisional autonomy, its resort to teamworking, and the set of provided non-monetary incentives to motivate employees. Using data of the European Company Survey 2019, we find that DA significantly correlates with firm innovation, providing its application is not limited to specific functions (like HRM). The proposed set of organisational arrangements confirms a significant moderating role in the relationship at stake, with the sole exception of the presence of teamworking. Such a moderating role is heterogeneous depending on the type of innovation. The positive association between DA and product innovation is in fact stronger in firms that rely on decisional autonomy to a greater extent. Conversely, DA exhibit a stronger association with process innovation in firms that make larger use of non-monetary incentives. Managerial and policy implications are drawn accordingly.