



Full Informed Digital Transformation Simpler, Maybe Better

Almeida Dias¹ , António Capita² , Mariana Neves³ , Goreti Marreiros⁴ , Jorge Ribeiro⁵ , Henrique Vicente^{6,7} , and José Neves^{1,7()}

¹ Instituto Politécnico de Saúde do Norte, CESPU, Gandra, Portugal
a.almeida.dias@gmail.com

² Instituto Superior Técnico Militar, Luanda, Angola
antoniojorgecapita@gmail.com

³ Deloitte, London, UK
maneves@deloitte.co.uk

⁴ Departamento de Engenharia Informática, Instituto Superior de Engenharia
do Porto, Porto, Portugal
goreti@dei.isep.ipp.pt

⁵ Escola Superior de Tecnologia e Gestão, ARC4DigiT – Applied Research Center for Digital
Transformation, Instituto Politécnico de Viana do Castelo, Viana do Castelo, Portugal
jribeiro@estg.ipvc.pt

⁶ Departamento de Química, Escola de Ciências e Tecnologia, Centro de Química de Évora,
Universidade de Évora, Evora, Portugal
hvicente@uevora.pt

⁷ Centro Algoritmi, Universidade do Minho, Braga, Portugal
jneves@di.uminho.pt

Abstract. The digital age is upon us and challenges many of today's businesses. To succeed with digitalization, it is needed a well-integrated enterprise and *Information Technology* organization that works seamlessly and thrives towards common goals. This is easy to say, but harder to achieve. *Digital Transformation* is the integration of digital technology into all areas of a business, fundamentally changing how one operates and delivers value to customers. It is also a cultural change that requires organizations to continually challenge the status quo, experimenting and coming to terms with doing something rather than making it perfect. This will be the focus of this work, which will be delivered as a computational agency integrating the phases of data gathering, the anticipation of a logic representation of uncertainty and vagueness, as well as the phases of data processing and analysis of results.

Keywords: Digital Transformation (DT) · Information Management · DT or DX economy · Entropy · Logic programming · Knowledge Representation and Reasoning · Artificial Neural Networks