

WITH GREAT DATA COMES GREAT RESPONSIBILITY: NEW COMPETENCIES FOR THE DIGITAL LEADER

KONFERENCE OM DATADREVET LEDELSE

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DATA ECOSYSTEM

Functional/Technical Dimension (classic view)

Functiona Technichal Sub-System



NEW DATA ECOSYSTEM AND THE NEED FOR NEW LEADERSHIP COMPTENCES

- Functional/Technical Dimension (classic view)
- Stakeholder Dimension
- Data source/user Dimension



Presentation and graphics taken from: Aaen, J., Nielsen, J. A., & Carugati, A. (2021). The dark side of data ecosystems: A longitudinal study of the DAMD project. *European Journal of Information Systems*, 1-25.



THE DAMD CASE





DAMD EMERGENCE (2003-2005)

Bottom-up experimentation and development of new data project system to handle patient information in general practices.





DAMD FORMALIZATION (2006-2009)

The data project was transformed into a formal organization and categorized as a "Clinical Quality Database". Data collection and number og stakeholder increased





DAMD EXPANSION (2010-2013)

Mandatory participation among GPs resulting in significantly increased data volume and new stakeholders (more than 96% of GPs participated in 2013)





DAMD COLLAPSE (2014-2015)





8



INCREASE IN THE SIZE OF THE ECOSYSTEM

The DAMD case shows that tapping into a data lake by reusing the data for multiple purposes to serve different stakeholder interests can "mud the waters" with:

- Less transparency (in data flow), that eventually made the data collection illegal
- Create different interests (e.g. between doctors and managers on whether data should be used for control / management)
- Threaten data validity (if new sanctions/incentives are embedded into the system)

The mechanism of function, stakeholder and data creep

- More and more actors joined the project and they requested more and more functions. We call these surges function creep, stakeholder creep and data creep.
- By using the term "creep", we emphasise that these data ecosystem drivers carry a hint of "sneakiness" (Dahl & Sætnan, 2009), which indicates that the possible dark side of data ecosystems may be clouded by short-term success.

BREWING THE DARK SIDE





IMPLICATIONS FOR LEADERS IN DATA ECOSYSTEMS

Policy makers and managers should look ahead at the potential dangers of data reuse - cf. function creep, stakeholder creep and data creep.

Understand the dual relation of the dark and bright side of data analytic projects

Avoid being seduced by opportunities to reuse data in new contexts! Go beyond optimistic notion of data as 'a magical diamond mine that keeps on giving"

Leaders should focus on the careful orchestration of stakeholders, functions and data, with an eye not only on the profits from the bright side but also on the risks brought about by the dark side.

Say NO!





DARK SIDE?

Beware of the dark side. Anger, fear, aggression; the dark side of the Force are they. Easily they flow, quick to join you in a fight. If once you start down the dark path, forever will it dominate your destiny" (Yoda in Starwars V*).

*The same concept is also described in Linstead, Maréchal, and Griffin (2014).





THANK YOU!

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