The IT Artifact in People Analytics

Reviewing Tools to Understand a Nascent Field

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Meet the Authors

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Agenda

01   Why Research in People Analytics is Necessary

02   Research Method

03   Five Archetypes in People Analytics Tools

04   Referencing Information Systems Discourses

05   Implications and Future Research

Motivation

People Analytics is a "hype topic" …

Office 365 zeigt Chefs, wann Angestellte arbeiten

ANGST VOR MISSBRAUCH

Gute Daten, böse Daten

VON INA LOCKHART - AKTUALISIERT AM 08.02.2021 - 13:16

People and HR Analytics Software Market was valued at USD 2.13 Billion in 2019 and is projected to reach USD 5.9 Billion by 2027, growing at a CAGR of 13.5% from 2020 to 2027.

Sources: Bild, 2021; FAZ, 2021; Verified Market Research, 2020.

Motivation

... but lacks conceptual clarity and consistency.

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Practitioners:

01 Drive the topic together with people analytics vendors

02 Focus on practical recommendations and selling professional advice

03 Offer different tools under the term people analytics

"Hype more than substance"

Lack of **academic inquiry into the actual IT artifact** and **consistent theoretical foundation**

Sources: Hüllmann & Mattern, 2020; Marler & Boudreau, 2009; Van der Togt & Rasmussen 2017.

People Analytics

Questions about the essence of people analytics remain.

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Modern HR Function

Data-driven decisions over intuition
to inform traditional HR processes

Transforms General Business

Involves all kinds of business
operations that involve people

Data and Technology Driven

Big data, computational algorithms,
and information technology

People analytics depicts **"socio-technical systems and associated processes that enable data-driven (or algorithmic) decision-making to improve people-related organizational outcomes"**

Sources: Gal et al., 2017; Hüllmann & Mattern, 2020; Levenson 2018; Marler & Boudreau, 2009.

Research Questions

IT artifact lens for uncovering people analytics assumptions and conceptions.

01 **What is people analytics** as understood by reviewing existing tools in terms of **methods**, **data**, **information technology use**, and **stakeholders**?

02 What **established discourse in the information systems discipline** provides insights for inquiring people analytics?

Methods

Exhaustive collection of people analytics tools.

Search

Monitoring social media from August to December 2019

Keywords: "People Analytics", "HR/Human Resources Analytics", "Workplace Analytics", "Workforce Analytics", and "Social Analytics Workplace"

41 People Analytics Vendors

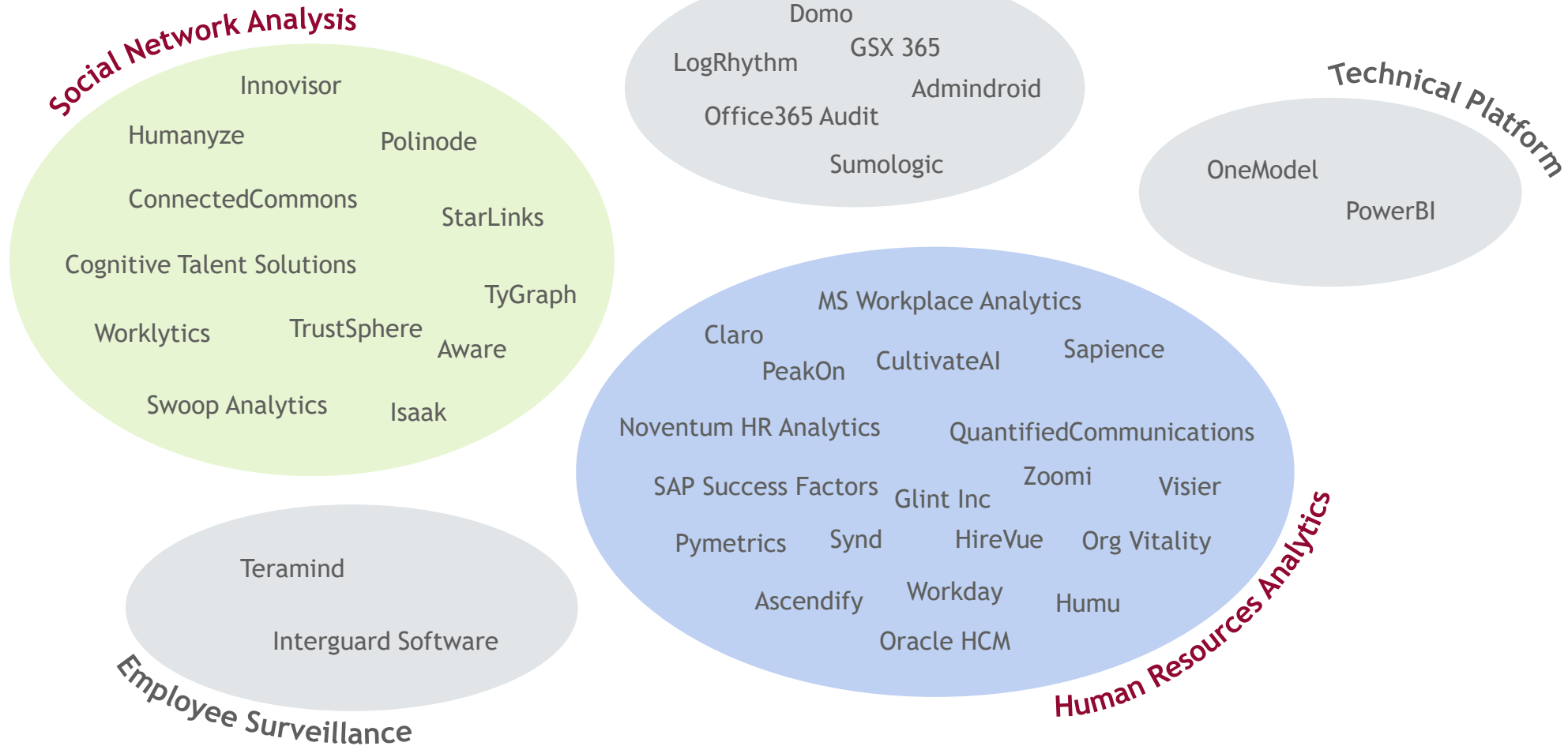Screening of the 41 vendors' websites to gather information

Analysis

Independent coding of vendors by two researchers using five dimensions adopted from coding scheme by Hüllmann & Mattern (2020): **methods**, **data sources**, **stakeholders**, **outcomes**, and **ethical issues and concerns**

Discussing and resolving non-matching codes jointly

Sources: Hüllmann & Mattern, 2020.

Findings

41 relevant vendors, five archetypes.

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Social Network Analysis

Innovisor

Humanyze   Polinode

ConnectedCommons

StarLinks

Cognitive Talent Solutions

TyGraph

Worklytics   TrustSphere

Aware

Swoop Analytics   Isaak

Technical Monitoring

Domo

LogRhythm   GSX 365

Admindroid

Office365 Audit

Sumologic

Technical Platform

OneModel

PowerBI

Human Resources Analytics

MS Workplace Analytics

Claro

PeakOn   CultivateAI   Sapience

Noventum HR Analytics   QuantifiedCommunications

Zoomi

SAP Success Factors   Glint Inc   Visier

Pymetrics   Synd   HireVue   Org Vitality

Ascendify   Workday   Humu

Oracle HCM

Employee Surveillance

Teramind

Interguard Software

Discussion

Learnings from IS discourses and people analytics software

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Social Network Analytics as People Analytics		Human Resources Analytics as People Analytics
Validity not sufficiently addressed by vendors but major theme in social network analytics discourse		Amongst privacy concerns, vendors should consider discrimination and bias as well as Validity [40]
Survey data as addition to digital traces potentially enrich insights on social networks and increase quality		Psychometrics and HR Information Systems potentially enrich insights from surveys, digital traces and interviews
Beside managers, employees are major stakeholders of people analytics		People analytics not only concerns HR managers and employees, but all managers and business units
Qualitative methods as addition to quantitative means to gather insights, potentially enrich and improve results		Consistency between discourse on human resources analytics and vendors in terms of quantitative methods

Sources: Ebrahimi et al., 2016; Gal et al., 2020; Howison et al., 2010; Hüllmann, 2019; Hüllmann & Mattern, 2020; Hüllmann & Krebber, 2020; Levenson, 2018; Marler & Boudreau, 2017; Schwade & Schubert, 2017; Thapa & Vidolov, 2020; Zarsky, 2016.

Implications and Future Research

Raising questions for future research and recommendations for vendors.

💡 Better understanding of the core of people analytics and underlying role of information technology

💡 Critical view on potential issues with people analytics, popping the hype bubble and addressing validity, privacy, and other issues underlying the vendors' promises

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Implications for Vendors

Method transparency

Transparency in validity of outcomes

Address unintended side effects, potential issues with privacy and validity

Implications for Research

Take up perspective of the archetypes

Extend the inquiry into the selected topics

Critical assessment if people analytics tools deliver the value they promise.

Thanks for listening

... and your ideas on how to continue our work!

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