Growth Analysis

Swedish Agency for
Growth Policy Analysis

Unlocking the Transformative Power of Digital Technologies – Digital Maturity in Swedish Firms

Integration and Disintegration in the Japanese Vision of Society 5.0:
A Model for an Open Society in Europe?
Stockholm April, 2018

Irene Ek, PhD

growth analysis

Presentation overview

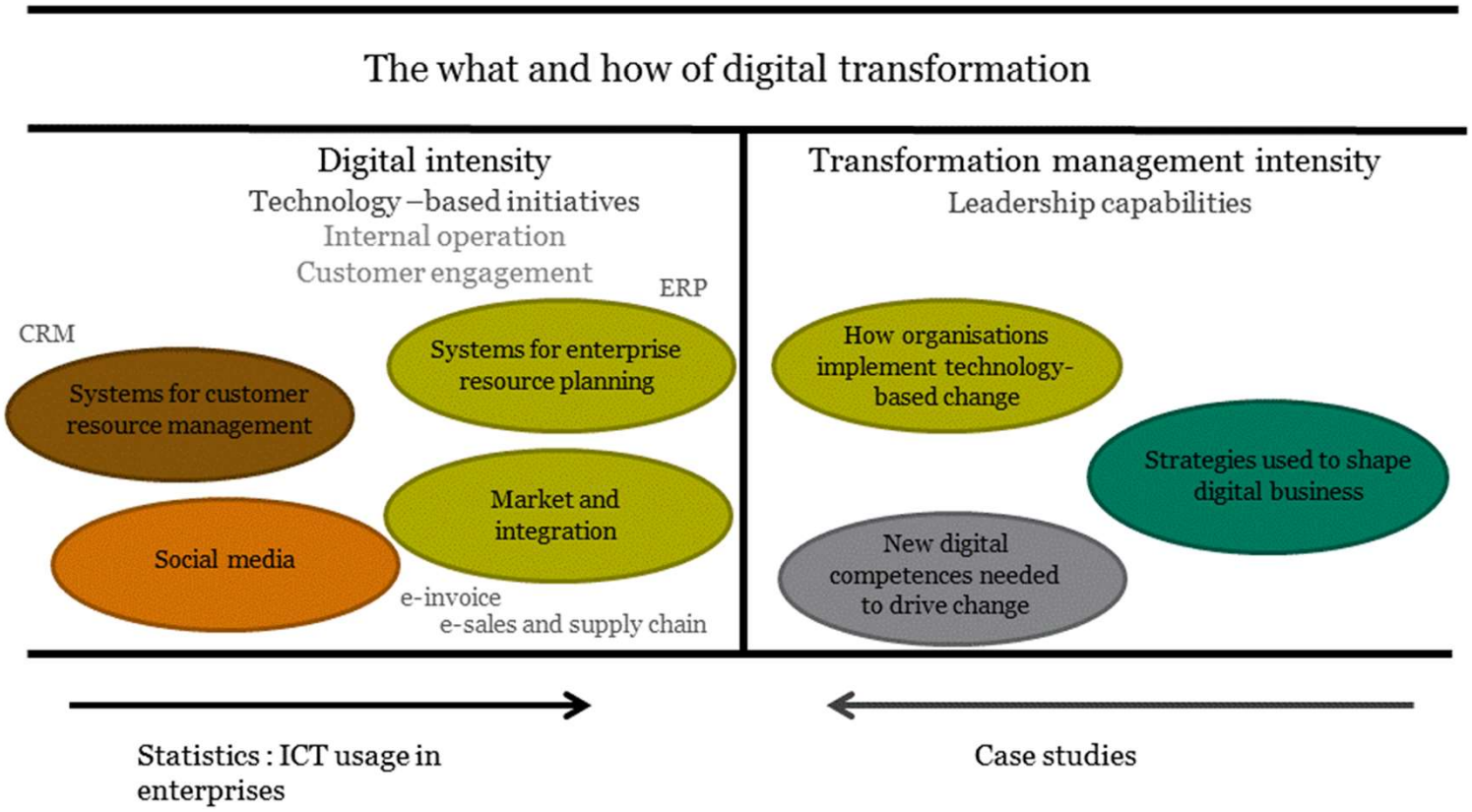
- What do we know about digital maturity?
- Model used to analyse digital maturity
- Results
  - Industries
  - Firm sizes
  - Transformation management
- Implementing digital policy in Sweden - The strategy Smart Industry and the area Industry 4.0
  - Does policy goals, support instruments and expected impact align?
  - The support instrument mix for Industry 4.0
- Additional material – links to reports in English

Digital maturity in the litterature

- The biggest difference between high and low digital maturity is not in technology usage aspects but in the business aspects i.e. strategy and skills
- Digital strategies are embedded in the overall business strategy
- Need for different types of digital competence to change how firms operate

Source: Kane, Palmer, Phillips, and Kiron (2015); Bharadwaj et al. (2013) ; Westerman, McAfee, Tannou, Bonnet, and Ferraris (2012) ; OECD, 2016

Modell to analyse digital maturity



Scource: Growth Analysis report 2017: 02 development of Westerman et al. (2012)

growth analysis

Industries

	ERP systems	CRM systems	Market & integration	Social media	overall digital maturity
Industry					
Information and communication	0,54	0,52	0,25	0,34	0,34
Wholesale and retail	0,63	0,53	0,32	0,11	0,25
Other services	0,54	0,44	0,17	0,16	0,22
Manufacturing	0,72	0,37	0,23	0,09	0,20
Utilities	0,47	0,35	0,17	0,12	0,19
Accommodation and food services	0,47	0,34	0,24	0,06	0,16
Real estate activities	0,59	0,40	0,11	0,08	0,14
Transport and storage	0,50	0,15	0,28	0,03	0,12
Construction	0,45	0,17	0,14	0,04	0,10
IKT-sector					
IKT-using sectors	0,72	0,55	0,35	0,27	0,37
IKT-sector (int def)	0,68	0,59	0,22	0,21	0,29

More digitalt mature

Less digital mature

Sources: Statistics Sweden: ICT usage in Enterprises 2014, Structural Business Statistics 2013, and the registry of enterprise groups 2013. Growth Analysis: International Enterprises 2013. Calculations by Mrs. Widerstedt

growth analysis

Frim sizes

Size	ERP systems	CRM systems	Market & integration	Social media	Overall digital maturity
Small firms	0,43	0,30	0,17	0,16	0,20
Mid-sized firms	0,71	0,51	0,31	0,28	0,35
Large firms	0,90	0,67	0,46	0,40	0,50

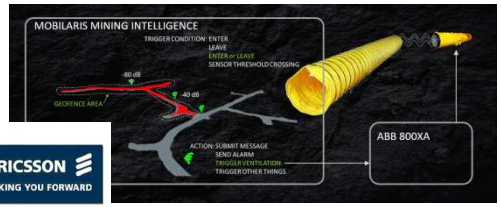
More digitally mature

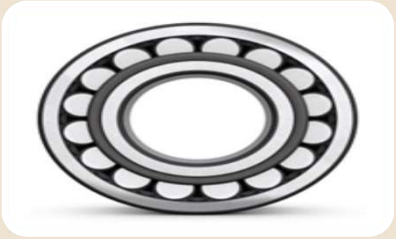
Less digitally mature

Source: Statistics Sweden: ICT usage in Enterprises 2014, Structural Business Statistics 2013 and the registry of enterprise groups 2013. Growth Analysis: International Enterprises 2013. Calculations by Mrs. Widerstedt

growth analysis

Transformation management





Digital Product/services	Digitally connected purchase, production and sales processes	Digital business model

Scource: Growth Analysis report 2017: 02

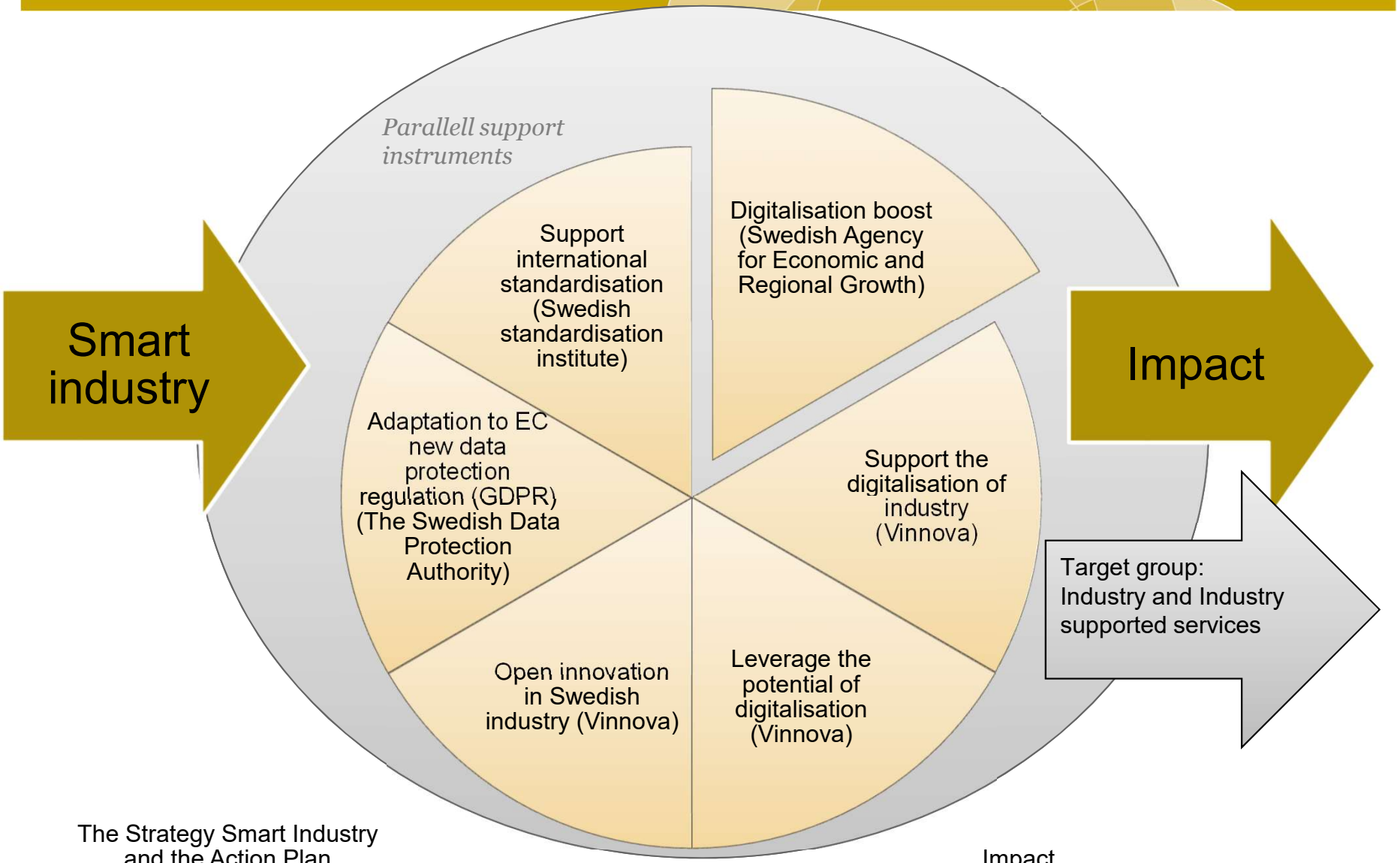
growth analysis

Implementing digital policy in Sweden

The case of the strategy Smart Industry and the area Industry 4.0

growth analysis

Unlocking the transformative power of digitalisation



Source: Growth Analysis PM 2017:19

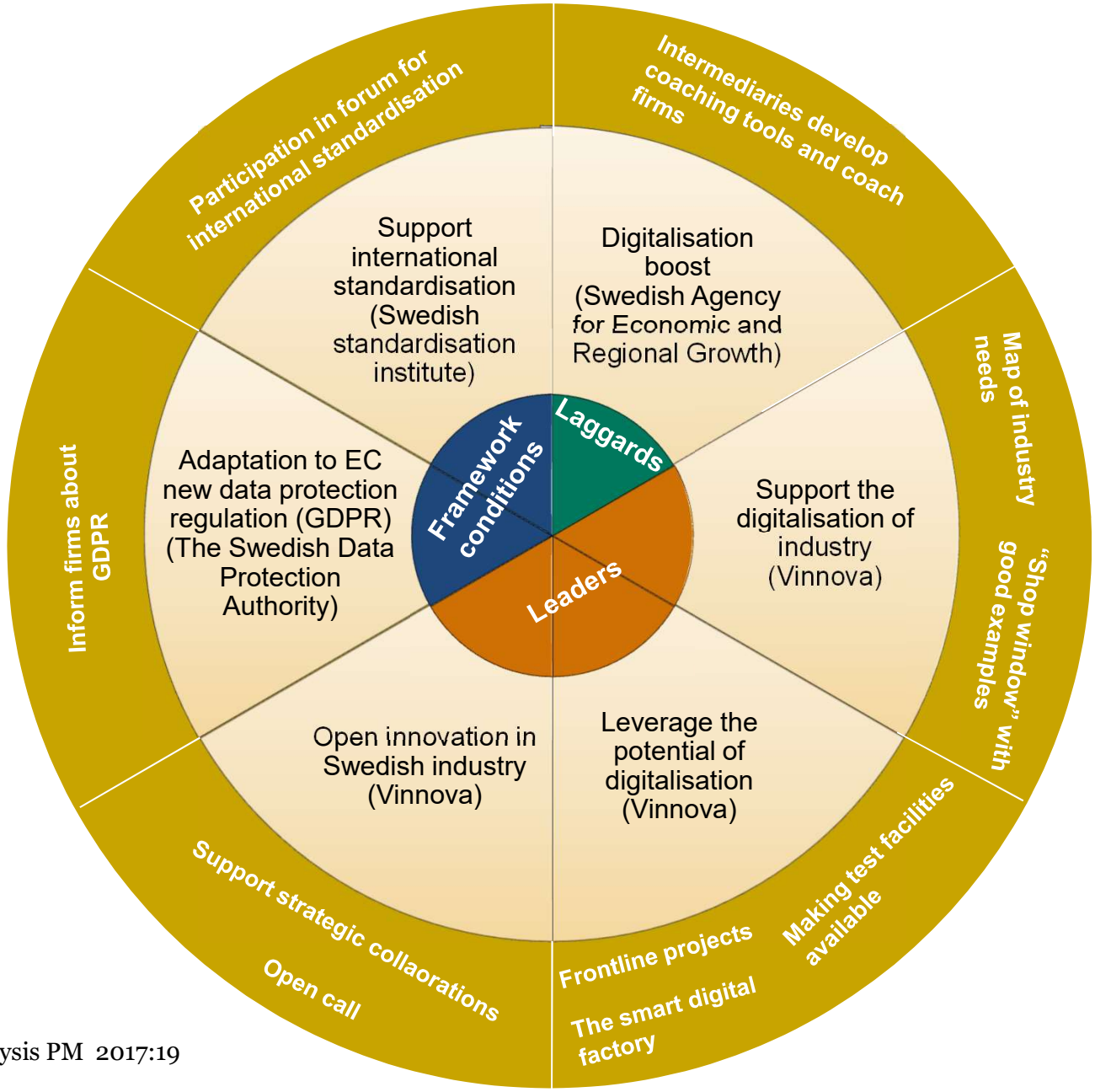
The policy goals for Industry 4.0

1. *Stimulating the development, spread and use of the digital technologies that have the greatest potential to lead the industrial sector's transformation.'*
2. *Exploiting the potential of digitalisation broadly, irrespective of industry, company size and geographical location.*
3. *Encouraging new business models and organisational models in order to tap the potential of the new technology.*
4. *Meeting new knowledge requirements that are brought about by digital development.*
5. *Adapting framework conditions and infrastructure to the digital era.*

growth analysis

The support instrument mix for Industry 4.0

Unlocking the transformative power of digitalisation



Source: Growth Analysis PM 2017:19

growth analysis

Thank you!

Irene Ek
Irene.ek@tillvaxtanalys.se

www.growthanalysis.se

growth analysis

Link to English reports on digitalisation

OECD paper entitled Measuring Digital Maturity in Firms

Master thesis entitled Digital Strategies and Strategic Alignment

Link to English summary and reports

OECD
Organisation for Economic Co-operation and Development

DSTI/CDEP/MADE(2017)3

For Official Use

English - Or. English

30 October 2017

DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INNOVATION
COMMITTEE ON DIGITAL ECONOMY POLICY

Working Party on Measurement and Analysis of the Digital Economy

Measuring Digital Maturity in Firms

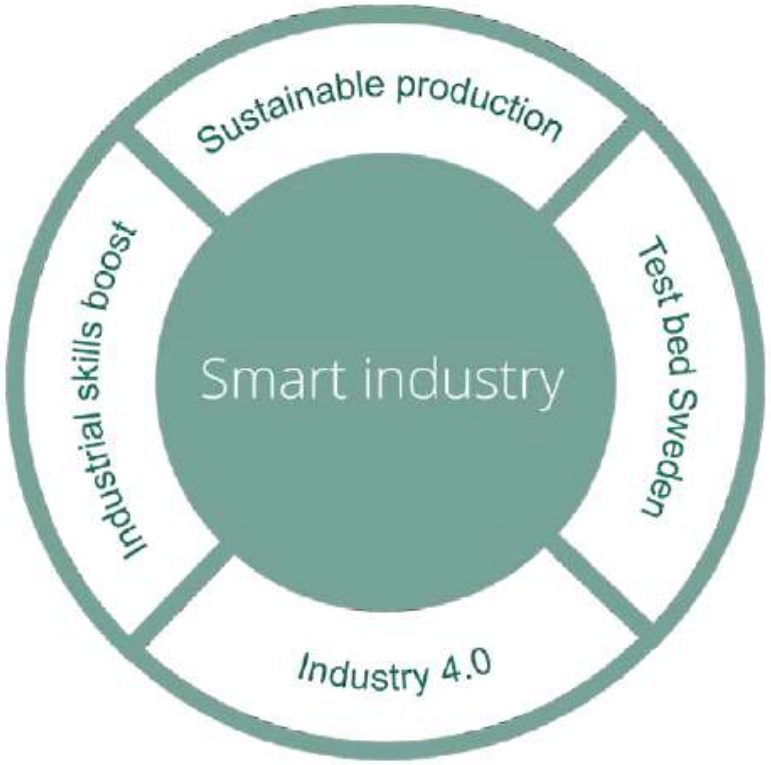
2-3 November 2017, OECD Headquarters, Paris.

growth analysis

The coherence of the support instrument mix?

The Smart industry strategy and the area Industry 4.0

Link to English summary



growth analysis