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Digital New Deal: Researching V4's Strategies for Society 4.0

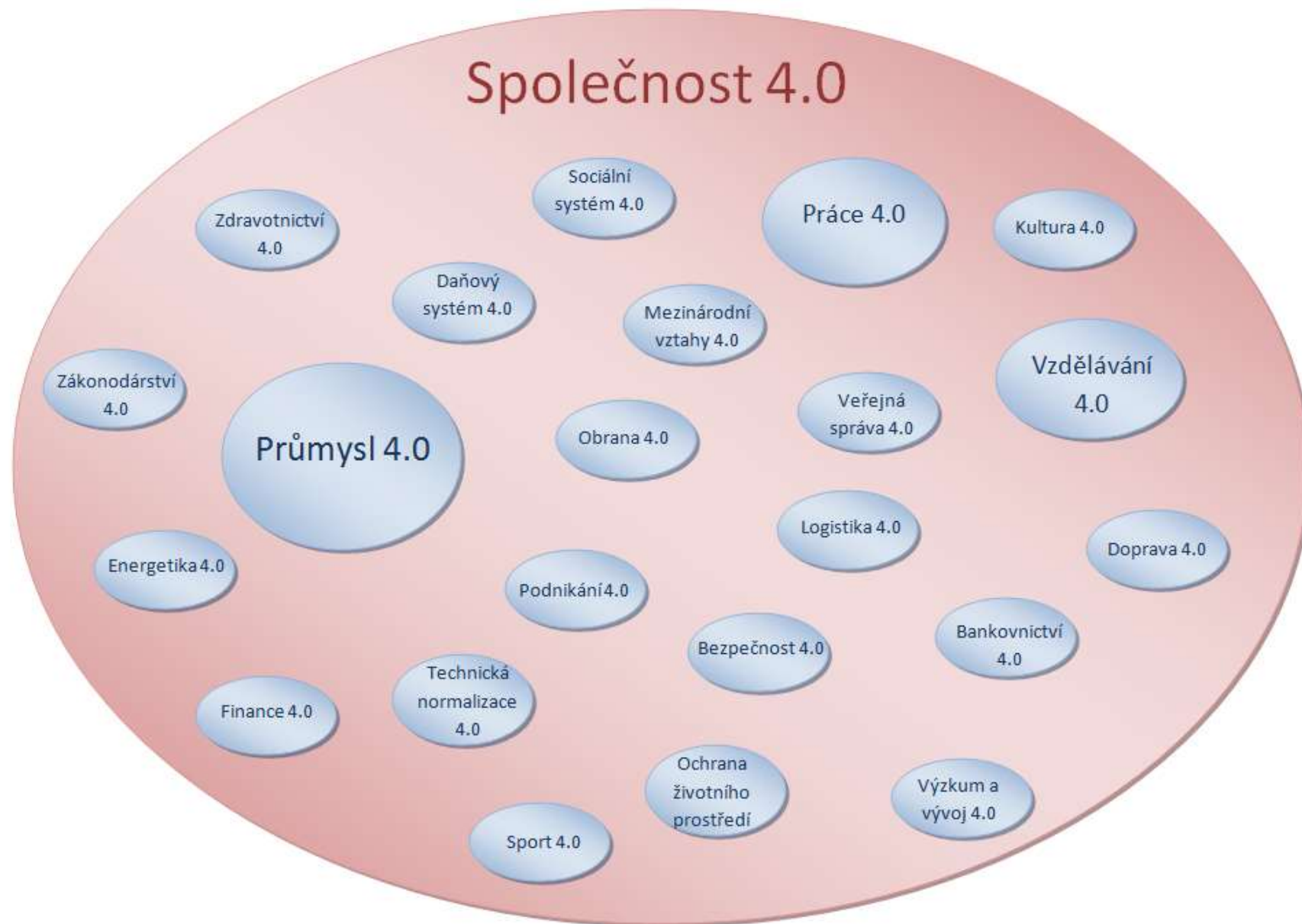
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Strategies 4.0 (2015-2017)

- 3 • **National Initiative Industry 4.0 (2015)**
 - National strategy of cybersecurity of the Czech Republic 2015-2020 (2015)
 - Strategy of Digital Literacy of the Czech Republic 2015-2020 (2015)
 - National policy of research, development and innovation for the years 2016-2020 (2016)
 - **Initiative Industry 4.0 (2016)**
 - **Initiative Labour 4.0 (2016)**
 - **Alliance Society 4.0 (2016)**
 - **Action plan for Society 4.0 (2017)**



Source: digiczech (<http://digiczech.eu/pilire-spolecnosti-4-0/spolecnost-4-0/>)



The label “4.0” has become widespread and overused?

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Positives:

- individual departments have started to think about their portfolios from a **longer-term perspective**
- admitted that their existing approaches may need to be **adjusted** to the challenges arising from rapid technological development and the resulting societal shifts
- a need for **intersectoral cooperation** revealed (e.g. between education and employment strategies)



Formulation of strategies only a first phase

- 6 • Strategies and action plans need to be **implemented**, executed and their outcomes properly assessed.
- Technological development may demand **flexibility** and possibility of reorientation on other priorities in the future.
- **What if a new government prefers to proceed in a different way?**



The current government

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- Program:
 - ✓ in close cooperation with business, science and research sectors secure implementation of the project “Industry 4.0”
 - ✓ prepare an analysis of the possible impact of robotization on the domestic manufacturing sector
- main focus in connection with the 4.0 agenda has **shifted from long-term systematic planning to specific issues that need to be addressed** as quickly as possible?
- Institutionally, it prefers nomination of a strong personality into a position of a **Commissioner** assigned to a specific Ministry who is given **narrower tasks with clear goals**



Who is „Mr. Mrs. Digital“ now?

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Position of a coordinator of the digital agenda does not exist anymore, instead:

- a Governmental Commissioner for IT and Digitalization (*Mr. Vladimír Dzurilla*) at the Ministry of Internal Affairs
- a deputy at the Ministry of Industry and Trade with responsibility over development of internet (*Mr. Ondřej Malý*)
- a Commissioner for Digital Education at the Ministry of Education (*Mr. Ivan Pilný*)



STRENGTHS

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- **Entering the 4.0 era with the lowest level of unemployment in the EU (unemployment of 2.4% in January 2018)**
- Genuine and viable Czech companies in the fields of e-commerce and cybersecurity (regionally) and internet (domestically)
- **Relatively low level of public debt (under 35% of GDP in 2017)**
- Strategic estimation of the Czech position at the beginning of 4.0 era that has been produced within recent years (e.g. *Initiative Industry 4.0*)



WEAKNESSES

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- **Underfinanced education system with low salary of teachers and limited access to high-tech teaching aids.**
- The capital city **Prague** as the country's main attraction for knowledge economy **has limitations in access to EU funds and is missing important infrastructure**
- Narrow possibilities for lifelong learning in general.
- **A culture of public administration that limits entrepreneurial spirit/start-ups** (paperwork, complicated and frequently changing laws, eGovernment solutions without proper reflection of user-friendliness)



OPPORTUNITIES

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- **Advent of new technologies can push forward transformation** of the Czech economy towards higher levels of added value
- **Industrial tradition with sectors that have already started to implement 4.0 concepts** (ability to develop and export 4.0 industrial solutions, both hardware and software based on big data analysis of their use in practice)
- 4.0 concepts in broader sense such as internet of Services or online platforms (sharing economy) have a potential to provide alternatives to old concepts of employment and/or additional revenue for households



THREATS

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- **High share of the manufacturing sector on Czech GDP and employment means that slow adoption of 4.0 solutions is connected with correspondingly high stakes (possibility of transfer of production elsewhere)**
- **High supplier/subcontractor character of significant portion of the manufacturing sectors** and inability to form independent investment/export strategies at the level of individual firms and subsequently limits strategic planning also at state level
- **Limited level of capital available for investments to new technologies, in particular in case of some SMEs**



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Thank you for your attention.