

Human Factors in Digitalization

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What is the first thing you notice?



The Human Element is often *the most* difficult component of digital transformation! How do you overcome it and implement a sustainable roll-out?

Digitalization = Augmented Intelligence

We want to make all supporting information available to humans to decide on path forward.

The machines give recommendations, the humans pick and choose.

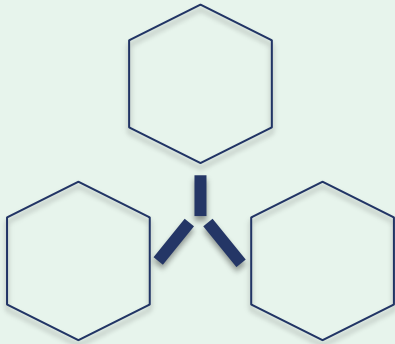


Digital technology is an enabler and is utilized to *enhance* the value of workers.

Shift the focus from Technology to Outcomes

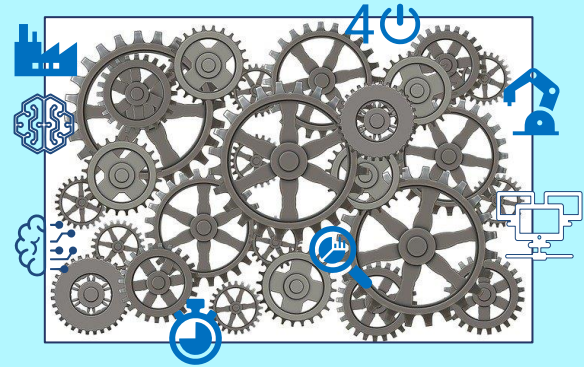
Technology as Central

- Technology is Driver
- Compartmentalized Skills
- Designed Value
- Risk-aversion Leadership.



Outcome as Central

- Technology is Enabler
- Blended Skills
- Continuous Value
- Speed-of-Recognition Leadership



Guidelines → Outcomes

- Start the planning process by engaging the workforce and ensure they are involved in every step: Including, and most importantly, the field level employees.
 - Start your digital transformation where data process foundations are strong. Familiarity breeds acceptance.
 - Know and accept that everyone is different. People will react differently, be ready.
 - If technology is going to replace any jobs, plan and educate those effected early so that they can still add value to the organization and not resist the new technology and possible bring others in to join the resistance.
- ➔ No matter the stage of the process – people will be fundamentally involved

How do we make Digitalization in Operations Sustainable?

Pilot roll-out in progress to write sustainable solution.



- 1 People are key to success
- 2 Must have adequate infrastructure and computing power.
- 3 Must have reasonable workflows, defined roles and responsibilities to achieve sustainability
- 4 Find something you like and try it out.
- 5 Do a proof of concept – quickly!
- 6 Start rolling out what works as soon as possible.
- 7 Engage different levels of the organization regularly. Make them want it so they will own the solution.

Education and Training

Education

- Advanced degrees
- Lower degrees
- Workforce training

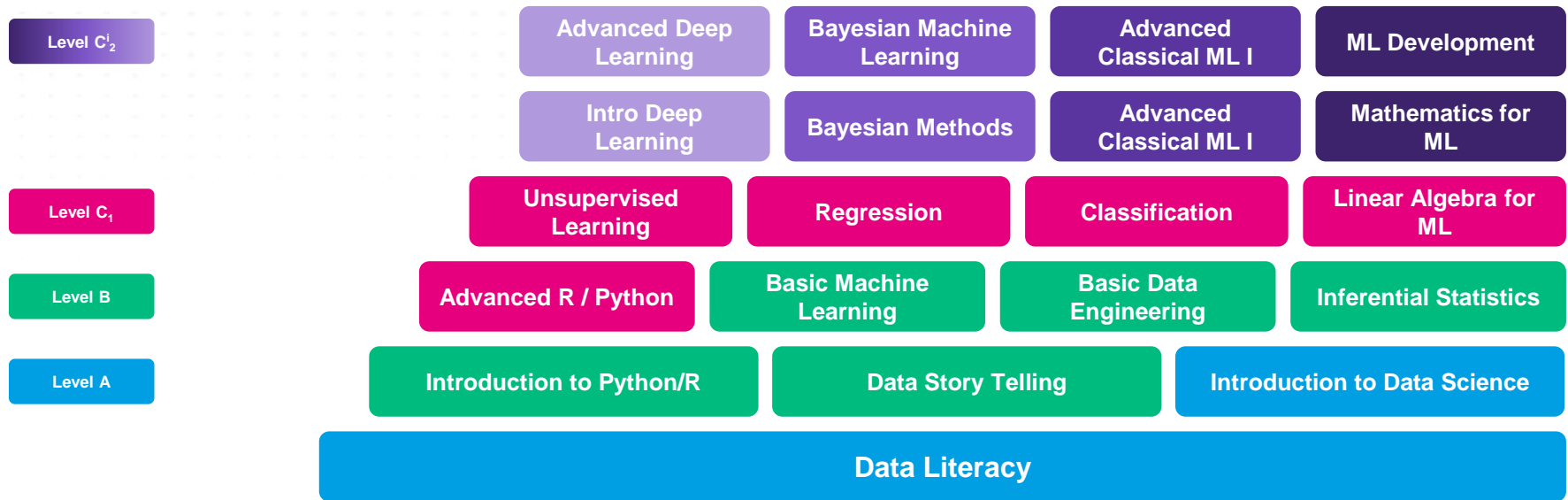
Recommendation

- Universities to continue and enhance data science offerings
- Universities add more data science to the lower degrees
- On the job training, data literacy, engagement

SPIRE-SAIS

"Skills Alliance for Industrial Symbiosis - A Cross-Sectoral Blueprint for a Sustainable Process Industry (SPIRE-SAIS)"

Covestro Data Science Academy





Thank You!

Any Questions?

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