

Flexibility - A timely requirement and synchronised headache!

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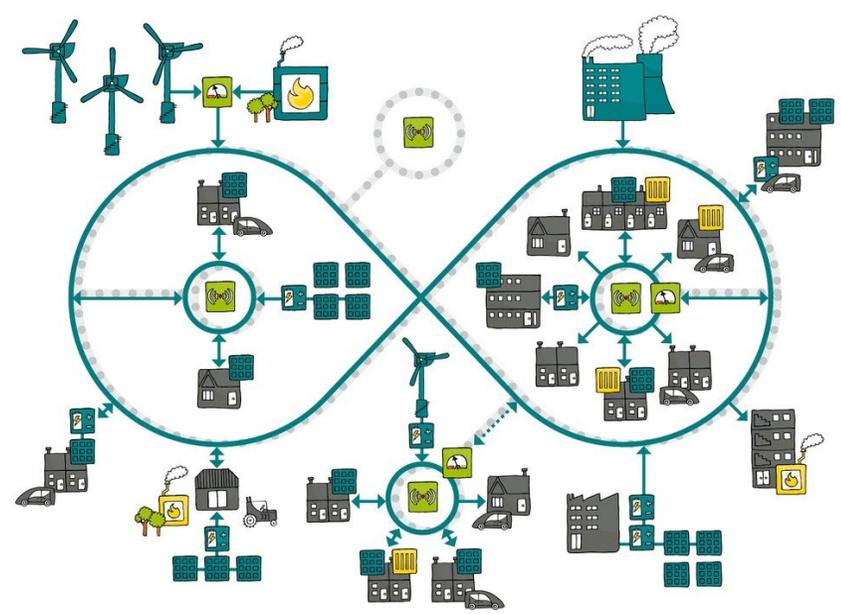
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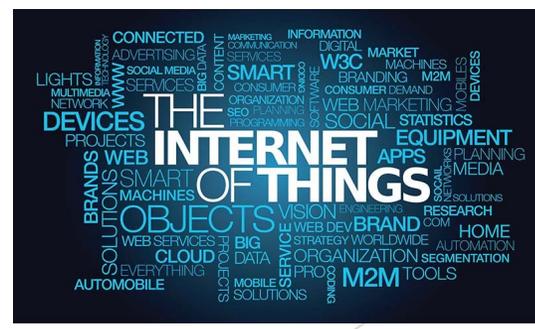
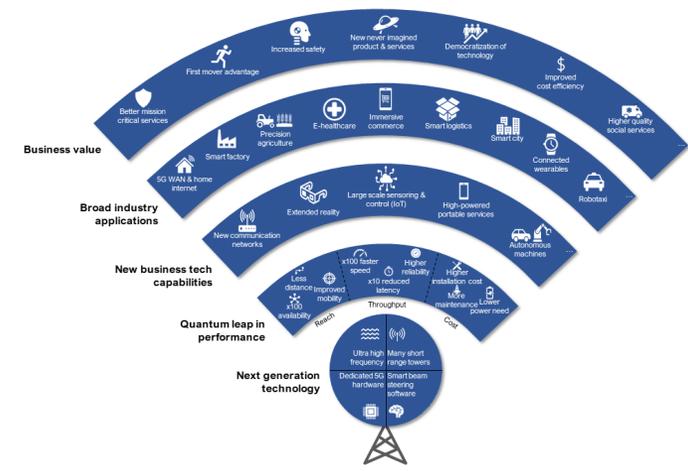
Energy Council Chair - GLLEP

Flexibility - what is it?

BEIS / Ofgem / Ofcom



The other side of the meter...



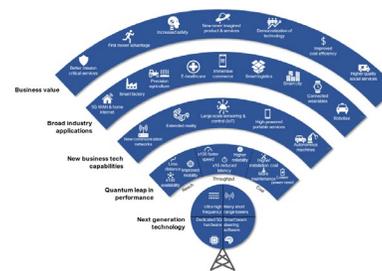
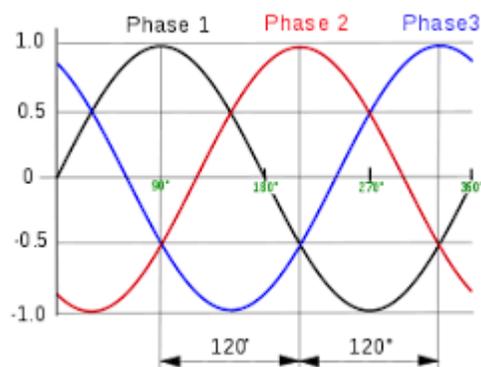
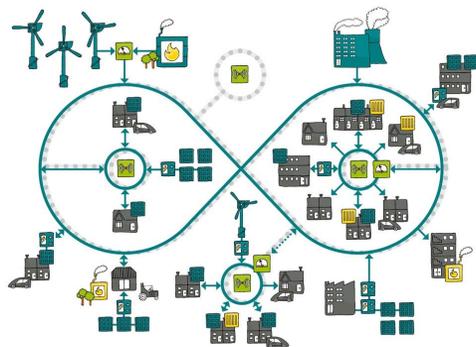
Time synch in many, many separate worlds



First case study - urban residential



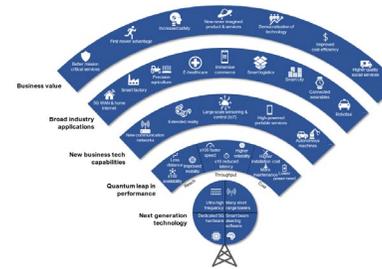
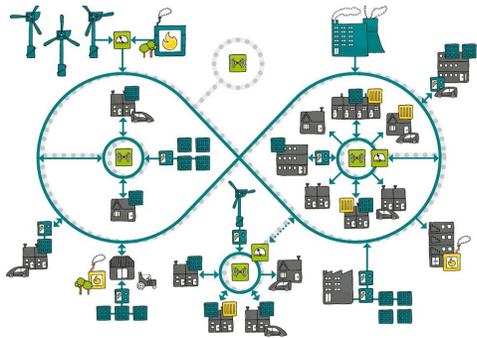
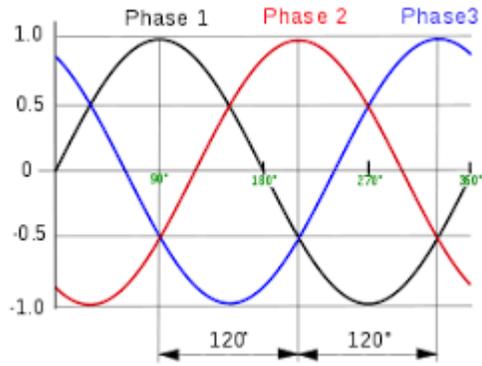
Red }
Yellow } All using different phases
Blue }



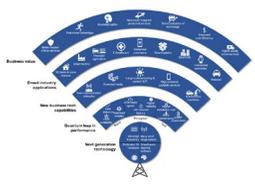
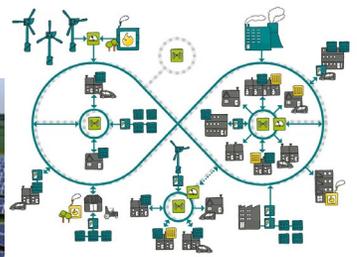
Second case study - Agriculture



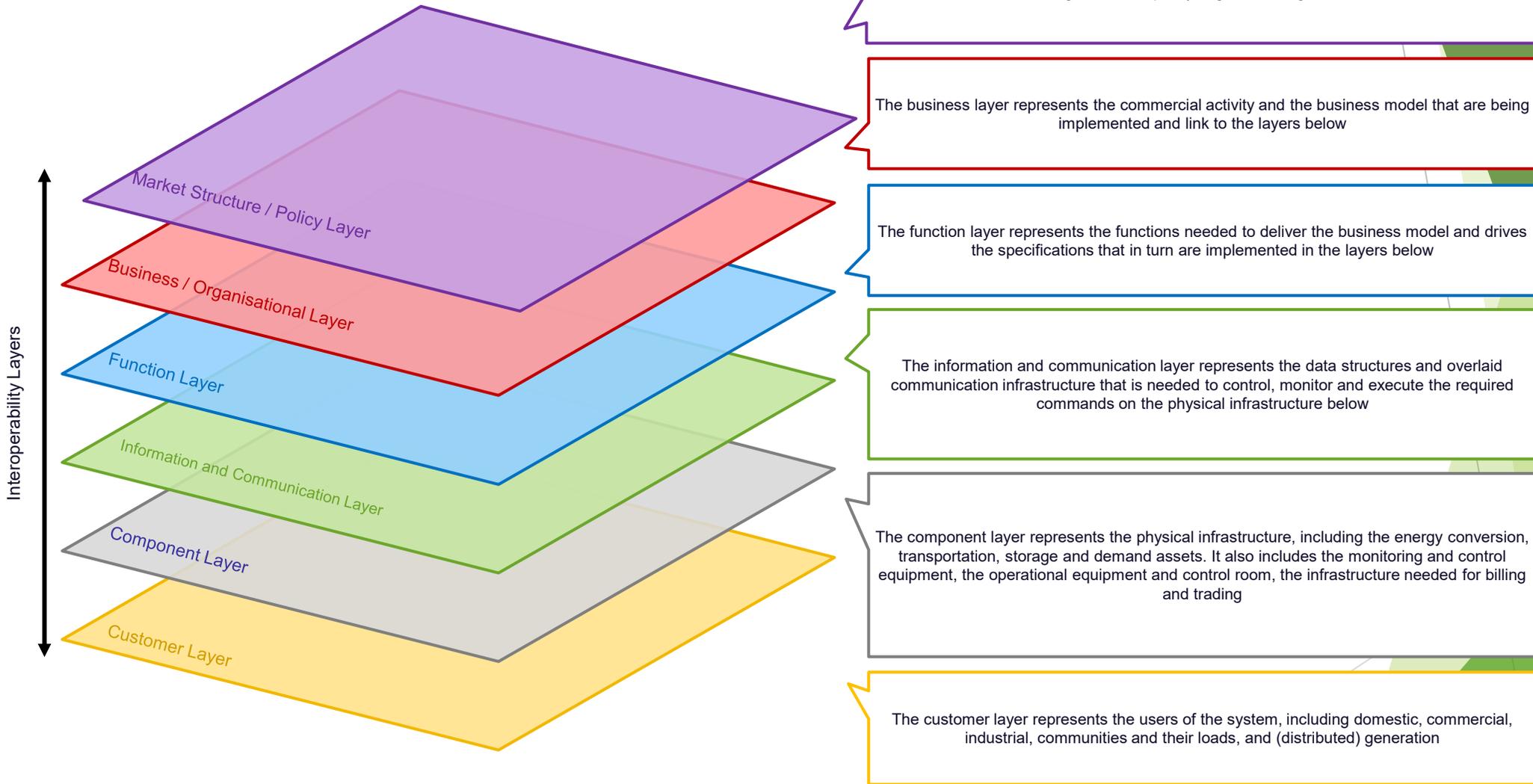
Red } All on same farm
Yellow }
Blue }

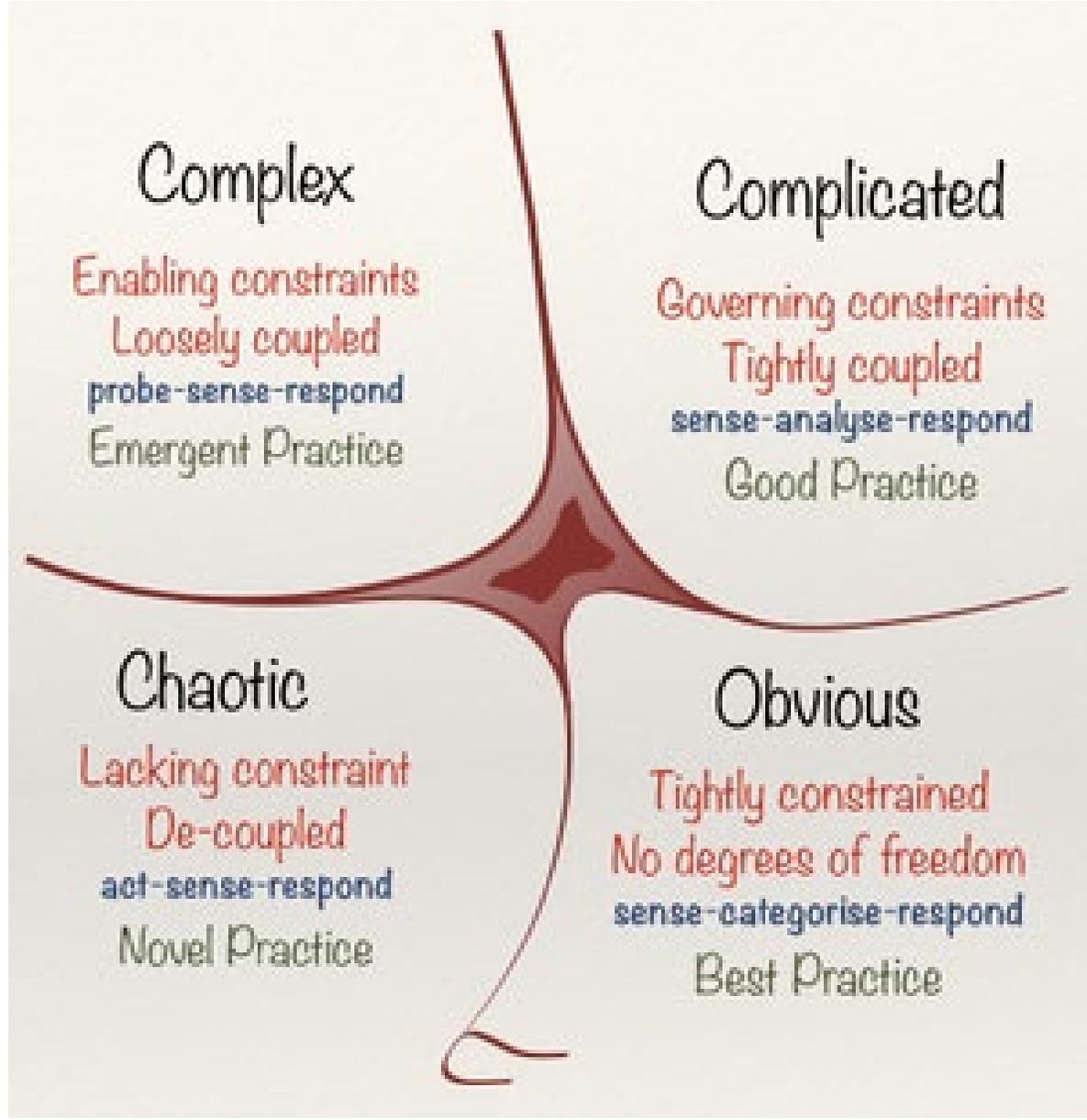


Second case study - Agriculture



The layered complexity of governance and technical challenge





Conclusion

- ▶ Time sync well understood point to point and point to multipoint
- ▶ Technology already exists to deal with the majority of challenges
- ▶ Governance, standards and deep understanding of interactions are key
- ▶ Whole system time sync is not well understood, due to mainly not understanding the problem domain
- ▶ The impact of one time synchronisation problem from one segment of the economy to another is only just being recognised (just as energy / carbon dioxide supply chain is for food wrapping and pig slaughter)
- ▶ We are still focusing on yesterdays challenges - not tomorrow's
- ▶ The challenges I outline already exist, they are just not widely being experienced.....yet!
- ▶ If you would like to know more or think you have solutions contact me.....

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Thanks for your attention

Q&A

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