Profissão em Computação e Informática

Career of Researchers

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Agenda

1. Introduce the presenter
2. Day to day
3. Requirements for the Activities
4. Knowledge and Techniques
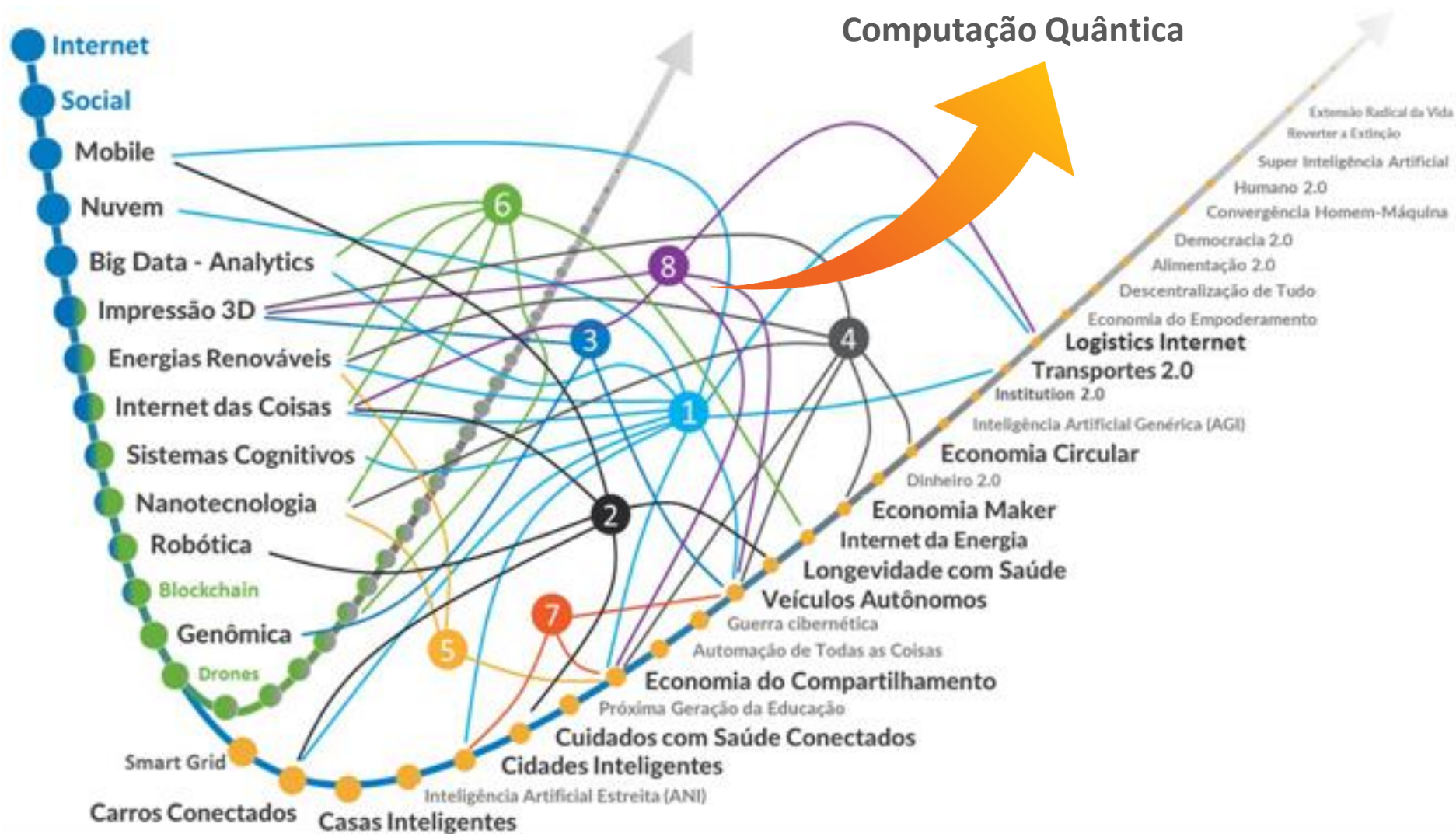5. Values
6. Concluding remarks

The Theory defines what can be observed! _{A.E.}

Day to day

- Define your goals
  - Make a plan (look for the Unified Process on Wikipedia)
- Acquire all you need to accomplish your goals
  - Knowledge
  - Experiences
  - Techniques
  - Frameworks
- Keep the focus on your goals
- Make a state driven analysis on your (partial) results
  - Realign if any

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Knowledge and Techniques (1)

- Strong Material Background
  - Theoretical
    - Computing Theory
    - Algorithm Analysis
    - Formal Languages and Automata
    - Statistics
  - Technological
    - Computer Architecture and Organization
    - Operating Systems
    - Computer Networks
    - Database systems
    - Computer/Networking Programming

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Knowledge and Techniques (2)

- Strong Programming Skill (non-exhaustive list)
  - Imperative oriented
    - Assembly
    - C/C++
    - RUST
    - Java frameworks
    - Python, PhP, Cython aso
  - Functional oriented
    - LISP
    - Haskell
    - Scheme
    - ML

Knowledge and Techniques (3)

- Project Management (PMI/CMU)
  - Initiation
  - Planning
  - Production or execution
  - Monitoring and controlling
  - Closing
- There many ways of managing a project
  - Traditional (RUP, CMMI …)
  - Agile (Scrum, XP …)
- It won't be enough if the designs are bad

Values

- Value definition
  - From romans (*Valere* in Latin)

  What makes the being good.

- Motivational types of values
  - Personal
  - Openness to change
  - Self enhancement
  - Conservation
  - Self transcendence

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Concluding remarks

- Strong knowledge
- Well defined personal values (at least)
- Entrepreneurship
- Innovation driven
- Foolish
- Hungry

From now on, it is up to you !!!

Thank you!

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