Surveillance Capitalism:

Making Big Data Work for All

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Surveillance Capitalism…..

"Surveillance Capitalism is a new "parasitic" form of capitalism that has arisen as consequence of big data utopianism. In this new utopian vision, all technology is "smart", connected and provides product as a service. Where data is considered to be without ownership and seen as a panacea"

Surveillance Capitalism…..

- Who
  - A loose coalition of all the big players in technology and social media
- Aims
  - Sell certainty from uncertain data (selling the "future")
  - Change human behaviour at scale
- How
  - Form the largest mass surveillance infrastructure ever known
  - Convince society that its digital data are waste products and worthless
    - Accumulation through dispossession (Harvey 2003)
  - Surveillance will be Implicit, Explicit and Ubiquitous
    - Report behaviours, habits, tastes and beliefs 24 hours a day, 365 days a year

The Big Data Ecosystem…

- Consists of Infrastructure, analytics, applications and machine learning
- 2-4 Quintillion Bytes of data per day created
- Market worth of 2 trillion dollars by 2020 !
- Currently operating on the extraction of "natural" resources model
  - Create a zero-cost asset that can be diverted from service improvement to a unit for market exchange
- "The online world is not truly bound by terrestrial laws… it is the world's largest ungoverned space" (Schmidt, Cohen)
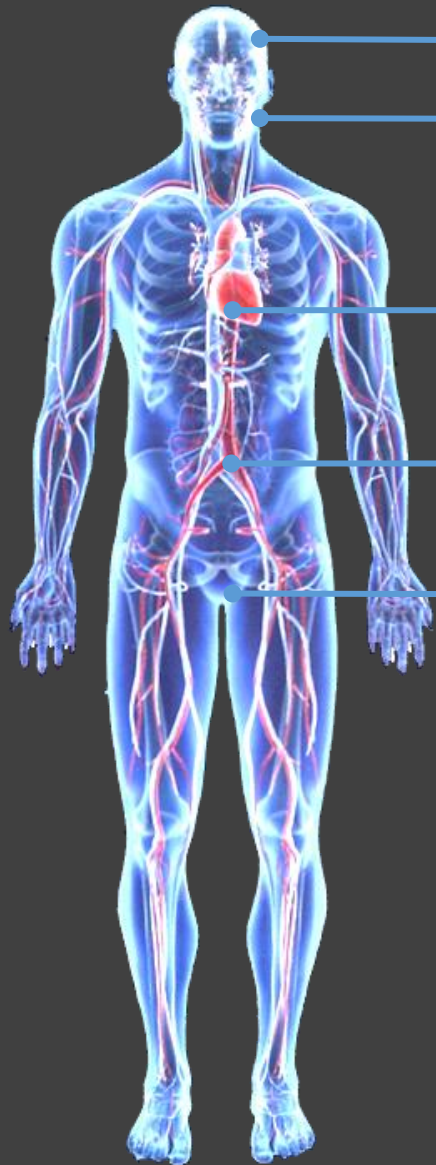- Not confined to any national borders

The Big Data Ecosystem

Surveillance Methods

- **Implicit – Quantified Being**
- **Explicit – Quantified Doing**
- **Ubiquitous – Quantified Environment**

Implicit

Cognitive   01010100 01101000 01101001 01101110 01101011   **How we think**

Affective   01100110 01100101 01100101 01101100   **How we feel**

Physiological   01100001 01100011 01110100 01101001 01110110 01100101

How we respond

Biochemical   0110001001101001011011110110110001101111011001110111001

Genetic   01010111 01101000 01100001 01110100   **How we are made**

Quantified Being

Explicit

Google
Facebook
Snap Chat
Instagram
Amazon
Alibaba
Netflix

100 Billion searches (Avg.) monthly
1.71 billion monthly active users
400 million Pictures per day
1.1 – 12.4Billion orders per year
4.8 million concurrent users per show

3000 data points gathered daily
Browser behaviour statistics
Preferences
Demographic Profiling
Geo-positional data
2.5 Quintillion Bytes of data per day

Quantified Doing

Ubiquitous

Internet of Things, Technology :

We Wear

Implant

Interact with

Work with

That simply surrounds us

Quantified Environment

Humans – A Natural Resource

- Goldman Sachs report 2016 Big Data - "A gold rush" the race to capture and trade "vast amounts of data"

- A never ending surplus of "human-natural" behaviour data

- Capitalism inextricably linked to a new resource in order to mutate and revitalize itself

- Breaking the supply and demand chain of old capitalism and replacing it with a feedback mechanism in which consumers are

  Not buyers , Nor sellers , Nor products

Rather they are the very basis of "free" raw materials for a new form of manufacturing

To Turn

Humans – A Natural Resource

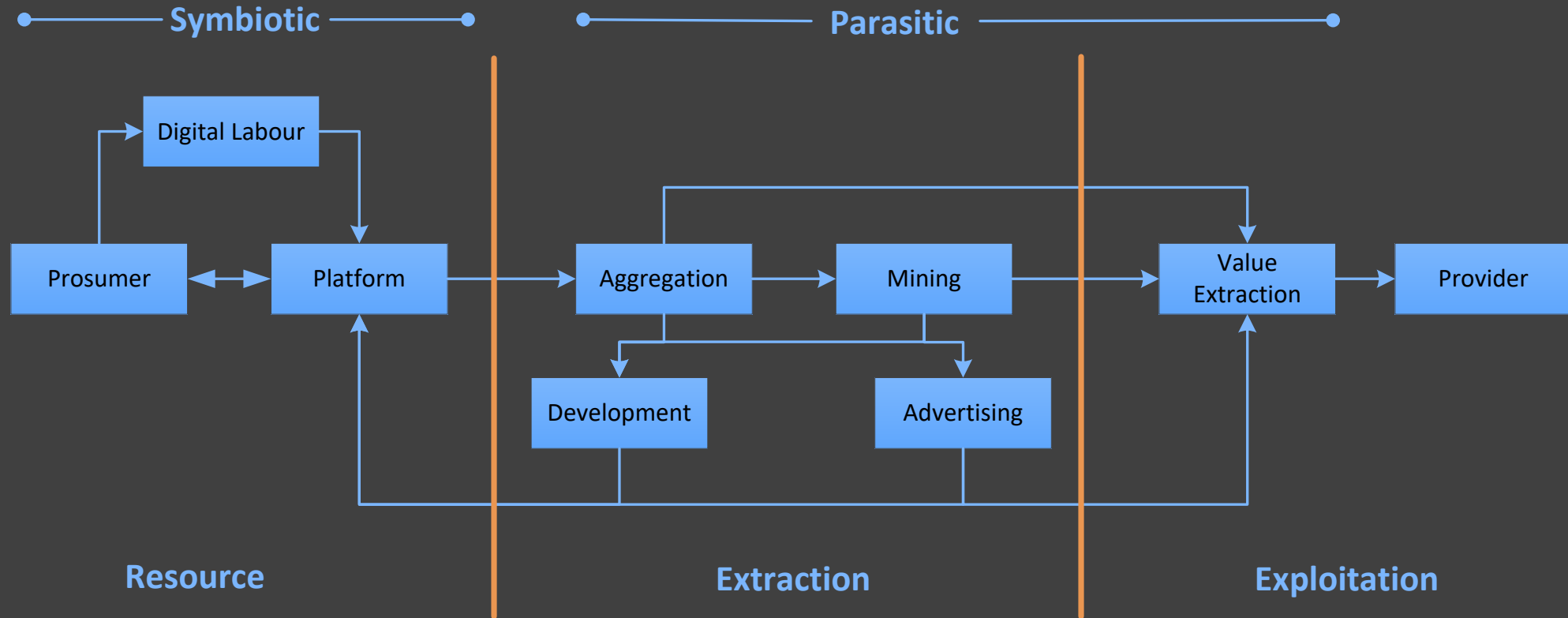
This

Humans – A Natural Resource

Into this

Humans – Enter the Prosumer

- The term "Prosumer" was coined by Alvin Toffler in the 1980's
- Derived from "prosumption" whereby consumers produced, while consuming
- Simple examples exist , think YouTube , Twitchtv etc.
- Concept requires re-tasking for this world of constant data prosumption
- Data that humans create is not waste, it represents
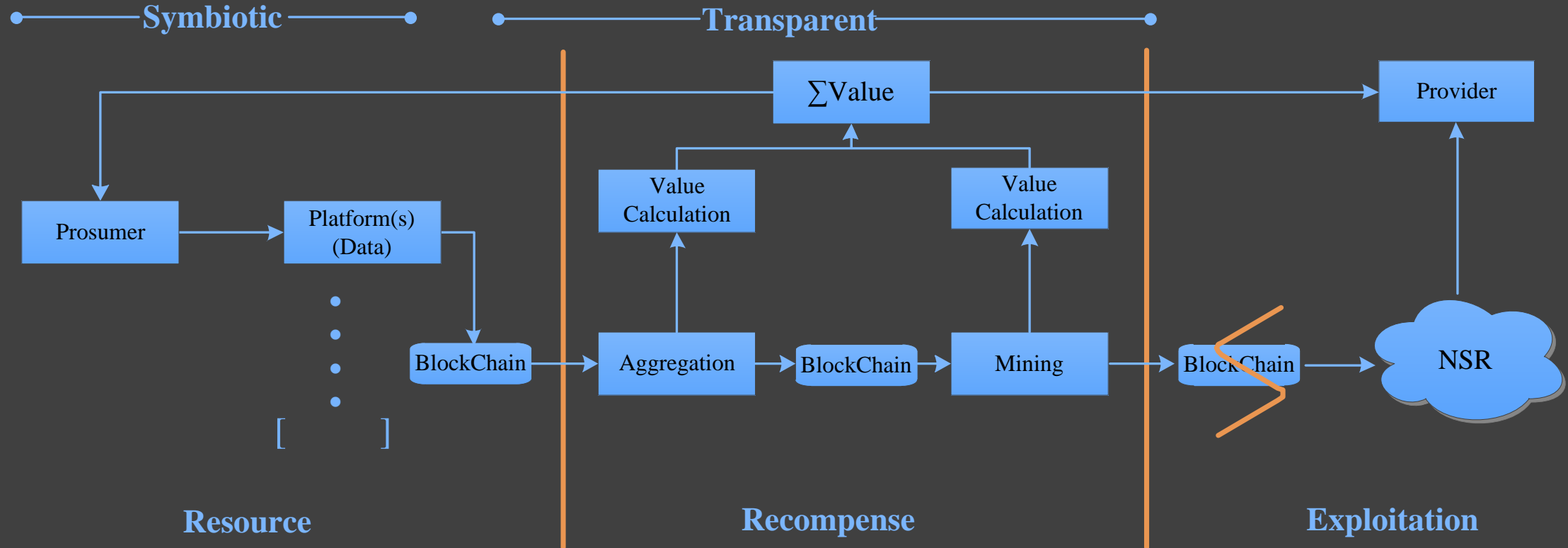   - Digital labour
    - Digital Value

The Problem ?

- Create even greater levels of inequality

- Threat to "liberal" democracy, the notion of free will and of the development of self

- In a world which reflects only the manipulated self, how do we foster creativity and innovation

- Already examples, Twitter censorship and pruning, Facebook echo chambers, "shaped" search results etc.

- Complete loss of Privacy and Erosion of "Rights"

- Build in obsolescence timed perfectly to match a new offering and then create the need for the offering

The BlockChain a Technical Solution: "fair pay, fair use"

Policy: The Political Solution

- Advocate for the convergence of public understanding, corporate empathy and state level policy

- Advocate for the education of all citizens from the earliest age possible about digital data, ownership and how it affects them

- Propose code of conduct with regard to data ownership from "production to sale"

- Provide a legal framework to support "fair pay , fair use"

- Provide ideological support for the notion of liberal democracy via the freedom to choose without manipulation

Big Data : Its not all bad

- The very convergence enabling surveillance capitalism will lead to:
  - More intelligent machines
  - Personalised health care
  - Cognitive support and enhancement
  - Emotional support and enhancement
  - Solutions to existing scientific and social problems
  - Solutions to problems we are not even aware exist
  - Better economic modelling
  - A more "knowing" environment