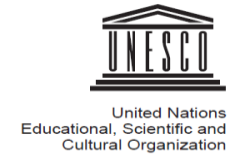




Intellectual
Capital for
Communities
In the
Knowledge
Economy



**Data, Digital assets and
Platforms for innovation**

The World Conference on Intellectual Capital for Communities

UNESCO, July 12&13

The platformic firm under the acceluated regime

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**Context, Objectives and general
approach to ISD programme**

1- The objectives of ISD programme

- ✓ Make the link between the past and the future of use of Information systems /digital resources (1970-2020)
- ✓ Draw the attention of Executives (CEOs, CIOs...) to the important strategic stakes, related to the transition from the industrial economy to the networked (knowledge/intangibles) economy and society
- ✓ Propose the building blocks of the understanding of the implications of such transformation
- ✓ Design the 2020 enterprise and its related digital resources /function

-2-

**The programme results:
25 proposals, one production system**

2.1-ISD Programme and the digital transformation

25 proposals / 7 dimensions

I- Emerging business models

II- Work, coordination and digital uses

III- Internal innovation practices

IV- Open (external) innovation practices

V- Enterprise space and knowledge flows

VI- The social and ethical dimensions of use

VII- Data, intellectual property, and the specificity of digital



P1	P2	P3	P4	P5
P6	P7	P8	P9	P10
P11	P12	P13	P14	P15
P16	P17	P18	P19	P20
P21	P22	P23	P24	P25

2.2. DESIGNING THE 2020 ENTERPRISE: *The conceptual building blocks*

P1	P2	P3	P4	P5
P6	P7	P8	P9	P10
P11	P12	P13	P14	P15
P16	P17	P18	P19	P20
P21	P22	P23	P24	P25



**The acceleration of links, at the core of
digital transformation**

**Ecosystem of
data**

Extension &
plurality of
spaces

Transaction/
organicity

**Acceleration
of links**

Spatio-
temporal
structuration

Organisational
plasticity or
liquidity

2.2. DESIGNING THE 2020 ENTERPRISE:

The conceptual building blocks From Lean Production to Accelution

Lean Production (relative to mass production)
The principles of Lean production include:
<ul style="list-style-type: none">• Teamwork• A focus on communication• Efficient use of resources and elimination of waste• Continuous improvement
Compared to mass production, Lean production means:
<ul style="list-style-type: none">• ½ the human effort in the factory• ½ the manufacturing space• ½ the investment in tools• ½ the engineering time (hours)• ½ the new product development time

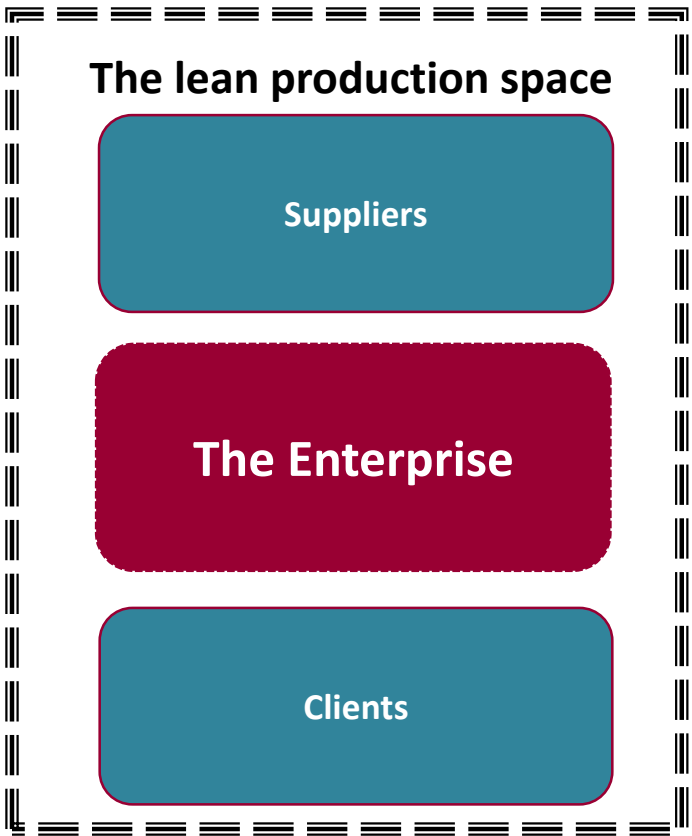
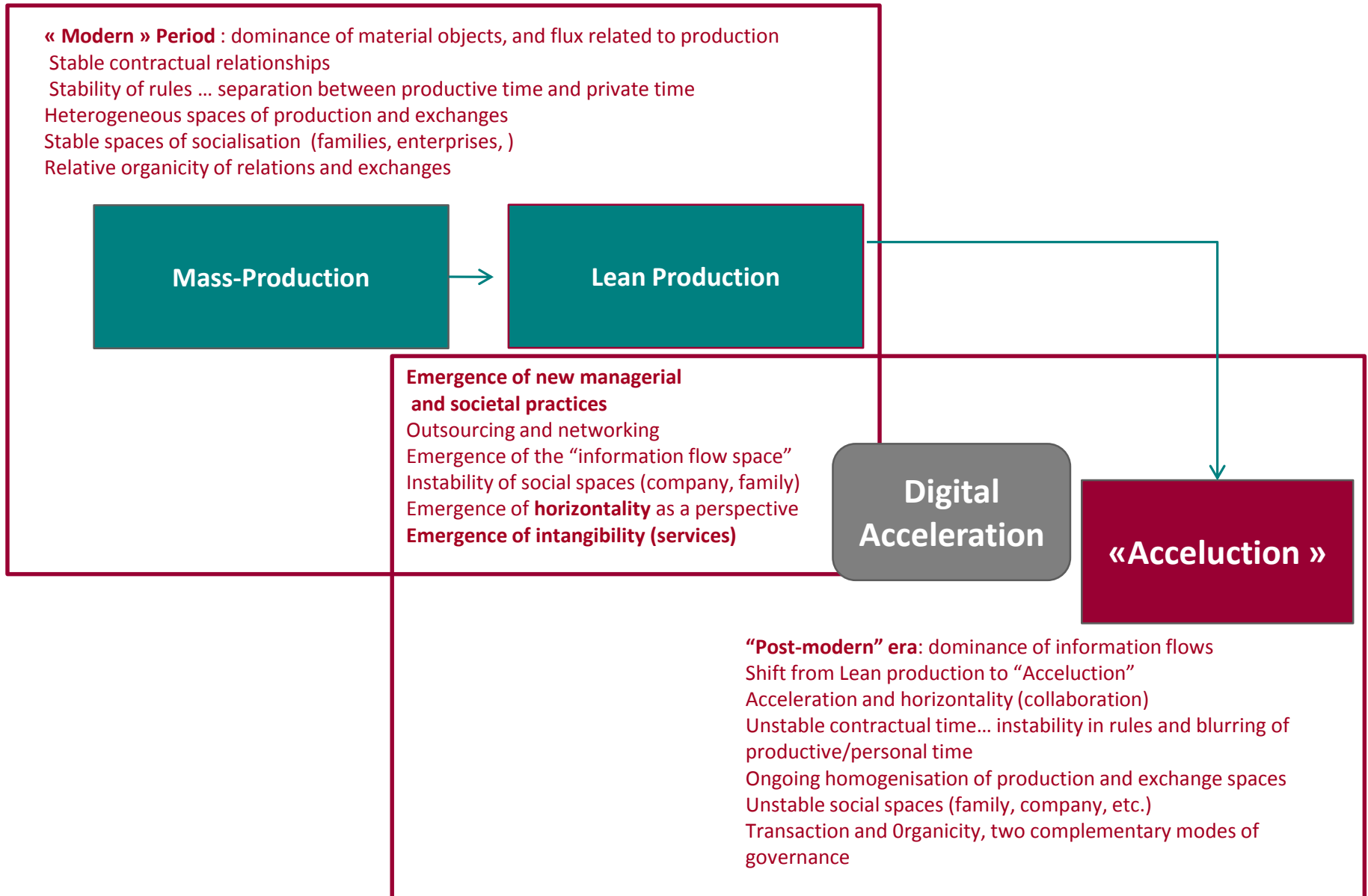


Table 3.2: Lean production: key characteristics
Source: Womack, Jones, Roos, The Machine that Changed the World, 2001

2.2. DESIGNING THE 2020 ENTERPRISE:

The conceptual building blocks From Lean Production to Accelution





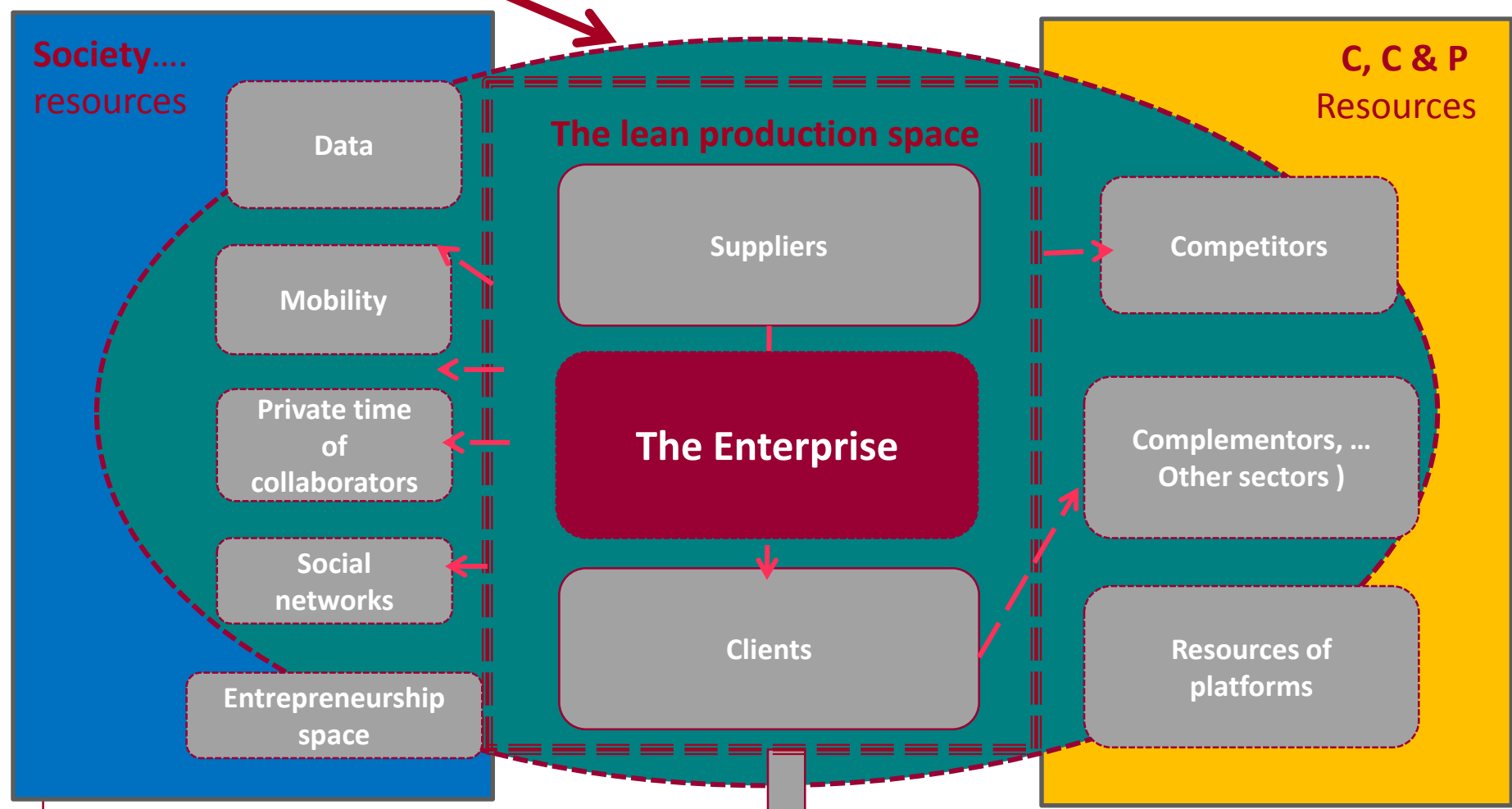
-III-

**The 2020 enterprise:
its value creation spaces and underlying tensions**



3.1. The 2020 enterprise: its value creation spaces

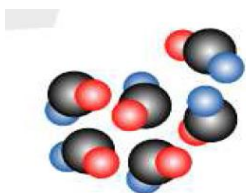
The Accelulation space



A new production mode where digital resources play a critical role

3.2 -The 2020 enterprise:

A space of tensions



Regime of Liquidity		Regime of solidity
Liquidity/Plasticity (volatility)	← →	Solidity/Organicity
Mobility	← →	Fixity
Market resources / Platforms resources	← →	Specific Resources
Instability of roles /mobility of resources	← →	Stability of roles/fixity of resources
Short time-span /finited space	← →	Long time, space to be built
Horizontality (collaboration, incitation)	← →	Verticality (order)

3.3 -The 2020 enterprise:

A space of tensions

UNDERLYING TENSIONS	CONCRETE MANAGEMENT SITUATIONS
<ul style="list-style-type: none"> • MOBILITY / FIXITY 	<ul style="list-style-type: none"> • What business models for mobile uses in the enterprise? • How can we turn mobility into an effective front office? • How do we redeploy staff from fixed-status tasks to mobile statuses? • What are the appropriate coordination mechanisms?
<ul style="list-style-type: none"> • MARKET RESOURCES / PLATFORM RESOURCES / OWN RESOURCES 	<ul style="list-style-type: none"> • How do we make trade-offs between own investments (legacy, internal teams) and market resources (cloud, etc.)? • How do we manage the question of intellectual property rights and digital assets (proprietary rights, shared rights)? • How do we deploy digital platforms, and how do we manage the data issue? • How can we integrate external spaces (social networks)? • How do we handle the question of joint resources (including employees)?
<ul style="list-style-type: none"> • UNSTABLE ROLES, MOBILE RESOURCES / STABLE ROLES, FIXED RESOURCES 	<ul style="list-style-type: none"> • In partner relationships (customer, suppliers, etc.) how do we assess the stability of roles and statuses (will customers always be customers)? • What stability is there for investments, and so for the return on investment for resources allocated to our customers and partners?

3.3 -The 2020 enterprise:

A space of tensions

UNDERLYING TENSIONS	CONCRETE MANAGEMENT SITUATIONS
<ul style="list-style-type: none"> • SHORT TIMESPANS, FINITE SPACE / LONG TIMESPANS, NEW SPACE TO BUILD 	<ul style="list-style-type: none"> • What is the timespan of the company's activities (R&D, design, innovation)? If the timespan is short, which particular tensions need to be identified? What coordination mechanisms should we deploy? • What is the (short-term) impact of acceleration on the company's working climate (stress, employment relations, etc.)?
<ul style="list-style-type: none"> • HORIZONTALITY-COLLABORATION / VERTICALITY-ORDER-HIERARCHY 	<ul style="list-style-type: none"> • What incentive systems for Generations C and Y? • How do we trade off between horizontality and verticality? What role can the central functions (general and functional departments) play? • What is the right incentive system? How do we define its control (time, task, and performance monitoring) and what adjustments are required? • How much tension is acceptable to our employees?



**IV-
Six Scenarios**



IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospaces
4 Platforms rule	5 Network abundance	6 Resistance to digital

IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospaces
4 Platforms rule	5 Network abundance	6 Resistance to digital

1 – Polyspace

- Acceluction governs the development of links between multiple value creation spaces.
- The 2020 enterprise will have to select the types of links it needs to develop
- Open innovation practices, crowdsourcing, and the use of markets reach maturity.
- At the societal level, the current heterogeneity of norms and rules enables enterprises to capitalize on links with these spaces

IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospaces
4 Platforms rule	5 Network abundance	6 Resistance to digital

2 – Back to basics

- In this scenario, the 2020 enterprise refocuses its activities internally.
- The practices of outsourcing, massive use of the Cloud, and more generally of the market, reach their limits,
- acceleration is expressed in two ways: internally, via the acceleration of business and management processes (R&D, innovation, IT...), and externally, via coordination with partners, the securing of market positions, and the development of the customer experience.

IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospaces
4 Platforms rule	5 Network abundance	6 Resistance to digital

3 – Mesospaces

- The 2020 enterprise focuses its acceleration efforts on developing links between spaces of different statuses (networks, communities, territories, enterprises), often with a local or territorial base,
 - but sometimes with a global reach (such as large science campuses like Saclay).
 - These links are both transactional and organic. The variety of statuses and structures is a key dimension here.
-

IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospaces
4 Platforms rule	5 Network abundance	6 Resistance to digital

4 – Platforms rule

- THIS SCENARIO STRESSES THE PLATFORM DIMENSION OF DIGITAL.
- THE 2020 ENTERPRISE FINDS ITS DIGITAL STRATEGY HEAVILY DEPENDENT ON ITS OWN PLATFORM STRATEGY, AS WELL AS ON ITS LINKS WITH THE MAJOR DIGITAL PLATFORMS, WHICH DOMINATE AND CAPTURE THE LION'S SHARE OF THE VALUE CREATED.
- INNOVATIONS ARE ORGANIZED AND ARTICULATED AROUND THESE GLOBAL-SCALE PLATFORMS.
- THE PLATFORM STRUCTURE BECOMES THE HUB AROUND WHICH MOST DIGITAL ACTIVITIES ARE ORGANIZED. ACCELUTION PLAYS AN IMPORTANT ROLE HERE IN LINKS BETWEEN PLATFORMS AND THEIR CLIENT/PARTNERS, AS WELL AS WITH USERS (ESTABLISHING PROFILES, SERVICE OFFERINGS, ETC.).

IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospaces
4 Platforms rule	5 Network abundance	6 Resistance to digital

5 – Network abundance

- Under this scenario, the 2020 enterprise harnesses the full potentialities of digital, notably through strong connection between physical and virtual spaces. This scenario assumes that all legal, social (privacy) and technical uncertainties have been resolved regarding the availability, circulation and monetization of data. It is in this scenario that accluction acquires its full meaning.
- Value is created by the acceleration of links between physical objects and virtual spaces, between different business data (proprietary, joint, non-proprietary), and between (and within) businesses. The digital spaces thus defined become essential levers of digital transformation. By leveraging network abundance, enterprises amplify the growth of their business.

IV-Six scenarios

1 Polyspaces	2 Back to basics	3 Mesospace s
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6 – Resistance to digital

This scenario assumes a kind of social boycott of digital uses, or at least a certain form of data-centric digital use, leading large sections of society to reject it. By resistance we mean here heightened vigilance about the use of personal or work-related data in contexts where there are few controls. On top of this there is, at the international level, serious fragmentation of the legal framework, creating uncertainty that prevents uniform use of data globally. Under this scenario, the 2020 enterprise develops a strategy attentive to the ethical dimensions of use and their effectiveness. It co-constructs solutions with users, and shares the rent with them transparently. It also develops vigilance mechanisms on intellectual property aspects, in a fragmented legal context.

V-Beyond 2020 : challenges and policy issues

1-Managerial issues related to post-2020 digitality

- The question of decision making
 - The question of the real time
 - The need for specialised skills
 - The issue of organisational design
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V-Beyond 2020 : challenges and policy issues

2-Societal issues related to post-2020 digitality

- The status of employment and job opportunities
 - Forms of social interaction
 - Intangibility and digitality
 - The issues of platforms (US vers China)
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Thank you for your attention

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