Plurality University Network

Réseau Université de la Pluralité

THE EMERGING ENTERPRISE: TRENDS, FORCES OF CHANGE, TENSIONS

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CONTENTS

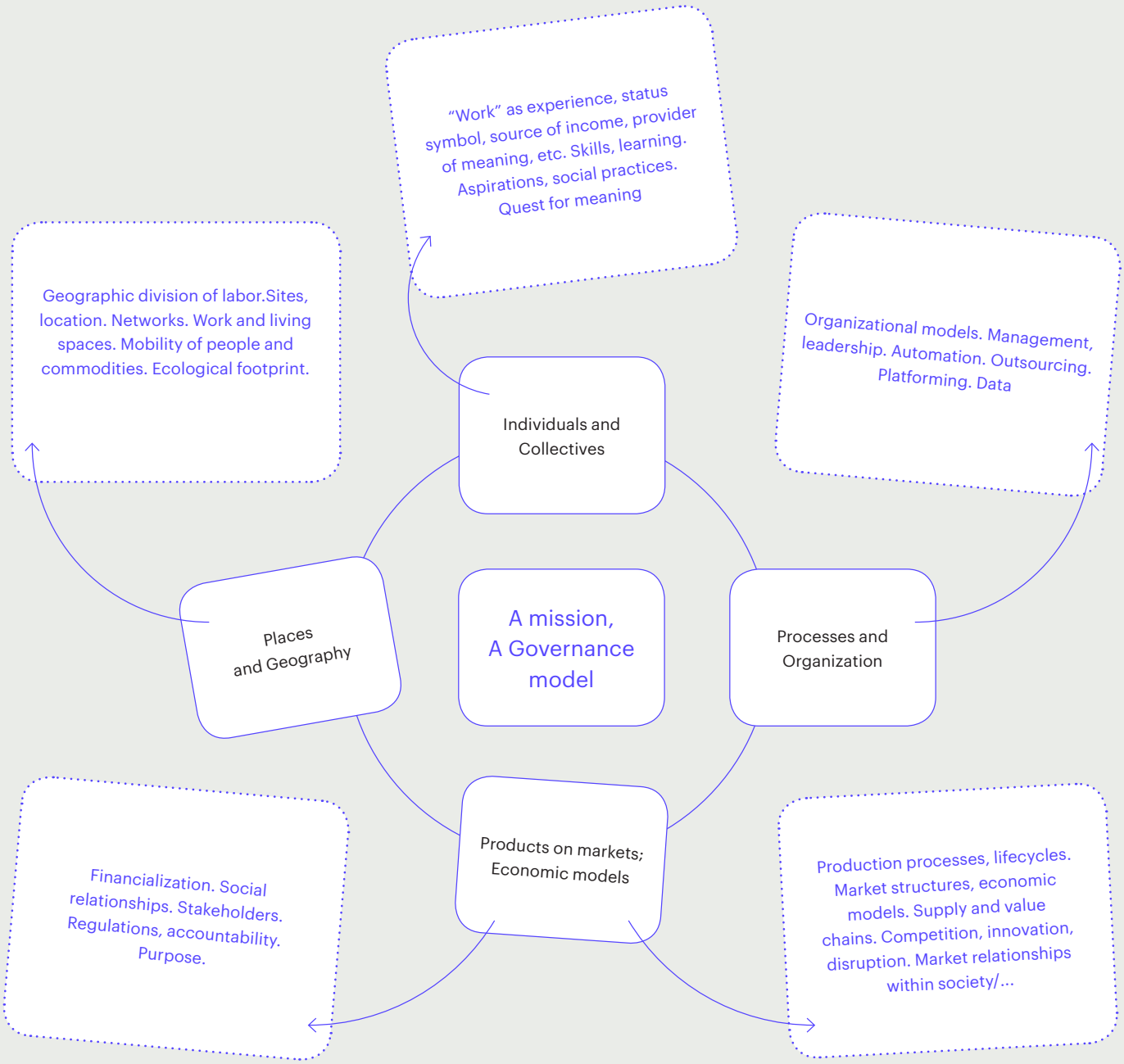
How to read this document

This paper maps out and synthesizes the forces of change impacting corporations in the present and the future.[1]

1

The first version of this paper was produced at the end of 2019 for Groupe la Poste (France), to whom we extend our thanks for allowing us to publish it. Marie-Abelle Nadin and Pascale Dymovski contributed to this initial version.

Scope:
A company is...



Although many large corporations employ foresight units, the future of "businesses" as entities itself is rarely the focus of foresight efforts carried out inside or outside corporations.

Admittedly, what a corporation actually is can be difficult to define; it is at once an economic agent, an organization, a political object/subject, an ensemble of individuals, a physical entity, and more. Any kind of transformation impacts all these dimensions simultaneously, and not entirely without creating some tension.

Consulting agencies and technology providers have produced a substantial body of literature on "the corporation of the future" that largely paints a single, deterministic (or prescriptive) portrait of that future (agile, distributed, holistic, *smart*, etc.). What's more, they often portray long-existing evolutions as cutting-edge.

This paper is based on a review of international documentation that comes largely under the heading of foresight — the exploration of possible futures — a practice integrating complexity, uncertainty, and the links between actors' choices and their consequences on those futures. The time horizon we have chosen to work with is 2030-2035, although there are some variations, depending on the source.

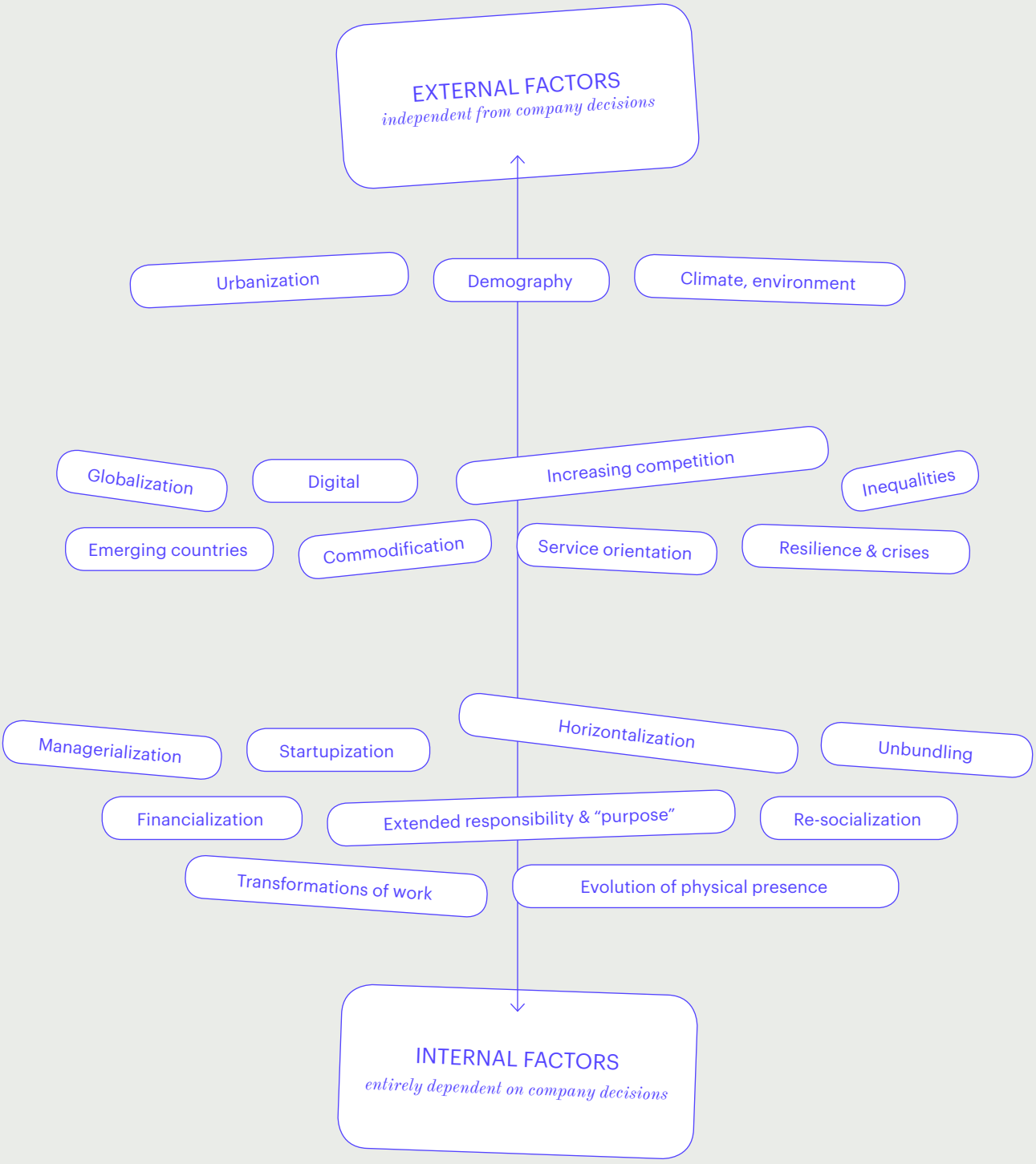
This paper focuses on the transformative forces that corporations are encountering and will encounter from within and without. Although the analysis is somewhat focused on large corporations, we have tried to take the diversity inherent to the business world into account. The scope of our analysis is international, even if most of the quantitative data have been garnered from French sources.

Forces of change

A “force of change” is a factor (internal or external to a corporation’s ecosystem) that has or will have significant consequences on the corporate landscape across several dimensions: mission and governance, organization, labor, production, business model, and geographical footprint. A force of change exists in opposition to the status quo, but it does not necessarily determine its end result: its impact will depend on its interaction with other forces, on individual corporate decisions, and on the decisions made by other actors (both public and private).
We have arranged these forces of change along an axis that opposes “external” forces

(that do not depend on corporate decisions, at least over the time horizon considered) and “internal” ones (that stem from corporate decisions). Between these two poles, there are several sets of “internal-external” (or “meta”) factors, which do not depend on a specific firm’s actions, but which depend on the functioning of economies.
Here, we mostly expand on the internal/external (with a specific focus on digital) and the internal forces of change, with some exceptions.

The main forces of change: a map



External forces of change

These forces are mainly independent of what corporations do, at least during the period under consideration (2030-2035).

External Factor 1

Demographics: aging, immigration, etc.

Description

Nearly all developed countries' populations are aging rapidly (except the United States), and so is China: in 2030, 30% of French people will be 60 years old and over, and 12% over 75 (source: INSEE). East Asian countries are aging the fastest. Lower migration rates will lead to low population growth in these countries, and sometimes even decreases.

What are the possible consequences?

- An increase in economic activities targeting seniors (the silver economy) and intergenerational approaches (housing, perhaps work); inclusive design.
- Tensions related to pension systems, system reforms and the conflicts they produce, increasing weight of pension funds.
- Changes in the labor force, development of the senior employment market.
- Possible effects on public opinion, public mindsets, political choices (generational conflicts?).

Urbanization and territories

Description

A wave of urbanization continues worldwide, even if it is slowing down and changing in nature in Europe. For example, 83% of the French population lives in a large urban area today, and this proportion will exceed 90% in 2030 (source: Observatoire des Territoires). Growth in France is concentrated in peri-urban areas, which are generally less prosperous and have fewer services. Conversely, certain rural areas are decreasing in population.

Source : Observatoire des Territoires

The health crisis of 2020 has led a (relatively well-off) portion of the population to abandon larger cities for smaller towns and rural areas well connected to transport and telecommunications networks. It is too early to say whether this phenomenon will endure.

What are the possible consequences?

- In the words of geographer Jacques Lévy, “Rural areas have become a component of the urban world with three specific qualities: low density, a significant dependence on vulnerable networks (transport, energy, telecoms), and a memory of its earlier rurality that persists in various ways. Rural and peri-urban areas are variants of the urban that are morphologically external to it, but ever more functionally integrated.”
- Concentration of economic around a small number of urban or peri-urban areas within each region.
- The decline of local economic agents to the benefit of networks that are part of the international economy (e.g., franchises in commerce).
- The still fragile search for ways to “relocate” economic activity, especially in the food sector (short food circuits) and industry (circular economy), as well as in other fields (self-production of energy, etc.).
- Tensions related to the search for new proximities and ecological and social issues.

Climate, environment

Description

Each year, the IPCC report on Climate Change points out that global inaction on carbon emissions keeps greenhouse gas emissions at the level of its worst-case scenarios. Not a single country is fulfilling the commitments listed in the 2015 Paris agreement. It is becoming increasingly clear that "green" innovation is doing virtually nothing to stem the tide of climate and environmental degradation. The goal to keep the average rate of global warming lower than 2 °C, or even 3 °C, by the end of the century seems increasingly out of reach.

The environmental crisis is not limited to climate. Biodiversity is declining at an alarming rate — in some rural areas, farmers are now forced to pollinate by hand. It is becoming more difficult to predict the availability of key resources (hydrocarbons, certain metals, drinking water, etc.). Moreover, these different crises are linked: acidification, for example, reduces the ocean's capacity to absorb greenhouse gases.

What are the possible consequences?

- Apart from extreme meteorological events (heatwaves, storms, etc.), the majority of most developed countries' populations and business operations will probably not have experienced the full effects of the (various) ecological crises yet. However, in specific sectors (agriculture, energy) and certain regions (the Global South, agriculture-dense areas, coastlines, etc.), ecological crises are already profoundly changing the landscape of corporate activity.
- A gradual but continual increase in migratory pressure.
- A probable increase in the prices of energy and other resources (such as water), although the recent evolution of energy prices does not provide a clear indication that such a trend exists.
- The public's growing ecological awareness will itself lead to more pressure on corporations, both internal and external: pressure to change from consumers, collaborators, and (some) investors; tighter regulations; changes to purchasing criteria, etc. Another consequence might be the emergence of political and geopolitical tension around the effects of environmental policies: are they freedom-destroying, inequality-generating, anti-progressive...? Does prioritizing the ecology enhance or constrain a country's competitiveness?
- Businesses can expect to tread a very fine line between ecological concerns and economic imperatives in a period of intense competition and instability.
- The rise of resilience

- On the other hand, the environment is a fast-growing commercial focus and, it seems, a powerful generator of employment. For France only, Ademe predicts that 900,000 potential new jobs could be created by 2050 to support the ecological transition.
- Long term tensions around the monetization of negative externalities (e.g., carbon markets).
- Finally, beyond green innovation, ecological awareness creates a space for new business models (e.g., mission-driven corporations, see below). It is also driving the emergence of new models of production (circular economy, relocation) and new models of social organization ("transition towns," alternative communities, universal basic income, etc.). Even if questioning the idea of economic growth is little more than a slogan for now, it may gradually lead to more concrete alternatives.

> *"Heat stress is projected to reduce total working hours worldwide by 2.2 per cent and global GDP by US$2.4 billion in 2030. [...] This is, however, a conservative estimate."*
>
> OCDE, *Working on a Warmer Planet*, 2019

Internal-external forces of change

Generally speaking, these forces exist independently of the action of individual firms, but they derive from the dynamics between national and global economies, and therefore (at least in part) from business activity more generally.

Internal-External Factor 1

Globalization

Description

From 1980 to 2017, the volume of world trade was multiplied by 6.8, while worldwide GDP increased by a factor of 3.5 (source: INSEE). Since 2011, however, world trade and GDP growth rates are almost identical: globalization seems to have reached a plateau.

Source : Insee

World trade, however, is not the only force driving globalization. Multinational corporations are expanding their activities and reorganizing their production and financial cycles (if only for tax optimization purposes). The major brands are spreading across the globe, as are cultural offerings and tourism, which are no longer exclusively the prerogative of the Global North.

How does it influence corporations?

- The consequences are well known: global “just-in-time” supply chains, the deindustrialization of most of Europe, increased international competition that weighs heavily on labor costs and markets, ecological impact...
- Moreover, while globalization clearly benefits certain emerging countries, the same cannot be said for other countries in the Global South, which remain sidelined at worst, and at best confined to supplying raw materials or subcontracting, under the control of large multinationals. Several “emerging” countries now subcontract their industrial production to other countries with lower labor costs.
- And what about tomorrow? A number of hypotheses exist. In industry, the international division of labor may have reached a plateau.

An international division of labor exists in the world of services as well, but there have also been a few relocations, particularly of customer service platforms. It is also possible that trade will become even more regionalized (70% of European international trade is between European countries) or even “relocalized” if energy costs and environmental factors come into play.

The rise of emerging countries

Description

The world is no longer subject to the de facto authority of the United States and, to a lesser extent, Europe. China is the world's number two economic power (or even number one, depending on how you count). Southeast Asia is the world's leading growth center. Africa will account for 40% of the world's population (and more than half of its youth) by 2100. Economic and political zones are redefining themselves independently of the "West," and emerging countries are no longer regarded merely as sources of raw materials and production sites — they are also consumer, innovation, and investment hubs (China, Gulf countries, India...).

How does it influence corporations?

- Increased international competition, including for high value-added products and services.
- Competition for resources and areas of influence (the "New Silk Road," China-Africa relations...)
- Changes to outsourcing configurations and locations; global social conflicts; outsourcing of design and not just production.
- The emergence of new global brands from emerging countries: Haier, Tata, Huawei...
- Significant impact on inequality at the national and international levels.

Intensification and transformation of competition; continual innovation

Description

The economy is more competitive than ever, but the locus of competition is changing. While traditional cost-based competitiveness is still the order of the day (notably due to globalization and automation), achieving an edge over one's competitors is also increasingly a question of innovation, product differentiation — making products difficult to compare with one another — and the control of customer relationships via services, platforms, data, etc.

How does it influence corporations?

Accélération des rythmes, tant à l'échelle des marchés (cycles d'innovation, *time to market*, obsolescence des produits) que des organisations (« réorganisation permanente », mode projets...) que du travail (intensification) et de la consommation (immédiateté).

- Acceleration of rhythms at the market level (innovation cycles, time to market, product obsolescence) and the organizational level (permanent reorganization, project modes, etc.), and in terms of workloads (intensification) and consumption (immediacy).
- Data seems to show that one classic measure of innovation, productivity growth, has actually been lower in the last 30 years than it was before the 1970s, suggesting that the shape role of innovation may also have changed (less focused on technology or needs, more on differentiation?).
- Shifting innovation processes: the classic R&D-innovation-marketing linearity is being challenged by innovation that is open, ecosystemic, "lean" (marketing is simultaneous with innovation, which becomes continuous), bottom-up (collaborating with customers to further innovations), etc.
- Change inside organizations — greater emphasis on initiative, adaptation, responsiveness, and projects rather than on the Taylorian organization of standardized work (this change has been partly offset by the computerization of processes — see below — and modulated by the fact that part of Taylorian production is outsourced).
- Disruption — innovation focused on a business model, which is generally aimed at the bottom of the market, or even at potential customers who do not have access to a market as is (e.g., low-cost), and gradually reorganizes value circuits entirely.

Commodification

Description

Commodification (in the context of this paper) refers to the process of bringing activities to market that were once wholly or partly outside the scope of the market: public services (social security, education, water, even defense), forms of mutual support (e.g., care), knowledge, natural resources, natural phenomena (e.g., the commodification of living things), behaviors...

Time and attention are also the targets of commodification: it seeks to enrich time spent, occupy downtime, attract attention and monetize it, and so on.

How does it influence corporations?

Émergence de nouveaux marchés : services à la personne, éducation...

- The emergence of new markets: human services, education, etc.
- Specific resources that were once free or relatively inexpensive become more costly and/or less accessible: scientific knowledge, data, natural resources, seeds, etc.
- Transformation of internal organizational relationships into contractual customer-supplier relationships (service-oriented organizations) and employment contracts into service contracts (outsourcing, use of freelancers, etc.).

Servicizing

Description

"Servicizing" means either bolstering service products (product-service mix) or transforming products into services (economy of functionality). Commodification (see above) often takes the form of servicizing: a service or relationship that existed outside or market relationships becomes a professional, cost-based service.

How does it influence corporations?

- Close to half of the direct hires in industry are service jobs (sales, customer relations, administration, maintenance, logistics, quality control, design, etc.).
- New business models: selling mobility but not a vehicle, prints but not a printer, unlimited subscriptions but not a set of products or a series of acts of consumption, all with a focus on forming long-lasting relationships with customers.
- Complexification of business models related to industrial products or distribution: the automotive industry earns money via financing and insurance, Amazon sells access to its IT infrastructure, its software (catalog, order, payment ...), and its logistics (outsourced or not).

Inequality

Description

The global wealth and income gap is increasing, although in different ways from one country to the next. Overall, the richest are seeing their resources multiply at far greater rates than the average. In developing countries, the poorest may see an increase in monetary resources, but hardly at the same rate. Some developed countries are experiencing an increase in poverty; this is less the case in France thanks to the social system, but the poorest 20% of households have not seen an increase in disposable income since 2008. In these same countries, the middle classes are falling prey to "downgrading", either subjective — the feeling that higher status is no longer accessible and a lower status is an increasingly plausible risk — or sometimes objective, borne out by statistics (Germany, United States).

In 1996, the French population's wealthiest 10% received as much as the poorest 40%. This ratio rose to a peak of 1.14 in 2011. It has since fallen back to 1.05. The patrimonial disparities are much more blatant: 1% of French people own 17% of all household assets; the wealthiest 10% own almost half.

Source: Observatoire des inégalités

How does it influence corporations?

- A rise in social and corporate conflict after decades of decline.
- Division of society and perhaps of markets (a "bottom of the pyramid" market?); conflicts between disadvantaged populations (natives versus immigrants, lower-middle classes versus the poorest, urban versus rural, etc.); the rise of political extremism, which may actually come to power; "secession" of entire social categories (the poor; the rich – e.g., gated communities).
- Political pressure either via taxation and redistribution, or bearing directly on firms' responsibility to address inequality themselves (however, greater inequality may not produce the "class solidarity" required for these to be upheld).

Resilience

Description

Given the mounting uncertainty and rapid change we are facing today, and the number of complex systemic crises at hand, there is a growing conviction that anticipating (or at least forecasting) the future may not be of real use anymore: the environment is too uncertain, there is no "normal" against which to benchmark fluctuations, risks might no longer be calculable individually, insurance models may no longer work, etc.

This would imply that we must also develop the capacity to resist and respond to sudden change and transformation, a quality known as "resilience," or in more proactive terms "anti-fragility" — the ability to grow and improve when confronted by unanticipated challenges. These capacities can be developed at the individual, organizational, societal, or regional level (e.g., "Transition Towns").

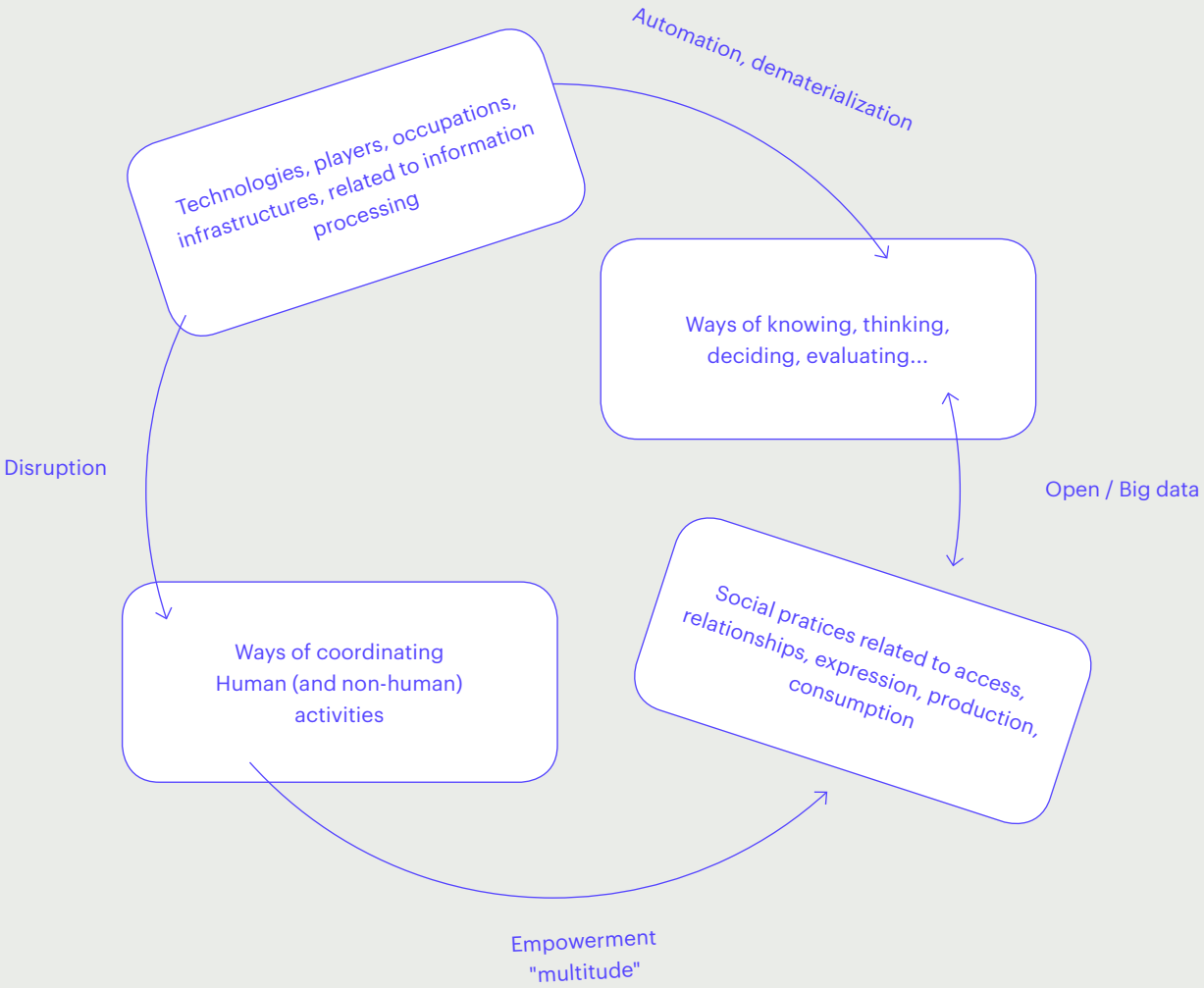
How does it influence corporations?

- Larger, highly diversified corporations or loosely integrated networks (loose coupling) may benefit, while small corporations and overly specialized freelancers may not.
- Crisis management skills become part of every organization's skillset, in response to both internal pressure (ensuring business continuity, or even finding opportunities at times of crisis) and external pressure (legal liability, brand image management, etc.).
- Exploration of new, more resilient, anti-fragile forms of organization: fixed cost reduction, transfer of risk to external actors, less dependency (on suppliers, technical systems), redundancies (duplication of critical components), relocations... but also greater solidarity within work collectives (extended or not), a greater capacity for autonomy and responsive action, and so on.
- Potential expansion of proactive and remedial intervention by national and regional governments, mitigated by the limitations of their means.

Digital as a force of internal-external change

Digital is often presented as “the” force of change in the business world. Of course, this is not untrue, but the digital world did not come out of nowhere, after all: to no small extent, it expresses, enables, and accelerates many long-term changes in corporations while also producing a dynamic of its own.

What does digital refer to? source : Fing, Transitions[2]



Digital is, at once

- A way of formalizing, automating, and optimizing organizational (or inter-organizational) processes to increase productivity, reliability, and traceability: this is what “information systems” produce.

- A way of producing and sharing knowledge: data becomes the dominant medium for knowledge production and decision making.

- The foundation for new personal and social practices (text messaging, social networks, file sharing, etc.).

- The platform for novel forms of coordination and collective action, on a smaller scale (Wikipedia) or on a massive scale (the platform economy).

  These various dimensions can interfere with each other, as shown for example by the problematic cohabitation between IT managers (CIO, CTO), digital managers (CDOs), and even data managers.

Automation, optimization

Description

Digital is — historically, *first and foremost* — computing, and its managerial application to rationalize and optimize organizational processes and enhance company efficiency and effectiveness. Today, optimization supports massive, complex systems (smart city, smart grid, "industry 4.0"...) and increasingly finer levels of granularity (the "Internet of Things"), and plays a growing role in research, design, modeling and decision-making processes (Artificial Intelligence).

How does it influence corporations?

- Automation: adding or substituting machines and/or software to complement human effort. Initially restricted to industrial or administrative tasks, automation now supports relational (chatbots) and decision-oriented jobs (AI dedicated to recruitment, sales, diagnosis, driving, etc.).
- Transformation of work content: technology is often expected to free workers from thankless and repetitive tasks, paving the way toward the human (creative) dimension of work. But this effect has not materialized on a large scale: the proportion of those whose work involves monotonous tasks rose from 15% in 2005 to 21% in 2013, and from 23% to 33% for blue-collar workers (source: Eurofound). In France, the proportion of employees whose work rhythm was simultaneously determined by at least three constraints rose from 6% in 1984 to 35% in 2013. source : Conseil national du numérique / ministère du Travail
- Interconnection, acceleration, and ubiquity: the flexibility to recompose complex processes — with different factors, actors, geographic locations, economic entities — in real time.
- Formalization and programmability: every process, every object is systematically described, and designed as a digital model. Its properties assume the form of computer programs and/or data. All one needs to do is reprogram a thing to transform it. This can also, however, result in freezing, over-formalizing, or bureaucratizing certain processes, relationships, or activities and to the multiplication of controls, etc. "Dehumanization" does not primarily happen from machines replacing humans, but from organizations making and implementing decisions without human intercession.
- Banalization: information systems are increasingly based on the same tools (e.g., ERP), the same service providers (cloud, outsourcing, consultants, etc.), and the same standards, making differentiation difficult.

> *"Code is Law."*
> Lawrence Lessig, Harvard Magazine, 2000 (traduit par Framalang)

New risks

Description

Companies are increasingly dependent on (functioning) digital systems, which are vulnerable to bugs, malfunctions, and cyber-attacks. Data privacy, protection, and quality have become significant issues. And what's more, businesses' digital systems are increasingly reliant on ready-made software and/or external platforms they do not control.

How does it influence corporations?

- IT security, in the broadest sense of the term, has become a practical constraint and a daily concern, as well as a cost generator and an economic, legal, and image-related risk factor.
- The interconnection of digital systems tends to lead to increased fragility, and makes "global accidents" (Paul Virilio) more plausible.
- Dependence on external offerings can reduce an organization's strategic room to maneuver, and its possibilities for differentiation — if every organization uses the same software and the same best practices promoted by the same consulting firms, how to tell the difference between them?
- That dependence also raises the specter of industrial espionage, or even sabotage, due to the proximity between certain significant suppliers and their countries (USA, China, Israel, etc.).

A closer look: Artificial Intelligence

Artificial Intelligence (AI) refers to "*a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation*" (Wikipedia). This relates to a large set of concepts and technologies rather than a discipline in its own right. Colloquially, the term "artificial intelligence" is often used to describe machines (or computers) that mimic "cognitive" functions that humans associate with the human mind, such as "learning" and "problem solving."

A subdomain of AI has been steadily emerging in recent years, thanks to the availability of massive amounts of data: machine learning, where the computer learns to use the data statistically, and deep learning, where the computer learns to model at higher levels of abstraction. Both have led to spectacular progress in areas such as pattern recognition, automated language processing, medical diagnosis, fraud detection, robotics (including the self-driving car), etc. More generally, computers have become more potent analyzers of complex phenomena and producers of original interpretations or predictions based on existing data.

These advances have generated enthusiasm and fear in equally excessive measure. AI is seen to herald the approach of an infinitely more efficient world, and better, more exact decision making; as well as that of a world of constant surveillance and control. Its rise has also been equated with the possible loss of millions of low-to-highly skilled jobs, such as customer relations and service sector jobs that (for the moment) have mostly escaped automation. Predictions about the effect of AI on employment vary considerably: France Stratégie states that 10% of French jobs will be lost in 15 years, while an Oxford Martin School study claims that more than 50% U.S. jobs could be lost. The OECD estimates that 32% of jobs will see at least half of their tasks altered in some way.

Even if some spectacular applications of the tech might confirm our greatest hopes and fears, the fact remains that AI is now highly specialized ("trained" for particular uses), highly dependent on the quality of the data it is fed (it reproduces biases that the data already contains), extremely opaque (understanding the results they produce is no easy task), and quite costly to use (especially in the learning phase).

From a business perspective, several questions may arise:

- What will be the direction, pace and extent of economic and labor transformations? How to prepare the organization for them, should they occur? How to prepare the employees?
- Is AI capable of generating genuinely significant productivity gains (in the broadest sense)? Can it give a robust, sustainable competitive advantage to its users?
- Will AI enable really radical innovation? In other words, will we be able to do more than just automate tasks?

Dematerialization, immaterialization

Description

"Dematerialization" means substituting electronic exchanges for paper exchanges, travel, face to face exchanges, and so on. It also sometimes refers to a reduction in the material content of economic growth, and a possible decoupling of GDP growth from growth in resource consumption and emissions — but this decoupling has not (yet?) taken place, and potential "rebound effects" throw its emergence into question. The digital sector itself is based on an extensive hardware infrastructure (terminals, networks, servers, etc.).

"Immaterialization" refers to the progressive increase in economic value of services and intangible assets.

How does it influence corporations?

- Two symmetrical transformations. On one hand, there can be greater organizational flexibility, including the capacity to reconfigure operations from project to project. On the other, there is a certain rigidity in computerization and in the interfaces (or even automatons) used to augment or entirely replace human interactions. Customer relationships and even internal company relations are subject to a kind of "algorithmic governmentality" that leaves little leeway for individual initiative or to negotiation.
- The economic character of the immaterial: in terms of value production, immaterial objects are non-rivalrous (we can share them without being deprived of them), and their cost of production is marginal to zero (increasing returns), which makes the classic rules of the market economy challenging to apply. Valuation depends increasingly on assets that have no objectifiable market value (brand, customers, knowledge, networks, etc.) and which are difficult to protect.
- Modularity: every component of a value chain functions as a kind of autonomous service. These are assembled in dynamic and substitutable ways. Whether a service comes from inside or outside the company is of little importance.
- Plasticity, agility: every service exists in "permanent beta" mode. In some corporations, a service may change several times a day; there may be several versions of the same service in operation or even a different version per user.

> *"We have come to value: Individuals and interactions over processes and tools Working software over comprehensive documentation Customer collaboration over contract negotiation Responding to change over following a plan."*
> "Manifesto for Agile Software Development," 2001, online

Data: a key asset

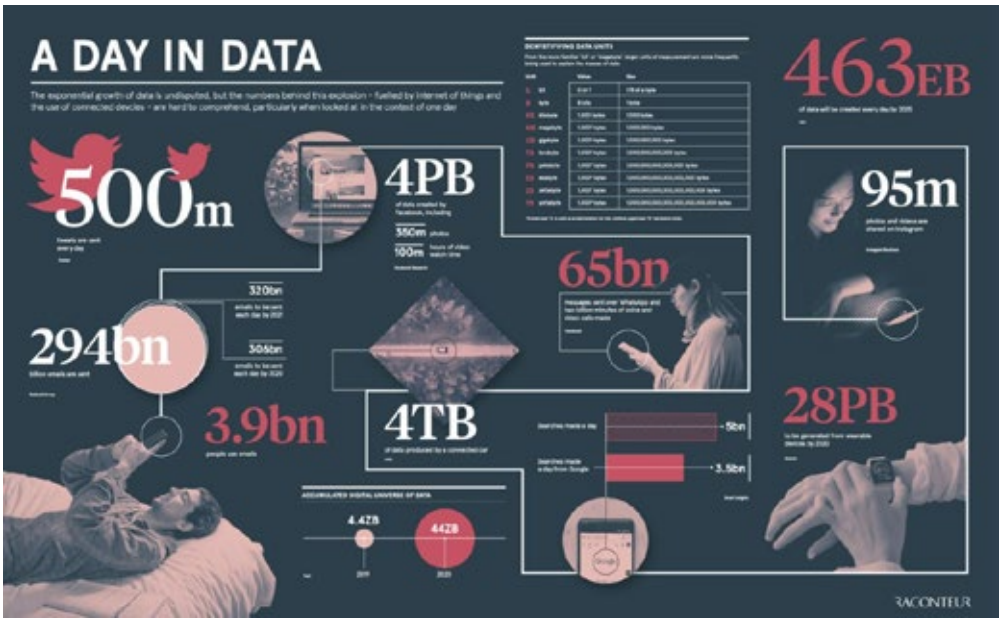
Description

Data, once subordinate to the computer programs that treated them as mere "variables," now have a life of their own. They can be used in processes far removed from their original contexts, can be bought and sold, can be crossed with other sets in a loosely targeted search for "patterns" (big data) and, of course, serve as elementary units of information to train machine learning algorithms in AI.

Absolute numbers do not make much sense (see graph below). However, studies estimate that the volume of available data doubles every 2 years — in other words, about the same amount of new data will emerge in 2 years as in all of history before. This explosion is the result of the increase in the number of connected devices (accelerated by the Internet of Things), the intensification of uses, and the desire to capture more and more traces of digital activity.

How does it influence corporations?

- There are markets for data; however, data can hardly be considered a patrimonial asset. It is a non-rival asset (we can share it and still use it) — its value decreases rapidly over time and mostly depends on how it is used.
- Data management influences digital architectures (data lakes, the cloud, etc.), skillset acquisition (governance, security, data exploitation), IT projects (big data, AI, etc.), innovation and marketing, business valuation...
- The ability to accumulate and process vast volumes of data, personal or not, will become a key criterion of competitiveness and/or a lever for exercising market power — the "platform" model. Data accumulation and processing are also becoming a source of contention from without and from within (use of employees' personal data, surveillance, control, etc.).
- The focus on data gives priority to measurable and/or categorizable elements and modeling that extends into the past. It can produce a kind of myopia or "tunnel effect" — seeing only what has been captured in the data, and directing activity towards what has been measured without questioning its meaning — and limit organizations' capacity to pursue more radical innovations.
- The importance of data has sparked political debate, producing regulations (GDPR; "public interest data"), public sector strategies (open data), and alternative positions (Mydata on the return of personal data to individuals; Qwant positioning itself based on the choice to not collect personal data, OpenStreetMap using contributions freely provided by its users).



Source : Raconteur, 2019

Openness

Description

The adjective “open” has become extraordinarily popular since the 1990s. It lies at the crossroads intersecting democratic political aspirations, cyberculture — where open standards such as open source have emerged — and a generation of entrepreneurs who embraced guerilla rather than static warfare, opted for coopetition (cooperative competition) over frontal competition. “Open innovation” (“a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology”) is but one dimension of how even for-profit businesses explore the benefits of openness.

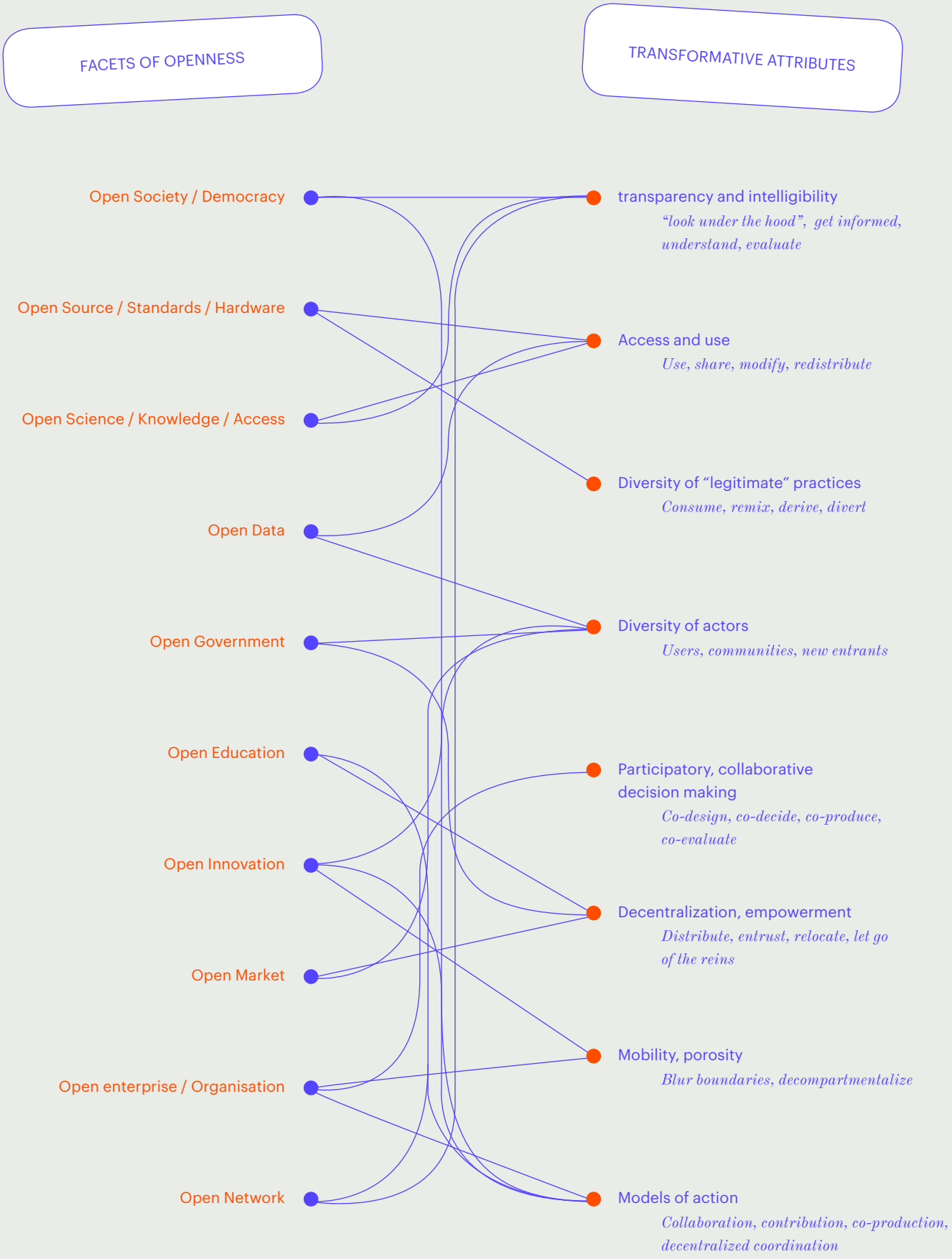
Openness has thus become a value-bearing quality that is generally (but not unanimously) seen in a positive light, implying organizational transparency and responsibility; functional ecosystems; the democratization of access to resources, services, and products; participatory and collaborative collective decision making; the diversity and fluidity of actors, proposals, etc.

How does it influence corporations?

- Competition: it becomes more difficult, less relevant, and sometimes less legitimate to base differentiation on tightly controlled secrets and intellectual property rights.
- Ecosystems: value is produced through complex, shifting operational boundaries, which are increasingly far removed from the vertical supply chains that placed numerous suppliers under the control of a single major client. Each participant is expected to share a significant part of its knowledge and open the interfaces of its systems.
- “Open” alternatives, opposition to “enclosures” — free software, generic drugs, seed banks — and opposition, for example, to the appropriation of living organisms or the commercial practices of biotech or industrial seed companies.
- A drive for greater transparency and participation.

Les « figures de l'ouverture » et leurs effets

source : Fing, Questions numériques – Transitions, 2015



Social and professional digital practices

Description

Digital has penetrated every corner of our daily lives, professionally and personally. It has contributed to a reconfiguration of human relationships, time and mobility management, consumption, media practices, etc. Even though computers have been a component of company operations since the 1960s and 1970s, since the early 2000s personal digital practices have been exerting a strong influence on business contexts (with or without the consent of management and CIOs).

How does it influence corporations?

- BYOD: Companies have less and less control over their employees' devices, particularly mobile devices and the devices they use at home to work. IT departments must take this into account.
- Nomadism and teleworking: while regular teleworking from home remained relatively marginal until the 2020-21 health crisis, nomadic, mobile, and ad hoc forms of working away from company offices were already multiplying — at a client's offices, in a café or coworking space, or at home in the evenings and on weekends. In 2017, 25% of French employees said they were teleworking, 17% of whom occasionally, and only 6% on a contractual basis with their employer

Voir la source : Ifop - Malakoff Médéric

- The health crisis of 2020-21 has seen teleworking expand considerably, under or outside of the control of employers. Many corporations and employees do not intend to return to the earlier status quo, even if the limitations that remote working places on the workforce have begun to appear. Everyone is not equal when it comes to telework: tasks, household working conditions, and levels of proficiency with remote working tools all create notable differences.
- The interpenetration of various qualities of time and space: people can work anywhere, not just the office, and can manage their personal affairs at work — employees and corporations alike take advantage of this. Working and workplace flexibility presents both opportunities and risks. The topic has become a prominent feature of individual and collective employment negotiations.
- Networks: new hires bring with them their presence on various social networks, a multitude of email addresses, as well as practices and values that they may want to apply in the company. While some corporations try to limit employees' use of these networks, others see them as an asset, albeit with some regulation of practices (charters). These networks make a substantial contribution to the future employability of qualified employees and, therefore, potentially make them less dependent on their current employers.

Decentralized coordination, platforms

Description

Digital technology makes it possible to coordinate a large number of very diverse stakeholders, in real time, for many different purposes: buying and selling (Craigslist; millions of merchants of all sizes who use Amazon); exploiting excess capacity (carpooling, house sharing); matching supply and demand of products (Booking.com) and skills (freelancing platforms); knowledge co-production (Wikipedia); etc.

How does it influence corporations?

- Platformization is profoundly restructuring certain markets. A platform sits at a specific point on the value chain, at the critical juncture between supply and demand, distinguishing itself by capturing information on the market's different stakeholders (multifaceted markets). Platforms are based on a combination of scale and scope effects, which leads to a critical mass in favor of one or two dominant platforms per market — winner takes all (or most). Their market power is and will continue to be challenged, but existing laws and rules governing competition are poorly adapted to extreme horizontal specialization.
- Platforms can generate significant revenue and profit from a relatively low-cost structure, so traditional corporate structures may, by comparison, have difficulty attracting capital and talent.
- The “long tail:” There is no longer any physical limit to the size of product catalogs, which means that, in theory, anyone can gain access to a market. However, profusion on its own generates concentration effects which, in most cases, primarily benefit the blockbusters. Economically, it seems that the long tail benefits online platforms and distributors more than the producers (e.g., artists) themselves.
- The emergence of informal networks, based on social platforms, that either compete with traditional forms of business operations (networks of independent contractors, small businesses) or exist in parallel to the formal structures of company enterprise (networks structured around skills, knowledge exchange, etc.).
- The emergence of click workers, a class of laborers often paid (very little) at the micro-task level, in charge of feeding the platforms and training algorithms (labeling images or other content, highlighting content, etc.) Some also consider the free “labor” provided by platform users (publication, republication, comments, ratings, etc., on top of furnishing their personal data) as unpaid “digital labor.”

- Some professions may feel proletarianized by the permanent competition that platforms represent, which compels them to accept short term, poorly paid projects over and over: graphic designers, certain types of consultants...
- Competition between traditional, commercial forms and collaborative forms, commercial or not: Wikipedia has made the encyclopedia market disappear, Waze and OpenStreetMap have changed the cartography domain.

> *"Software is eating the world. The Internet has now spread to the size and scope where it has become economically viable to build huge companies in single domains, where their basic, world-changing innovation is entirely in the code."*
>
> Marc Andreessen, founder of Netscape, investor, Wired, 2012

Disintermediation/ Reintermediation

Description

Even if digital actors are constantly challenging the very notion of intermediation, it has fostered the emergence of some new, very powerful intermediaries — platforms, mostly. Frequent announcements signaling the demise of a particular intermediary (bank, mass distributor, record company, media outlet, etc.) have largely not come to pass. The direct relationship between producers and consumers has not become a massive reality despite being heralded since the advent of the Internet. On the other hand, the obligatory motions content producers (or other producers) used to go through in order to achieve their aims (publishers, programming schedules, distribution channels) have been replaced by more diverse and fluid mechanisms: I can have a personal web shop on Amazon, several physical distributors, and any number of profiles on specialized platforms.

How does it influence corporations?

- Destabilization, but not disappearance, of traditional forms of intermediation and distribution. *(For more on this, see the section titled "Evolution of corporate physical presence" below).*
- A multiplicity of options for distribution, financing, logistics, etc. Logistics is a radically different field after the emergence of new forms of intermediation, which typically do not integrate this function internally.
- The market power exercised by new intermediaries is at once more easily contested — it is not strongly protected by laws, contracts or political players; rivals emerge nonstop — and more significant. That market power not only weighs heavily on the margins of other corporations, it can also inhibit their capacity to differentiate.
- The ideal of certain intermediaries simply vanishing remains alive and well, and continues to fuel a wave of innovations (blockchain; smart contracts). For the time being, however, the effects on corporations remain modest.

A closer look: Blockchain

A blockchain, or chain of blocks, is a technology for storing and transmitting information without any control mechanism. Technically, it is a distributed database whose users' information is verified and grouped into blocks, thus forming a chain. The whole system is secured by cryptography using a consensus method involving many individual participants. Therefore, the chain of blocks is a secure, distributed record of all transactions carried out since the start of the distributed system.

In 2008, the appearance of blockchain — and its initial application, Bitcoin — was dubbed a "revolution," a return to the libertarian ambitions of the Internet. Thanks to its existence, the story went, it would no longer be necessary to resort to trusted third parties (banks, notaries, etc.) to validate personal information or transactions, manage currencies, etc.

Beyond its initial monetary applications, other uses are developing, particularly around the concept of smart contracts — legal contracts implemented by computer programs, which are automatically triggered according to events. Other projects consider it a way of managing commons without a central authority, such as in the energy sector.

Source : https://www.daisee.cc/

The enthusiasm and high expectations initially placed on blockchain have faded somewhat:

- The potential for disintermediation only makes sense within the framework of public blockchains that allow anyone to participate, and anyone to verify information. However, many uses are private — internal to a company, a sector, etc. — and in these cases, blockchain is just one of several technologies that can be used to secure information.
- Blockchain cryptocurrency manipulation, and the difficulties encountered by the first decentralized autonomous organizations (DAOs) reveal that there are limits to the trustless model, wherein technology serves in lieu of the trust usually placed in other actors.
- Several studies focus on the blockchain's energy consumption, or on the number of cases demonstrating that blockchain is a less efficient technology than its competitors for the same uses.

Disruption

Description

According to the researcher Clayton Christensen ,disruptive innovation "describes a process by which a product or service initially takes root in simple applications at the bottom of a market — typically by being less expensive and more accessible — and then relentlessly moves upmarket, eventually displacing established competitors." By (almost) always innovating at the high end of the market to serve their most profitable customers, established market leaders create space for new entrants, who use it as a foothold to oust their predecessors.

By extension, disruptive innovation refers to any innovation that changes the frame of reference for a market (the nature of products, uses, prices or marketing methods, actors and their relationships, etc.) by relying, not on a technological breakthrough, but rather on a new business model.

How does it influence corporations?

- Disruptive innovation is a powerful way to dislodge the most established firms by [1] targeting the most underserved segments of the market, [2] shifting value downstream (from design and production to distribution, service, even the customer), and [3] reconfiguring value chains. Few sectors are immune, even if some corporations have shown themselves able to respond to the disrupters: banks with online subsidiaries, carmakers with low-cost models...
- Disruption challenges the traditional conception of innovation as primarily technological — but the traditional conception was never an accurate reflection of reality in the first place.

Questioning the digital

Description

The importance that digital has taken on in everyday life and company operations is arousing growing contestation.

Some criticism focuses on the digital world as energy-intensive, polluting, dehumanizing, responsible for the over-acceleration of our daily lives, and more.

Others focus on today's digital technology applications, especially the power that major platforms exercise: their business models, largely based on the massive capture of attention and personal data; their tax optimization practices; their effects on markets, social practices, politics, etc.

Still others highlight digital technology use inside organizations: process standardization, bureaucratization, a heavy focus on metrics, the reduction of human contact with customers or even among employees of the same organization, opaque algorithmic decisions, etc.

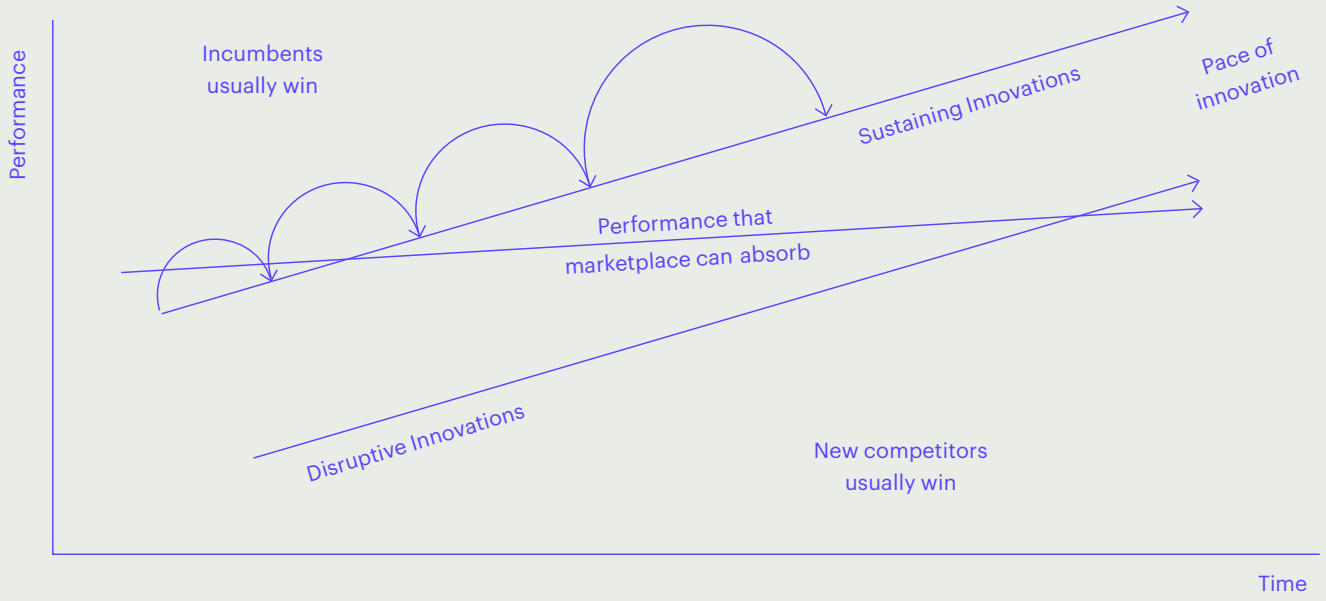
A (small) number of people are trying to move away from digital, or at least from some of its primary uses, especially social networks. However, the importance of digital technology in maintaining personal and professional relationships during the health crisis is perhaps likely to counteract this emerging trend.

How does it influence corporations?

- How organizations might best to deploy digital technology is becoming a matter of debate and collective bargaining. The massive use of collaborative tools (sometimes without organizations' permission) during the COVID crisis may reinforce criticism directed at digitalization, which is often perceived as rigid and bureaucratic.
- Initiatives are emerging to "restart" the digital on other grounds, mainly to reduce dependence on large (often American or Chinese) private platforms, (e.g., RESET by la Fing in France, Mydata for personal data, etc.). Some corporations see this as a way of regaining strategic control and creating more opportunity for differentiation.
- Some are questioning new digital infrastructures (e.g., 5G, smart city, smart meters) and large private sector initiatives (e.g., Google's AI tools provided to the US Department of Defense). These developments may cause some corporations to innovate in less technologically oriented ways, or even look for low-tech forms of differentiation.

Disruptive Innovation Model

Source : Adapted from Clayton Christensen, *The Innovator's Solution,* HBS Press, 2003



Internal forces of change

These forces are directly related to individual corporate decisions, even if they are also inspired and driven by their environments.

Internal Factor 18

Managerialization

Description

"Managerialization" is the application of managerial methods to most types of activity, inside and outside corporations: the public sector ("new public management"); social enterprise (performance metrics and impact indicators); the generalization of performance indicators; customer-supplier relations within organizations; the transformation of departments into business units, etc.

How does it influence corporations?

- Professionalization of management, objectivization of performance criteria.
- Organizations are both tending towards horizontality — each function or department is now invited to think of itself as a virtual company — and at the same time becoming more rigid, leaning ever more on formal processes, indicators, and reporting.
- Paradoxical individualization: more commitment and initiative, flexibility, the flattening of structures and autonomy of project teams, individual negotiations (salary, hours, career...), employer branding, etc. – and at the same time, more stringent controls and performance indicators, bureaucracy, constant reporting, etc.
- Managerialization inside corporations puts pressure on individuals and collectives, and at the same time masks or normalizes power struggles, or the ethical or political stakes that underpin performance criteria. Managerialization is criticized in the public sector for this very reason, and sometimes also in the private sector.
- There is an increasingly widespread feeling that a "dictatorship of numbers," and imposed processes far removed from the realities on the ground, are contributing to a sense of meaninglessness at work.

Startupization

Description

Many managers tend to believe — with or without evidence — that innovation emerges more easily in small, dedicated organizations than in large organizations trapped in their economic model and culture. This conception leads firms to believe that startups are the sole sources of innovation and market transformation, and to look for ways to emulate them.

How does it influence corporations?

- Finance and sometimes public innovation funds are sometimes more easily allocated to newcomer innovations rather than those of existing firms. As most large corporations have withstood the Covid crisis better than smaller ones, they may however become more attractive to employees and investors.
- Startups focused exclusively on a single innovation, whose vocation from the outset is to sell itself rather than to build sustainable growth.
- Large organizations are developing programs to work with startups (open innovation, incubators, funds, etc.) and intrapreneurship programs to gain agility and innovation capacity, and keeping their most entrepreneurial employees. This phenomenon may partly compensate for the negative effects of managerialization (see above).

Horizontalization, participative management

Description

There is a movement in some corporations, usually initiated from the top down, towards flattening existing organizations by leveling hierarchical structures, promoting project and field team autonomy, and facilitating employee participation in strategic decisions (aka the “liberated” company, holocracy, etc.).

The health crisis is a potential driver of this phenomenon — during the first weeks, many employees have spontaneously organized themselves to ensure business continuity in the absence of managerial instructions, or even in contradiction to them.

How does it influence corporations?

- Potentially impacts employees’ sense of meaning and job satisfaction, the robustness of work collectives, day-to-day innovation processes, and innovation quality. Conversely, there are risks related to never ending discussion, to the empowerment of teams that may begin to act independently from the rest of the company... There are very few radical experiences of the liberated company, and they often depend, paradoxically, on a charismatic manager's or champion’s support.
- Ongoing interrogation of verticality in organizations and management.
- A revaluation of human collectives within the “extended enterprise.”

Unbundling

Description

Traditionally, a company will group very diverse functions (finance, production, sales, etc.) together for two reasons: to create a project community, and to reduce the transaction costs associated with information exchange. Digital technology considerably reduces these costs, even when the entities exchanging information are not from the same organization. That practice is at the origin of a powerful contemporary movement towards "unbundling" internal functions: outsourcing entire departments, decoupling work from the workplace, contractualizing relations between company entities (sometimes with the explicit intention of putting them in competition with external counterparts), etc.

How does it influence corporations?

- A rise in of companies (or other types of organizations) focused on one single corporate function, enabling their corporate clients to outsource it altogether: outsourcing and offshoring agents (accounting, administration, HR, customer service, production, logistics, etc.), shared workspaces (coworking), freelancers' cooperatives, freelancing and crowdsourcing platforms, open innovation systems...
- The dynamic, continuous reconstruction of value chains — or their trivialization, given that every actor is using the same specialized service providers.
- "Flash" organizations: ephemeral, transversal teams of internal and external collaborators, or several companies (suppliers, customers), over a short period.
- Extended enterprises, ecosystems: the extended enterprise model — a group of corporations that combine forces to complete joint projects of varying lengths — is giving way to the ecosystem, which brings together companies that are competitors and complimentary in constantly reconfigured networks of relationships focused on customer needs and/or innovation. The notion of a corporation, as a human community and project community, may eventually become devoid of meaning, nothing more than a core unit responsible for strategy and management of contractual relationships, with everything else residing externally.
- A the extreme end of the spectrum, the (very gradual) emergence of distributed autonomous organizations (DAOs) using blockchain technology, entirely organized through "smart contracts" executed and verified automatically, without intermediaries: "*With the power of modern information technology, we can encode the mission statement into code; that is, create an inviolable contract that generates revenue, pays people to perform some function, and finds hardware for itself to run on, all without any need for top-down human direction.*" The company becomes nothing more than a group of shareholders, statutes, and a computer program that expresses them.

Financialization

Description

The “Friedman doctrine” (1970) holds that corporations’ sole responsibility is to maximize profit and value for its shareholders. His theory, combined with increasing digitization, the advent of more and more sophisticated financial markets and products, and the rise of pension funds has resulted in a kind of global takeover of large corporations by financial operators. 40% of French stock capitalization is owned by non-residents; between 2009 and 2017, Cac40 corporations redistributed 67% of their profits to shareholders, compared to 5% to employees and 28% to investments.

Source : Oxfam-Basic

The cumulative capitalization of listed corporations has exploded, rising in the United States from $3bn in 1976 to $25.3bn in 2016, a growth 3 times higher than that of its GDP. On the other hand, financialization has been accompanied by a sharp reduction in the total number of corporations listed on the stock exchange (-50% in the United States between 1997 and 2017), which benefits private and institutional investors (pension funds, sovereign wealth funds, hedge funds, other corporations, etc.).

How does it influence corporations?

- Focusing on the short term and reducing costs, reducing investment capacity: quitting the stock market may (not always) correspond with a desire to regain investment capacity.
- In some cases, corporate “carve-out” strategies with no other goal than to maximize financial gain.
- The autonomy of finance, bubbles and financial crises not necessarily linked to the fundamentals of economics.
- Potential tension between management and shareholders.
- Pressure on the distribution of capital and labor, a profusion of inequalities.
- Substantive challenges to Friedman’s shareholder theory, including from the heart of global capitalism (e.g., World Economic Forum); possibly, even, new accounting systems that take financial, human, and natural capital into account simultaneously.
- One way to counterbalance some of the negative effects may be to develop employee shareholding. According to the French Federation of Employee Shareholder Associations, nearly all listed French corporations have more than 3% of their capital held by employees or former employees. The proportion of employee shareholders exceeds 50% in nearly three-quarters of these corporations. However, this movement is very uneven from one country to another.

> *"[The Friedman Doctrine] has serious deficiencies and is no longer tenable as a framework for business in the 21st century. It has been the source of growing disaffection with business, its environmental, social and political problems, and the erosion of trust in it.*
>
> *Those problems will intensify in the future as technological advances risk exacerbating social detriments as well as benefits of corporations, and public policy responses lag increasingly far behind innovations."*

British Academy " Reforming Business for the XXIst Century ", 2018

Corporate “re-socialization”

Description

The redistribution of work, and the room to maneuver granted to (or claimed by) employees, has rendered existing norms of social dialogue obsolete (the end of time and place unity, reformation of subordinated bonds).

New demands are being voiced, especially for greater recognition, autonomy, meaning, work-life balance, protection against economic contingencies, and better healthcare, housing conditions, and mobility. The priority given to employment — the “Fordist compromise” — is giving way to a dialogue on the content of work and its conditions.

Within extended enterprises, such demands may be made by new stakeholders. “External” employees no longer feel so external; new counterparts are emerging (cooperatives of self-employed workers, subcontractors, territorial institutions, judges, etc.), as are new forms of dialogue and social conflict (informal “coordinations”, conflicts via social networks, etc.).

Resocialization is becoming a strategic corporate priority to ensure business continuity, but corporations do not yet have a playbook to help them enact it.

How does it influence corporations?

- Differences in status between corporations’ employees/external contributors do not necessarily prevent them from benefiting either totally or partially from collective agreements and legal protections.
- Management struggles to identify the grounds for compromise, and no longer has absolute control over how bargaining takes place within the organization.
- Companies find it challenging to find forms of dialogue and stable interlocutors to work out lasting agreements. The HR and managerial functions generally do not have the skills required to operate within these new professional and geographical dialogue paradigms. New risks are emerging: image damage, blockages, boycotts, lawsuits...
- At the more individual level, more difficulty retaining talent and skills.

Extended corporate responsibility, “purpose”

Description

For several years, the law and public opinion have been placing greater and greater emphasis on corporate responsibility for the social and ecological impacts of their activities, even if they do not appear in their financial statements. “Extended producer responsibility” means that corporations have responsibilities towards their stakeholders but also towards society at large and the Planet. Incurring this responsibility might mean reparations (polluter pays principle) and criminal sanctions.

More recently, a growing number (but still a tiny minority) of corporations are flipping the notion on its head by making positive impact central to their mission (or “purpose”) and economic model: social entrepreneurship, benefit corporations, etc.

How does it influence corporations?

- The rise of ethics inside corporations: initially focused on business practices (corruption, etc.), ethical approaches now include many other areas: diversity, child/forced labor, gender equality, use of data and AI, etc. The law sometimes forces them to do so, usually within a scope that also covers their suppliers and subcontractors.
- Extended responsibility goes beyond corporate social and environmental responsibility (CSR), which is generally voluntary and has failed to change business practices significantly.

  It has three consequences:

  1. Compliance with an increasing number of strict regulations (such as France’s “Anti-waste law,” passed in 2020), but also with national and international “soft laws” that emanate from specific initiatives, standards, labels, benchmarks, etc. The scope of compliance is continually expanding (traceability, risk management, environmental damage, etc.).
  2. Stakeholder integration into governance upstream and downstream of activity — but generally not into the board of directors.
  3. Consideration of the social and environmental impact created by day-to-day operations, be it measurement to minimize negative impacts, or directing all or part of corporate activity towards creating positive impact.
- The act of taking impact into account, or explicitly producing positive impacts, has the potential to profoundly transform corporate activities: performance benchmarks and measuring tools, accounting, governance, economic model, choice of suppliers, etc.
- The more the number of impact-driven companies grows, the greater the pressure on others.

A closer look: purpose-based corporations

Benefit corporations (U.S. expression), or purpose-based companies, are for-profit enterprises whose statutory objectives include the production of beneficial social and/or environmental impacts on society. This status may or may not be recognized by Law, and usually does not confer any particular benefits; however, it allows corporations to access certain investment funds, attract talent, differentiate themselves with novel stakeholders, etc. In countries where corporate law recognizes wide-ranging rights for shareholders, it also protects the company from legal action by shareholders solely searching for maximum return on their investment.

In France, the PACTE law established the "Mission-based company" (*entreprise à mission*) whose charter must include a mission statement that expresses its social, societal, environmental objectives, and so on.

As the first mission-based company in France, insurer Maif has made commitments whose implementation will be monitored by a stakeholder committee that includes employee representatives, policyholder representatives, representatives of NGOs, and elected officials.

The law also allows the company to go further by making more far-reaching changes to its governance, as well as by using integrated reporting combining financial data and non-financial data on the company's impact on natural capital and human capital.

Evolution of corporate physical presence: offices and production sites

Description

Industrial production in Europe (excluding Germany) has been declining inexorably for decades: for France, from 18% of GDP in 1980 to 9% today, from 4 million employees in 2000 to just over 3 million today. This deindustrialization is due in part to corporations having relocated production sites, as illustrated by the healthy state of French balance of payments despite the trade deficit.

Offices (head offices, service corporations...) are more challenging to relocate, although many service operations have successfully done so. On the other hand, there is willingness to reduce and transform office space (open floor plans, flex offices, hotdesking, etc.), that may (albeit rarely) extend to employees interested in flexible forms of work and coworking. However, this kind of evolution is almost entirely concentrated in cities (capitals and semiurban hubs), with a very high concentration in "global" (i.e., affluent and well-connected) metropolitan areas. The presence of corporations in rural areas is marginal. The health crisis is accelerating this trend, likely without changing its nature.

How does it influence corporations?

- Companies are rethinking workspaces to reduce costs and increase their contribution to value creation (employee satisfaction, efficient information exchange, project platforms, etc.).
- Options (sometimes pressure) to work remotely or nomadically, less attached to offices which in turn become less personal; yet workplace quality of life still a factor contributing to employers' attractiveness.
- Many shared workspace options: coworking, short term rentals, even sharing of existing company office space (according to the startup Base 10, 42% of professional real estate in France is under exploited).
- The health crisis is likely to contribute to the development of hybrid forms of work (remote, nomadic, and in-company), leading to a reconfiguration of workplaces.

Evolution of corporate physical presence: customer relations and distribution

Description

While some corporations are reducing the number of their points of presence and contact in regional areas, others are building more — and sometimes rethinking their configurations.

While historically very present on the ground, French banks have been gradually closing branches (from 37,000 in 2016 to 32,500 in 2020, source: Sia Partners), albeit not as fast as other European countries. Other networks are drastically reducing their physical presence — insurance providers, travel agents, some distributors, etc. — at the same time that franchised brands (clothing in particular) are rapidly increasing theirs, often to the detriment of local and traditional operations. Most of these points of presence are concentrated in city centers and suburban shopping areas.

Source : Sia Partners

How does it influence corporations?

- Pooling: using existing points of presence such as tobacconists, grocery stores, newsagents, etc. as relay points, bank branches, etc.; creating multi-service spaces (public service outlets, healthcare centers, etc.). Post offices in most developed countries are part of this trend.
- The functions of existing points of presence are changing: increasing specialization or its opposite, a multiplicity of functions; remote expert intervention; improved reception areas and opening hours adapted to the needs of the public, etc.
- Phygitalization, or combining physical and digital presences: showrooms plus online ordering, multi-channel customer support (e.g., Nespresso, made.com, Ikea).

Transformations of employment and work

Description

The status of workers and the content of work are both undergoing a series of significant transformations as organizations evolve.

Many varieties of permanent salaried employment remain dominant in Europe, but job flexibility is emerging at pace: in France, the vast majority of new jobs are not permanent. Self-employment is also on the rise since the 2000s. These new freelancers mainly work in the service sector, earn much less money than the old ones did, and sometimes use this status to combine several professional activities. In several countries, all kinds of new contracts promote flexibility, often to the detriment of job security (zero-hour contracts, etc.).

The content of jobs is also changing. Entire professions are changing rapidly, making regular training essential. Transversal, soft skills (relational, collaborative, project management, etc.) are becoming increasingly important. Digital is growing. The gap is widening between high skilled jobs (that are increasingly project-based and entrepreneurial) and low skilled jobs, to the detriment of mid-level skilled work, which are shrinking in OECD countries.

Voir la source : OECD Employment Outlook 2020

How does it influence corporations?

- Multiple types of employee status: salaried, subcontractor, manager, project based, micro-tasking, offshoring, etc., all of which presents serious consequences for working collectives. Emergence in tandem of new forms of struggle (e.g., freelancer unions, platform workers, worldwide social conflicts via social networks, legal action for requalification as salaried employee, etc.).
- Simultaneous change in recruitment criteria and employee expectations, creating a new tension: should professional development take place inside or outside the company?
- Rapid changes to skill requirements, which can lead to difficulties adjusting, and to labor shortages in some professions.
- The recurrence and combination of complex crises could make large corporations and salaried employment attractive once more.

Four wildcards that just might change everything

The majority of the transformational forces that will affect corporations in 2030 have either already emerged or are in the gestation period. However, four combinations of forces could lead to significant disruptions. These should be considered alternative as scenarios, not as predictions.

Ecological disruption

The effects of multiple ecological crises combine to change the conditions of economic activity: disasters are becoming more common and impossible to insure, natural ecosystems are changing metabolism, resources are becoming significantly more expensive and scarcer, the global economy and geopolitics are destabilized... while society's awareness is increasingly being translated into politics, strategy, and in corporations.

→ *Forced and at least partial de-globalization and relocation.*

→ *Breakdown or, at the bare minimum, destabilization of the forces of change based on the fluidity and continuity of technological networks and economic circuits (cloud-based digital, platforms, globally extended enterprises...). People will have to get used to operating in "degraded mode."*

→ *Reemergence of local activities, grassroots solidarity, partial decommodification of specific activities (mutual aid, etc.).*

→ *Generalization of "extended responsibility," internalization of externalities (ecological and social costs are taken into account in prices), integrated accounting considers impacts on financial, natural, and human capital.*

→ *Challenge to growth and the mechanisms designed to accelerate it (creation of needs, programmed obsolescence, race for performance, etc.), orientation of activity towards "needs."*

Technological disruption

The combination of technologies such as AI, the Internet of Things, blockchain, decentralized on-demand manufacturing (including 3D printing), and so on, finally ends up profoundly reshaping the entire economy: production processes, value chains, industry boundaries. Automation is reaching new thresholds, leading to a net loss of service, relational, design, and management jobs. A small number of corporations capable of mobilizing these technologies on a vast scale dominate the world, while others are becoming dependent on their ecosystems. Whatever the final outcome of this rupture, 2030 will be in the midst of a significant adaptation crisis affecting all activities, all workers (or nearly all), social systems...

→ *The increasing dependence of most corporations on increasingly capitalistic and powerful platforms who control data, ecosystems, and customer access.*

→ *Cyclical and structural unemployment, development of hyperlocal parallel economies for the many losers in the system.*

→ *Race to adapt, rather than innovate.*

→ *National and European catch-up programs; creation of shared data, computation, and sensor infrastructures.*

→ *The collapse of existing social systems, with the likelihood that there will be nothing to replace them.*

Loss of meaning

Societal demands regarding not only ecological issues, but also inequality, quality of life, and so on are leading a growing number of corporations to question the role they play in society, their negative or positive impact, and their contribution to the public good (expressed, for example, through fulfillment of the UN's Sustainable Development Goals).

Not all corporations are following this path, but their increasing ranks can find support in targeted regulations; purchasing criteria used by public actors and other corporations; campaigns, labelling, certification, etc.; specific investors; and the quest, by a growing number of young professionals, for working environments and employers that reflect their values.

→ *Coexistence of the "classic" corporate world with a world shaped by shifting new demands, including selection and performance criteria that partners have to adapt to.*

→ *Professionalization of the collaborative and activist domains of society, not without some conflict.*

→ *Pan-corporate adaptation to a new regulatory and competitive framework.*

Geostrategic disruption

The multipolar world that emerged following the collapse of the Soviet bloc did not establish governance capable of preventing conflict. The UN and other leading global regulatory bodies have been weakened, and even deserted by influential nations. Regional conflicts have become entrenched in the Middle East, the Mediterranean basin, Africa, and Asia. Areas of armed conflict have expanded, intensified by the growing demands of nations wishing to maintain or extend their territory of influence. These are aimed in particular at:

- Controlling new traffic routes opened up by climate change,
- Ensuring sustainable access to sources of raw materials and agricultural products,
- Ensuring permanent access to freshwater reserves
- Stemming migration flows, and so on.

The China Sea, the Arctic Ocean, and the Mediterranean are loci of conflicts of influence that see Russia, China, North Korea, the United States, and Japan opposing each other; historical allies (e.g., Canada and United States) conflict with one another. NATO no longer seems to be able to guarantee the security of its members. Europe, insufficiently united and without an integrated army, is becoming a potential prey.

→ *In more and more areas, the market is no longer accessible; the security of establishments, factories, employees, and goods is no longer guaranteed.*

→ *The rules of international trade are weakened. State interventionism in the economy is increasing.*

→ *Poor visibility on the evolution of supply and demand in specific market zones leads many corporations to reduce their investments, repatriate their skills, and modify their logistics circuits and purchasing policies.*

→ *The security of tangible and intangible assets is a higher priority than actions to protect the environment or sustainable uses. Some corporations are getting ready for a war economy.*

Eight tensions shaping the future of corporations

We define “tension” as enduring opposition between two poles, generally not intended to be resolved, and from which several corporate bifurcations or structuring choices emerge. Tension delimits a space of choice, or even differentiation.

1

Priority to profit and growth

Priority to "purpose", focus on ecological and social challenges

→ The company can no longer ignore the ecological and social impact of its activities and can even organize itself in such a way as to produce positive impacts. But this will can come into tension with maximizing growth, profit, and shareholder value. This tension can also express the fact that non-profit organizations or activities can operate in the same space and base their activities on the same issues as traditional companies: should all be considered as possible "enterprises of the future?"

2

Integrated organizations, proprietary production tools, offices and networks

Networked organizations, fabless, fragmented and non-exclusive workplaces

→ The extended or fragmented corporation is a highly-valued model, in constant development supported by digital tools. It can also be fragile in times of great instability, depending on many external factors. The integrated company has potentially better control over its choices, but can prove to be less agile and be prevented from evolving by the size of past investments. Platformization increases the tension.

3

Pyramid organizations, vertical management

Horizontal organizations, participative management

→ Organizations are becoming flatter, operations are increasingly being carried out by project teams in response to demands for autonomy and flexibility. But many large, efficient companies remain hierarchical. In large enterprises and/or networks, hybrid organizations appear and new forms of management are trialed.

4

Globalization, delocalization, priority to large urban hubs

Relocalization, reduction in scale, diversification, and regional autonomy

→ The trend towards the globalization of value chains is established and has led to significant gains in productivity and responsiveness. However, it is challenged for its ecological, social, and territorial effects. The prospect of a more uncertain world and ecological challenges invites us to reconsider the prospect of relocating productive functions

5

Technology as tool

Technology as organizing principle

→ All companies have invested heavily in technology, particularly digital technology. Depending on whether or not it is placed at the heart of the value production system, however, the choices companies make can be very different.

6

Human as capital

Human as resource

→ On one end of the spectrum, an organization that emphasizes the evolution, commitment and loyalty of its staff and the human collective; on the other, an organization that considers people to be a factor in production among other operations and emphasizes the formalization of tasks and substitutability.

7

→ At the enterprise level,there is a tension between the formalization of processes, organizations and work; and agility, flexibility, trust, autonomy, self-organization,that may also value informal and even unproductive time.

On a macroeconomic scale, on the one hand there is a tendency to try to bring the informal sector (which, according to some research, can represent up to 70% of the labor force) into the “norm” and provide guarantees to those concerned; on the other hand, an approach aimed at overcoming this vision and imagining new models.

8

→ On the part of organizations as well as individuals, tension between personalization, individualization (of careers, of payment schemes, etc.) a call for or aspiration to autonomy, initiative, commitment, self-realization... and on the other hand, the pressure of organizational logic, the need to belong, the aspiration to work collectively, the need to redefine collectives with which to discuss or negotiate...

“Individualization” does not necessarily mean “individualism.”

Appendix 1:

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Appendix 2:

Three sets of scenarios on the future of corporations (and of work)

Most existing research deals with the future of *work*, rather than that of corporations. Those we have selected focus on organizations, rather than on the individual or social dimension of work.

PWC (2018) Workforce of the Future: The Competing Forces Shaping the Future

Source: > report

PWC examines how the working world might be shaped over the next decade. Their report is based on research begun in 2007 with the James Martin Institute for Science and Civilization at the Said Business School in Oxford, and on a survey of 10,000 people in China, India, Germany, the United Kingdom, and the United States.

The report describes four possible worlds of work in 2030:

- Red is the color of a fragmented, dynamic world, made up of specialists, profit-making niche creators, and powerful international groups. Organizations and individuals race to give consumers what they want. Innovation outpaces regulation. Digital platforms give outsized reach and influence to those with a winning idea. The relationship between workers and their employers is driven by technology and the demands of extreme flexibility.
- Blue is the world of capitalism and consumerism. Corporate is king. Big company capitalism rules as organizations continue to grow bigger and individual preferences trump beliefs about social responsibility. It is a world where a corporate career equals success and social status. Technology and performance are pushed to extremes. Most people would be willing to consider treatments to improve their intellectual and physical performance if it would enhance their chances of getting a blue world job. Data analytics is the key to talent selection and assessment.
- Green is the color of a world where social and environmental responsibility is predominant. Social responsibility and trust dominate the corporate agenda with concerns about demographic changes, climate and sustainability becoming key drivers of business. In this world, managers' social consciousness ensures employees' trust and loyalty to an organization that integrates their concerns into its operations. Remuneration is global and includes citizen contributions.
- Yellow is the world of the collective, where social and community business prosper and "humans come first". Crowdfunded capital flows towards ethical and blameless brands. There is a search for meaning and relevance with a social heart. Artisans, makers and 'new Worker Guilds' thrive. Humanness is highly valued. The leaders of the yellow world are in search of meaning and relevance in their actions. Technology supports open and collaborative communities.

France Strategie (2017): Four types of labor organizations by 2030

The way in which corporations organize work is a key predictor of how they will operate in the future. They have helped shape today's world, and their evolution will bring about profound changes for workers, for the economy, and for society at large.

How will these organizations evolve between now and 2030? Will these changes lead to improvements in the quality of work, managerial practices, and mobility?

This France Stratégie study [in French] distinguishes 5 “determinants” of tomorrow's labor organization: the digital world, the evolution of society (higher levels of training and greater individual empowerment), the economy (competition, instability, rise in inequality and a worldwide middle class), institutions (in crisis and transition) and demographics (aging).

Source : France Stratégie study

From this, the study identifies four types of work organization, inviting us to adhere as closely as possible to the first one:

1. The learning organization is oriented towards the worker and is based on a proactive approach, from which arise participatory organizational and managerial practices (decentralization of decisions and autonomy, teamwork). Its keywords are autonomy, learning, and work enrichment.
2. The virtual collaborative platform is based on a computer system that provides workers with resources and tools (customized software, secure databases, augmented reality workspaces) to facilitate collaborative and remote working. It can be used for project management, knowledge management (methods, market information, etc.), content co-production, or to improve production and design processes in research and development. This new form of working differs from the classic learning organization in that the interactions are based on a wider community.
3. The ultra-flexible super-interim. Based on high-speed communication networks, this model would be generalized in sectors experiencing short-term peaks in demand. It may spell the demise of the “single employer/single work contract” model, which is already less dominant. The generalization of matchmaking platforms could call into question the functioning of work as we know it today. On the same day, a person might, for example, do two hours of gardening in the morning for one employer, then two hours of service in a restaurant for another, then an hour of cab driving, and so on.
4. New age Taylorism. A new type of collaborative platform has emerged that targets people with no particular skills to perform simple microtasks remotely, with limited added value. It is no longer a platform of super-temporary type services, but a platform of “production.” These new workers are nothing more than mere contributors, offering a few minutes or a few hours of work to complete tasks for the benefit of corporations that outsource them through “basic” platforms. They can make these their primary source of income or use them as complementary sources of income.

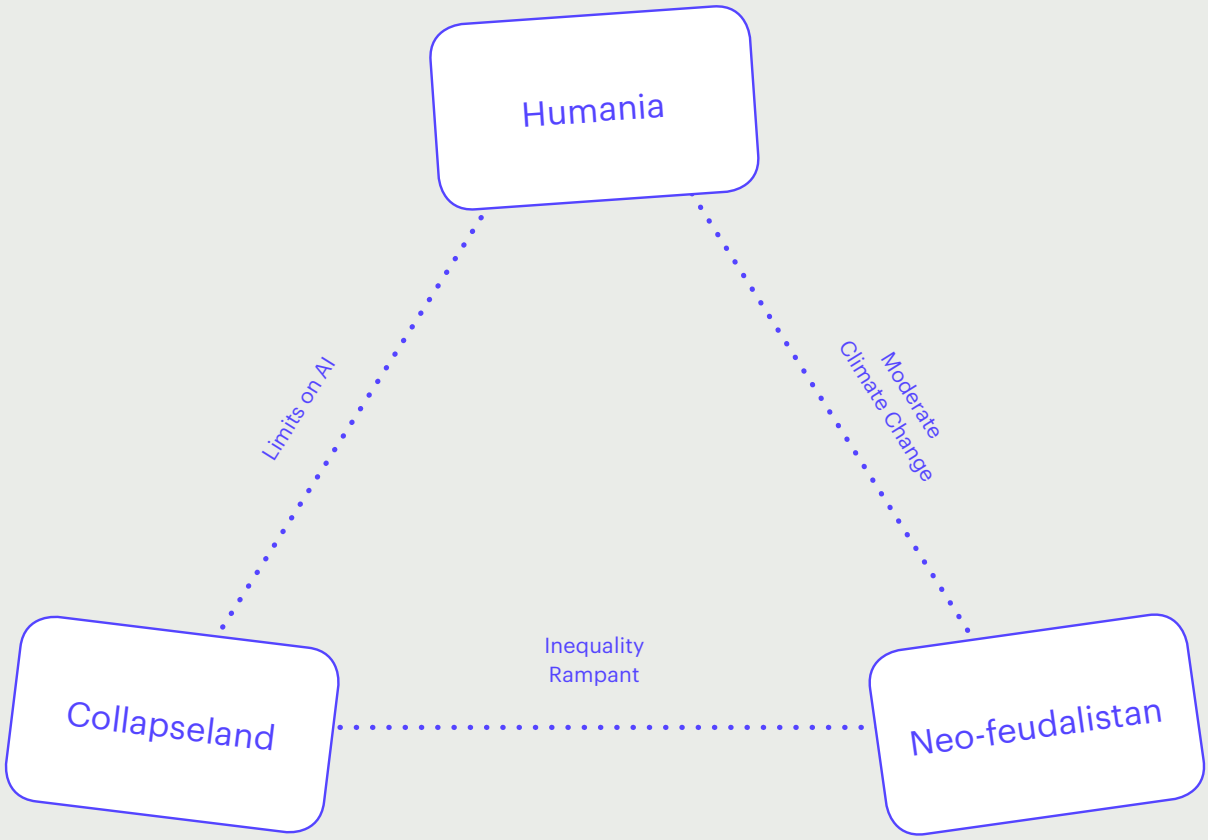
Stowe Boyd (2015): What Will a Corporation Look Like in 2050?

In *Wired*, American futurist Stowe Boyd envisages three scenarios for the corporation of the future based on the interaction between three forces: the management of inequality (controlled, or unchecked); climate change (ability or inability to avoid systemic collapse); the impact of AI and robots on work and employment (dominant, or voluntarily limited).

Source : three scenarios for the corporation of the future

The 3 resulting scenarios are:

1. Humania (limited AI, mitigated climate change): egalitarian organizations bringing together autonomous individuals on a project basis; agile, fast, and “loose” in the sense that social and authority ties are weaker, heterarchical (networks are multiple and horizontal), and porous (one can easily and continuously enter and leave the corporation).
2. Neo-feudalistan (mitigated climate change, maximum inequality): organizations have championed the struggle against climate change and have somehow overcome it. Hyper-specialized, AI-led corporations function in largely automated ways. The human masses have nothing more to do and live on universal basic income. The satisfaction of basic needs is made possible by the low cost of robotized production.
3. Collapseland (climatic collapse, maximum inequality, limited AI): corporations are, above all, dedicated to satisfying basic needs in new ways (desalination of water, accompanying climatic migrations...). They hardly innovate and are similar to today's corporations, except that employees work more and harder for less money. Those who are not lucky enough to have a job have nothing.



Plurality University Network } u+ {
Réseau Université de la Pluralité
} 5 rue de la Vega – 75012 Paris
} info@plurality-university.org
} www.plurality-university.org

Philippe Hagmann
philippe.hagmann@gmail.com

Ingrid Kandelman
ikandelman.ik@gmail.com