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# Practicality, support or premeditated calculation in the digital age: the case of Ecuador

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## Abstract

This paper aims to analyze the attitudes among young Ecuadorians with regard to processes of technological practicality. It seeks to identify the turning points in the decision-making process regarding the transfer of data and to examine the associated conceptual debate surrounding the role of related participants, such as governments, supranational organizations, transnational companies and end-users. Interviews were conducted with 299 university students in the city of Ambato, Ecuador, using quantitative techniques. The participants stated that they were aware of practicality but not of its effects and limitations, indicating that not everyone would be willing to give up part of their privacy in return for benefits in frequently used applications such as Facebook, WhatsApp or Netflix. Generally, participants felt dominated by technology, which often masks the processes of dependency associated with the costs and custody of data surrendered in exchange for a benefit. Issues of fairness and security in the treatment of data and the uneven coverage of services highlight a need for greater regulation of technological platforms.

**Key words:** practicality; technology; dependence; lack of free choice; domination; capitalism

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# Practicidad, ayuda o cálculo premeditado en la era digital: el caso de Ecuador

## Resumen

El presente trabajo analiza los patrones de conocimiento, afectación, predisposición y uso de los procesos de practicidad tecnológica en los jóvenes ecuatorianos a través de doscientas noventa y nueve entrevistas realizadas a estudiantes mediante ponderación cuali-cuantitativa en la ciudad de Ambato (Ecuador). Los participantes señalaron que conocían la practicidad, aunque no sus efectos y limitaciones, afirmando que no todos estarían dispuestos a renunciar a parte de su intimidad/privacidad con tal de recibir algún beneficio en las aplicaciones que usan como Facebook, WhatsApp, Netflix, etc. Además, en términos generales se ven dominados por la tecnología, enmascarando en muchos casos procesos de dependencia asociados al gasto y custodia de datos cedidos a cambio de alguna contraprestación, abriéndose de igual modo un debate conceptual con sus elementos irradiadores como gobiernos, organismos supranacionales, empresas transnacionales y usuarios.

**Palabras clave:** practicidad; tecnología; dependencia; falta de libre elección; dominación; capitalismo

## 1. Introduction

Practicality is a consumer phenomenon with one of the highest levels of interconnectivity, drive and control to be found worldwide. At the same time, it is one of the least studied and understood. As a guiding force of human decisions, it might not offer the illicit emotion of Freud's unconscious sexual desires, or the mathematical elegance of economic incentive (Wu, 2016), but it does hold the privileged position of mediating and directing our wishes. The processes of technological practicality establish the means of carrying out tasks with greater expediency, efficiency and ease compared to those performed by

traditional methods, and can also be far cheaper (e.g. downloading pirated software or music). According to Morozov (2015: 12), "In reality, technology is no longer concerned with hardware and software. What it is really about is the extraction and use of enormous quantities of data in order to make the world a better place." However, it brings problems of privacy: Facebook admits that Cambridge Analytica fraudulently obtained the data of 87 million users due to errors and abuses of trust (Lapowsky, 2018).

The processes of practicality can offer added value, such as improving the quality of a product or saving time for the client by speeding up access and

use. These benefits make life easier for society<sup>1</sup>, as well as for organizations and individuals who, deliberately or unintentionally, interact with these processes. They even affect those who are simply caught up in the paradigm shift resulting from the phenomenon of paying for something that saves time and that may then be used as each user sees fit. Tasks that are carried out more easily are considered beneficial and, therefore, better than the alternatives. This overturns many ancestral traditions that were formerly deemed worthwhile by society. In fact, technological solutions are able to persuade users to pay for goods and services that could be obtained in a similar way and for free. The advance of technology has facilitated the lives of individuals at a “reasonable and affordable price” but, at the same time, has introduced an immeasurable degree of control and even regression in some instances. Indeed, practicality has caused unprecedented changes in human life (Seymour, 2020; Turkle, 2017). According to Madakam, Ramaswamy & Tripathi (2015: 164)

The development of the Internet of Things [IoT] has been primarily driven by needs of large corporations that stand to benefit greatly from the foresight and predictability afforded by the ability to follow all objects through the commodity chains in which they are embedded.

Social life is accelerating (Wajcman,

2015); hyper-consumption is encouraged by transnational corporations (TNCs) and supranational bodies (Luque, 2017), while global legislation adapts itself to commercial requirements (Luque & Casado, 2020). This pseudo-legality is imposed, by act or omission, with an erosion of public authorities' functions, such as consumer protection. The economy is molded to the requirements of TNCs, together with their technological developments<sup>2</sup> (Hernández & Ramiro, 2016). Competitive advantages are created that are beyond the reach and regulatory capacity of traditional businesses. These are based on a new law: that of commerce and its related elements. As Hache states, (2014: 4)

Technological sovereignty refers to the contribution each of us makes to the development of technologies, saving our radical imaginations, recovering our histories and collective memories, resituating ourselves to be able, together, to yearn for the construction, here and now, of our own infrastructures of information, communication and expression.

Technology, according to Bermúdez (2017), “is any tool we create and use to carry out the tasks of our daily lives, and through which we leave a cultural trail; technological development is linked to the historical and structural evolution of society.” Technology has progressed on all continents in the last eighteen years, with Europe (570%)

<sup>1</sup> Sidewalk Labs, a firm specializing in urban innovation, a part of Alphabet (Google's parent company), will create a 'big brother' in a Toronto neighborhood. Dan Doctoroff, the firm's director stated: “We can show the world how to make life in the cities less expensive, more practical and healthy, greener and fairer and, at the same time, more exciting.” Report by J. Porras in Elpaís.com, <https://bit.ly/3BP7Fbu> 24/07/2018.

<sup>2</sup> “China launches a new kind of credit, “social” credit...and it's enough to make you quake” in that, in the same way as credit ratings used widely in all developed countries, the social rating of Chinese citizens could go up or down as a result of their behavior. The maxim is that “holding people's trust is an honor, and losing it is a disgrace,” with all the socio-political subjectivity that such a statement allows, yet with the objectivity that any who fall into disgrace will have a really hard time. Report by Der Blaue Mond in El blog Salmón, <https://bit.ly/3x8gF8b>, 07/05/2018.

and North America (219%) standing out as points of reference for knowledge and development (Luque et al, 2020; Internetworldstats, 2018). In addition, there is a race toward innovation led by China, with 34% of 5G patents, followed by South Korea (24.5%), the USA (13%), Japan (8%) and the EU (17%) (Pohlmann, Blind & Heß, 2020). There is a specific objective in view, and it is the permanent high-capacity and simultaneous hyperconnection of multiple devices through the “Internet of things”. This, in turn, derives from the new standard of a greater volume of data required by users and “things” (including the possibility of establishing the triangulation of data) and the commensurate establishment of a map of behavioral patterns that no technological platform or government is willing to overlook.

In a brief space of time, technology has led to the resolution of uniquely complex problems and the carrying out of sophisticated large-scale interventions in the political and cultural spheres. In addition, it has begun performing the routines of everyday life, all through the unifying force of artificial intelligence (AI). These mechanisms are currently almost beyond being called into question although, according to the study by the consultancy Forrester (2017), 58% of those surveyed stated that their organizations are researching AI<sup>3</sup> while only 12% actually use it in their work.

This highlights the growing interest of businesses and other organizations in this field<sup>4</sup>. It is necessary to remember that the neural networks associated with AI require large quantities of data for training purposes since they are both intensive and slow-moving processes (Sulleyman, 2017).

Meanwhile, humans are able to corrupt AI systems by interfering with these training data, and such malicious alterations can be difficult to detect (Gu, Dolan-Gavitt & Garg, 2017). According to a PricewaterhouseCoopers (PwC) report (2017), AI processes will contribute 15.7 trillion dollars to the global economy by 2030, causing millions of jobs to disappear while creating millions more. As it stands, there are limits to the automation of various processes, such as 1) those concerned with perception and manipulation, especially in enclosed spaces, 2) those related to the use of creative intelligence, requiring the search for original ideas, and 3) those using social intelligence, such as understanding the reactions of others (Frey & Osborne, 2017).

The processes of practicality are connected to many areas of knowledge, such as education (Shirley et al, 2011) and the armaments industry. Indeed, any activity could be included that is capable of being improved while providing a clear economic benefit for whoever performs such improvements (Juárez, Arango

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<sup>3</sup> Artificial intelligence is a branch of computing that has as its objective the creation of smart machines that teach and learn from one another and that, through the use of feedback processes, are able to minimize mistakes.

<sup>4</sup> The University of Cambridge will establish a DeepMind Chair of Machine Learning, thanks to a benefaction from the eponymous world-leading British AI company. University of Cambridge, <https://bit.ly/3zGNxq7>, 24/07/2018.

& de la Cruz, 2019). Information and communication technologies (ICTs) are a part of the development of human life and are present in all of our daily activities. Over time, these have evolved for the benefit of humans in areas such as work, education, entertainment and business (Moya et al. 2016). The evolution of ICTs has allowed the performance of daily activities to become easier and faster in each of these real-world processes. In accordance with the processes of social evolution, good methods of communication for expressing the various needs of each company or user have become essential. Mass media technologies have been created that—based on the platforms of television, radio and the printed and digital press—allow consumers to obtain the information they

need and perform tasks in the quickest and cheapest way possible to the benefit of all types of digital commerce (del Pino & Galán, 2010).

Likewise, the new competitive atmosphere demands continual innovation of companies, in both their production and their management systems, with the aim of improving their efficacy and dividends (Reicheld, 1993). Table 1, Trends, gives a terminological summary of new working methods and technological models based on the interconnection of knowledge areas and continuous feedback. Many of these are disruptive<sup>5</sup> while others are a clear sign of new services' first steps rising from the agglutination of innumerable existing services.

**Table 1**  
**Trends**

TECHNOLOGICAL TRENDS	
<i>Chatbots</i>	Messaging platforms such as Messenger, Whatsapp, Skype, Telegram, Line, etc; " <i>chatbots</i> " begin to replace traditional mobile applications by standardizing their use.
Voice-activated virtual assistants	Assistants such as Alexa, Cortana and Now Assistant, activated by voice, are grounded in the fact that it is often easier to speak than to write.
Self-driving taxis	During 2020 there will be 10 million self-driving automobiles <sup>2</sup> . Other forecasts predict that self-driving cars will make up 15 percent of all vehicles sold in 2030 <sup>3</sup> .
New collaborations between man and machine	A combination of the reasoning of humans with the processing power of computers.
<i>Fact-checking</i>	Sites dedicated to the checking of data and facts, e.g., Snopes, <a href="https://factcheck.org">Fact-Check.org</a> , ABC News, Associated Press and PolitiFact
<i>Blockchain</i>	A data base of the records of secure transactions shared by all of the nodes of a computer network.

<sup>5</sup> Uber drivers sue app over 'constant barrage' pushing California anti-employment initiative. Gig companies have been pushing Proposition 22 to supersede a state law requiring them to make drivers employees. Available at The Washington Post. Elaborated by F. Siddiqui and R. Albergotti <https://wapo.st/2IZOP16> 22/10/2020

## Cont... Table 1

Machine learning	The attempt to automate intellectual processes normally performed by humans.
New functions of applications	Identifying objects in photographs, speech recognition, driving a vehicle or translating an online document into dozens of languages.
Mixed reality	Mass use of augmented reality <sup>1</sup> and virtual reality technologies.

Source: authors' own data from 1) Ovum, Trends to Watch: Big Data (2016), 2) Businessinsider (2016), 3) Mckinsey (2015), 4) in 2016, 15% of the big Banks worldwide began to experiment with blockchain, but 66% have already announced plans to implement it; reported by Fortune (2016), 5) Fombona, Pascual & Madeira (2012).

Trends in technology platforms are a clear economic and social predictor, not only for maximizing production, but for dominating the interrelationships between actors immersed in practicality processes. A new paradigm has been created, such as the society of video surveillance through connectivity and big data processing, which looks to establish an analytical advantage while presenting a starkly bleak outlook (Lovink, 2019). The trends presented in Table 1 show clear day-to-day planning. From household chores to transportation or work tools, these are beneficial aspects as long as control is retained and there is provision for restitution and non-monopolistic alternatives. The public sphere is interrelated with private spheres while certain supranational companies, governments and agencies renounce many of their functions with an attitude of "why invest in a service for which there is already a platform". By way of example, many universities use free servers such as Gmail as their corporate mail for their thousands of workers. But this apparent advantage becomes a dilemma: what control do these thousands of organizations have

over their employees' data? According to Pohlmann, et al, (2020):

"A global 5G network will unify mobile communication in order to connect individuals and devices to everything through the Internet of Things (IoT), with 5G technologies linking vehicles, ships, buildings, meters, machines, healthcare devices and other items with electronics, software, sensors and access to the Cloud. Increasing connectivity will drive new disruptive technologies such as autonomous driving, AI driven robots, augmented reality or many more. The fourth industrial revolution will rely on a stable, real-time communication allowing the constant exchange of massive amounts for data. The next telecommunication generation 5G standard is an important step to meet these new requirements of connectivity for future applications".

This study analyzes the processes of practicality with the aim of discovering the turning points in the decision-making process pertaining to the transfer of data, as experienced by users in Ecuador. As a corollary to this, it examines the need for regulation of platforms by national governments and supranational organizations in order to provide guarantees over the use of data and to ensure a greater coverage of services.

## 2. Theoretical background: a problem discovered

Practicality is the ability to guide certain choices when making decisions such as buying goods or using a service. Hence the need to enlist big data applications to assist in decision making, based on an informed prediction, planning and organization process (Chen, Philip & Zhang, 2014; Wagner, 2014; Elgendy & Elragal, 2014). Practicality processes pivot on passing a point of no return that is, the moment after certain products or services have been used to the extent when a relationship of dependence is established, making them indispensable. A clear example of this is the use of a washing machine, the same is true with online purchasing: the users' day-to-day experience makes them feel friendlier and more accessible, which simultaneously gives control to the companies. Facebook, Airbnb, Uber, Glovo, Whatsapp, Amazon, Google and countless others have not only created dependence in their users, but also acted as predators over the market.

Practicality solves problems while creating an illusion by generating feelings of continuous accessibility "at the click of a mouse" accompanied by the ease

of credit card payment. Is it possible to create a day-to-day experience without any obstacles for the user? The answer appears to be "yes", for those who can afford it, and bearing in mind that this can lead to a *leitmotiv* devoid of any meaning<sup>6</sup>. This false sense of emancipation, in fact, leads to slavishness and creates a duality by establishing, on the one hand, dependence on the products and services offered while, at the same time, encouraging the precariousness<sup>7</sup> of industrial relations. It is clearly not the same to be a user as it is to be a worker for these companies that "facilitate life": a luxury but not for everyone in equal measure.

The processes of practicality affect many of the wishes of individuals and change their behavior. The chances of making the intended and rational choice are thereby enormously reduced.

Faced with this situation, what individual would not be tempted by the ease, accessibility and support of the processes of practicality? These processes cut across sectors and are interrelated. Practicality is frequently placed before the quality of the finished product, and it is spread, promoted and "scientifically" guaranteed by a never-ending list of services and trivialities that

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<sup>6</sup> - 'I'm not a robot': Amazon workers condemn unsafe, grueling conditions at warehouse. Employees under pressure to work faster call on retail giant to improve conditions – and take their complaints seriously. Available at The Guardian <https://bit.ly/34nu9kS>. Elaborated by M. Sainato 5/2/2020  
 - How Amazon keeps a close eye on employee activism to head off unions. Available at CNBC <https://cnb.cx/2KyCl5i>. Elaborated by A. Palmer 24/10/2020  
 - Google Antitrust Woes Mount With Third Suit Targeting Dominance. Available at Bloomberg <https://bloom.bg/2KebGjS>. Elaborated by B. Brody and D. McLaughlin 17/12/2020

<sup>7</sup> - 'I'm not a robot': Amazon workers condemn unsafe, grueling conditions at warehouse. Employees under pressure to work faster call on retail giant to improve conditions – and take their complaints seriously. Available at The Guardian <https://bit.ly/34nu9kS>. Elaborated by M. Sainato 5/2/2020  
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continually challenge the wishes and demands of the public across the globe.

According to Morozov (2017):

Alphabet's long-term strategy has been two-fold. On the one hand, it wanted to learn as much as possible about each user; to do this, it was prepared to offer heavily subsidized services that, while not producing a profit, would generate large quantities of data. These data allow Alphabet to predict our information requirements without needing us to carry out an online search. Knowing our location, our key concepts, a planned itinerary in our email or a meeting noted on a calendar would be sufficient.

Technology companies use the processes of innovation to attack imposed regulations. They are able to speed up or slow down technological processes at their whim, in favor<sup>8</sup> of other, unregulated, technologies or user behaviors, thereby creating a state of dependency for their products or services<sup>9</sup>. According to the European Commission (2020) "Some large online platforms act as "gatekeepers" in digital markets. The Digital Markets Act aims to ensure that these platforms behave in a fair way online. Together with the Digital Services Act, the Digital Markets Act is one of the centerpieces of the European digital strategy". This is all carefully and cynically planned by corporations, as

Amnesty International point out (2017):

It takes just five clicks on [ExactData.com](http://ExactData.com) and we are staring at a quote to download data on 1,845,071 people listed as Muslim in the United States. For the price of \$138,380, the website offers a database file containing more than 1.8 million individual names, addresses, cities, states and ZIP codes. Just 7.5 cents per person.

According to Cohen (2015), Google has a history of winning legal battles that lead to digital regulation. This new technological tyranny is based on an overarching economic model camouflaged as providing our most basic needs. This has been widely characterized by various authors as "empire" (Hardt & Negri, 2001), "latter-day capitalism" (Jameson, 1992), "post-capitalism" (Mason, 2016), "capitalist realism" (Fisher, 2009), "semicapitalism" (Berardi, 2015), "cognitive capitalism" (Boutang, 2012; Sierra & Maniglio, 2016), or "systemic corruption" (Luque, 2018).

According to Taplin (2017), corporations such as Google, Facebook and Amazon boast nearly absolute power, and act almost as monopolies. In fact, Google has 88% of the online browser market, Facebook (and its subsidiaries Instagram, WhatsApp and Messenger) dominates 77% of mobile

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<sup>8</sup> Google received the largest antitrust fine ever handed out by the European Union (EU): \$2.7 billion USD. The corporation had promoted, through its search engine, an online purchasing service to the detriment of its competitors. Whenever a user accessed Google to browse virtual stores, the website systematically gave a favored position to its own store, which infringes on European competition law. Reported by [http://europa.eu/rapid/press-release\\_IP-17-1784\\_en.htm](http://europa.eu/rapid/press-release_IP-17-1784_en.htm) , 27/06/2017.

<sup>9</sup> "Free Netflix in exchange for your personal data: What are you prepared to divulge? You have spent your whole life sharing data with Facebook and Google without knowing it, iRule is an app that wants you to do this while getting something in return." Reported by M. Mcloughlina for ElConfidencial, <https://bit.ly/2TJkH9u> 28/07/2017.

social traffic and Amazon controls 74% of the e situation was not always like this. Between 1980 and 2000 various applications came to the fore, such as Napster (1999), Audiogalaxi or Winamp (1997). After these, other developments emerged such as Emule and BitTorrent; currently, there is Miro and, even in the research sector, all types of academic documents are available through the conglomerate Sci-Hub. Nowadays, on-demand platforms such as Apple iTunes Store, -book market. The Spotify, Netflix, Amazon, Microsoft Zune and Qriocity are the dominant trend.

Certainly, a technological architecture of leisure and entertainment has evolved, the like of which has never been seen before. This is in spite of the fact that any of these electronic leisure products (as well as professional software) is capable of being pirated with no loss of speed or quality. Between 2015 and 2017, the index of unlicensed software fell by two percentage points (BSA, 2018). This was indicative of a mind-set that was due to various factors, such as the acceptance of the value added by the products, their accessibility, and a "reasonable" price. Access to entertainment has been democratized although, as Molina (2019) points out, the technology and the associated culture are used just for as long as you are a consumer: the moment you cease to be a consumer, you cease your interaction. The lack of leisure time resulting from, among other factors, precarious working conditions and globalization (Standing, 2013), has led to pirated services or products being seen as valuable or luxury items.

It is in this context that the processes of practicality find their niche in the market, and explains why products and services may be obtained

in exchange for the handing over of personal data (indeed, this is often a necessary step in order to access a particular service) since this forms the behavioral patterns on which technology companies base their services. Another market niche is that of individuals of limited means, or in a dependent state, such as students or the unemployed, who may have the chance to go to the movies once a week in return for providing their location to an online company. All of this provides a double benefit for companies. Firstly, they obtain first-hand data—with no filtering or distortion—and, thereby, the ability to manipulate individual tastes. Secondly, they leverage a targeted kind of word-of-mouth publicity from those who enjoy perks from technological platforms.

### 3. Methodological structure

Two hundred and ninety-nine semi-structured interviews were carried out with students attending the Indoamerican Technical University (private) in the city of Ambato, Ecuador. The research instrument was in line with the needs of the overall objective of the study as well as the specific objectives: a) to define the variables to be measured; b) to make clear their meaning based on their purpose; c) to establish the measurement scale; (d) to create a data coding system.

The age range was between 18 and 25 years (mean = 20.8 years). 35.8% were women and 47.8% men (16.4% not given). The interviews were designed in accordance with the theoretical framework and were independently verified by three reviewers (Hernández, Fernández & Baptista, 2009). They lasted between 5 and 10 minutes each and were performed by the trained interview team. A scale of 12 quantifiable

items was used, of which 6 were of the Likert type (total agreement=1, total disagreement=5), 5 were multiple-choice and 1 was a closed question (Table 2).

All of the interviewees were made aware that their participation was voluntary, anonymous and non-commercial. The results were analyzed using SPSS software (Version 26), from which descriptive data (in the form of percentages) and inferential data (Chi-squared and Spearman's correlation) were obtained.

#### **4. Analysis and results**

The most valid and relevant descriptive results are set out in Table 2. As may be seen, the majority of the interviewees disagreed with the idea of surrendering privacy in exchange for free services (item 1). When asked to give examples of this, 26.4% referred to personal details, 8.4% to privacy, 16.1% to social network activity, and 17.1% gave no specific example. Similarly, item 2 showed strong disagreement with the idea of surrendering freedom and privacy, on this occasion, in return for access to applications of convenience. According to the responses, the majority identified these as monopolizing practices of the technology giants.

Regarding how much they would be prepared to pay to avoid advertising (hypothetically), the interviewees stated they would pay more to remove advertising on television, but less on the Internet. This shows that television advertising is perceived as more intrusive. When asked whether they would be prepared to pay for Facebook or Whatsapp, young people appeared to give greater priority to Whatsapp.

Finally, in response to the question "What advantages do you think you can

obtain by paying for downloading or streaming music or movies online, when these same services can be obtained free of charge?", 33.1% cited quality, 20.1% ease of use, 14.4% exclusivity and 14.4% avoiding advertising. In response to the question "What disadvantages do you think arise from not paying for and freely accessing digital platforms and applications?", 23.1% cited poor quality, 18.4% viruses, 12% economic reasons, 10.7% the slow speed of the service, 8% privacy concerns, and 4% advertising.

The inferential analysis (chi-squared) showed significant differences ( $p < 0.05$ ) by gender in item 4 only, with women slightly more in agreement than men with the idea of having breakfast or lunch out, rather than preparing it themselves, due to practicality.

In regard to age, the inferential analysis (Spearman's correlation) shows the youngest being more disposed to surrendering their privacy (item 1) compared to the eldest of the interviewed students. At the same time, the older interviewees (23, 24 and 25 years old) were less prepared to have breakfast out than at home (item 4). These are also the interviewees most in agreement with paying in order to remove advertising from television (item 9), and those who would pay for Whatsapp if it were no longer free (item 12).

Finally, the cross-item analysis shows that questions 1 and 2 have a positive correlation since, as commented on above, there was a tendency to disagree with the idea of surrendering privacy, either in return for free services or for convenience. Regarding this last point (item 2), the more the interviewees were prepared to surrender their privacy and freedom, the more they confessed to feeling dominated by technology (item 3) and vice versa. This could indicate

a sense of helplessness or impotence in this aspect, whereby access to free or convenient services leads inevitably to accepting a kind of tyranny inherent in the system. On the other hand, the less accepting interviewees were of surrendering freedoms, the less they were prepared to pay to avoid advertising and to access Facebook if it were no longer free (item 11). Meanwhile, those who most felt the dominance of technology (item 3) were also those who most prefer to have breakfast out (item 4) and who would pay the least for Whatsapp if this were necessary (item 12).

Those most in agreement with the practicality of having breakfast out were also prepared to pay for administrative procedures (item 6), and the group who would pay the least in order to avoid television advertising (item 9). Similarly, those prepared to pay administrative charges (item 6) would pay the least to avoid advertising on both television and the Internet (items 9 and 10), or for Whatsapp if it were no longer free (item

12). These last results highlight the disparity between physical practicality (not making one's own breakfast, or paying in order to avoid queues in administrative procedures), and that experienced through a digital interface, either by television, Internet or Whatsapp.

In another aspect, those who had paid for a product or service that is also available for free, and had then found this had given them no added value (item 7), were those who would pay the least to avoid television advertising. Here the relation can clearly be seen between the negative experience and the perceived lack of benefit in attempting to avoid television commercials.

Finally, a positive correlation was found between all of the last items (from 8 through 12), in which there is no generalizable disposition to pay for services, either to avoid television or Internet advertising, or to access Facebook or Whatsapp if these were no longer free.

**Table 2**  
**Descriptors**

Item	Totally agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Totally disagree
1-I surrender/would surrender privacy (even inadvertently) in return for receiving services free of charge.	7.4%	14.7%	19.1%	22.7%	33.8%
2-I would be prepared to surrender freedom and privacy in return for convenient applications, thereby entrusting some aspects of daily life to an algorithm and, therefore, the company that controls it.	10.7%	15.7%	11.7%	27.1%	22.4%
3-I feel dominated by technology. There is no way to avoid this tyranny "from within the system".	10%	12.4%	35.8%	19.1%	11%

Cont... Table 2

4-I prefer to make my own breakfast or lunch, but eating out is so practical, convenient and cheap that I almost never do what I "prefer".	10%	20.7%	30.4%	26.4%	6%
5-The processes of practicality associated with convenient online applications tend toward the monopolization—disguised as speed of access, connectivity and progress—of technology giants such as Amazon, Ebay, Uber, Spotify, Facebook, Apple, Microsoft, etc.	31.1%	5.7%	25.4%	18.1%	13%
6-I am prepared to pay a sum to perform an administrative procedure, rather than go to an office and wait in line, even if the procedure is free of charge.	9.4%	27.1%	27.4%	21.7%	12.7%
7-You have paid for a product/service that is available free of charge and have afterwards found no additional benefit.	Yes = 38.1%		No = 51.2%		
	<b>0\$-5\$</b>	<b>5\$-10\$</b>	<b>10\$-15\$</b>	<b>15\$-20\$</b>	<b>Más</b>
8-How much are you prepared to pay for something that is available free of charge?	36.8%	30.4%	13.7%	1%	0.7%
9- In order to avoid advertising on television, I am prepared to pay...	37.1%	27.8%	18.4%	6%	7.7%
10-In order to avoid advertising on the Internet, I am prepared to pay...	49.2%	29.8%	4.3%	5%	3%
11-If Facebook were no longer free of charge, how much would you be prepared to pay in order to continue having access to its services?	48.5%	37.1%	9.7%	1.7%	2.3%
12- If Whatsapp were no longer free of charge, how much would you be prepared to pay in order to continue having access to its services?	35.5%	32.1%	17.7%	6.7%	5.7%

Source: compiled by the authors

The disparity identified between physical practicality and its on-screen counterpart must be highlighted since this demonstrates how context is a key to determining the practical mentality of individuals. In this analysis, practicality is not a generalizable or applicable holistic attitude, but rather it seems that it is used by consumers for certain ends while it is rejected for other purposes. Therefore, the theoretical framework for the uses of practicality would explain this disparity by considering the phenomenon a matter of potential rewards evaluation whereby some individuals would place greater value

on physical costs or time, and others on benefits obtainable through a digital interface. Nevertheless, the processes of technological practicality amount to a new weapon in the transnational technological arms race over which there is, for the present, extremely weak regulatory control by the European Union<sup>10</sup>. Information is power, and no company or government is prepared to concede a loss in this struggle (Luque, Macías & Casado, 2021). Caution is necessary in generalizing about the processes inherent to practicality when the use and treatment of mass data employed by each company is not fully

<sup>10</sup> Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act) COM/2020/842, 15/12/2020. Available at <https://bit.ly/3h7vNfK>

known. Moreover, the position taken by supranational bodies in regulating these processes is uncertain, and no company is prepared to share its data without formal agreements with other enterprises unless legally compelled to do so. According to Barassi (2020)

“There is very little knowledge of what happens to this data. People already know that their information is used to target them in a more specific way through advertisements. What you do not see are the data brokers trading in the shadows.”

Due to the problems identified concerning the illegal transfer of data, the lack of tacit consent by the public, and the poor implementation of the right to rectify, oppose and delete (the right to forget), the General Data Protection Regulation (GDPR) was proposed (European Union Law, 2016). Through this tool, the European Parliament, the Council of Europe and the European Commission attempt to unify the processes of data protection for all citizens of the European Union (2019). The principal objective of GDPR is to give citizens and residents control over their personal data both within EU territory and beyond. The regulation was adopted on April 27, 2016 and became operative on May 25, 2018 following a two-year transition period. When GDPR is eventually fully implemented, it will substitute the 1995 data protection directive (European Union Law, 1995). There will be no need for governments to introduce national legislation since, unlike the directive, the regulation is legally binding across the EU. Its provisions include severe sanctions for transgressors of up to 4% of the global turn over, although it does not specify the means for carrying out this colossal task.

There is no doubt that technology

is necessary, nor is there any way to resist it although the evidence from this study shows that it must be associated with a different kind of economic, political and legislative system in order to be fair and not engender asymmetries. Clear processes of restitution must be developed and implemented where there are abuses and predatory behavior in order to build faith in the system. Currently, there are clear institutional deficiencies in ensuring the custody of user data or their trafficking with third parties. Indeed, the simple right to be forgotten about seems difficult to guarantee on the Internet. To talk about technology and its analysis in the abstract belies the existing reality of market relations: the economic system expands through technology and has perfected its exploitation by using economic and political power as well as its access to unlimited information.

The needs as well as the rights of individuals come together in technology. There is no requirement for it to be fair or supportive or, indeed, to conform any set of values, hence the need for national and supranational mechanisms that will catalyze the in-depth deployment of the technological processes of practicality. It is necessary to redefine the relationship between human and non-human and thus try to recover a sense of balanced technical diversity, aiming not to impede the progress of technology but rather to prevent its being used for domination (Hui, 2020).

This task must be undertaken in earnest since, up to now, states and supranational organizations have played a minor role in monitoring the technology platform startups created by venture capital funds. States themselves have been expelled from their own regulatory systems by the illusion of questions of

accessibility and cost savings for the public sector. These commitments made between the public sector and enterprises are based on the liquidity of economic procedures since, if the level of profitability set unilaterally by the platforms is not guaranteed, such collaborations will cease to exist. The state would then be left in limbo as many of its functions have been outsourced and stripped away; meanwhile, the market comes out on top in every scenario.

This is the model of expulsion by dispossession. Markets such as healthcare, education<sup>11</sup> or virtual libraries are good examples of this: once deployed, the terms of use are altered to suit private interests by the dismantling of the public system. Members of the public are similarly affected since a large part of their rights are established in accordance with their purchasing power. Democracy becomes blurred and the state is subject to market forces, as is currently the case with human rights: to obtain nationality in a certain state, it is often sufficient only to have a certain level of economic resources or to make a series of investments in that country.

#### 4. Conclusions

In response to the main objective of the study, according to the sample analyzed in this research, Ecuadorian users are reluctant to surrender their privacy but, at the same time, are not fully opposed to it. Specifically, they accept the transfer of their personal privacy when this implies being subject to covert advertising. Furthermore, the research

reveals that users are aware of the dominance of technological platforms, which they perceive as friendly, and implicitly accept the monopoly they exercise. Consequently, cognitive capitalism seems set to become the rule and no longer the exception in this context.

With regard to the associated issue of regulation of technological platforms, the lack of legislation at the transnational level makes this new paradigm an unknown quantity. This situation is exacerbated by the number of routers, processes and technology operators through which information typically passes without let or hindrance by states (who place commercial rights on the same level as other, fundamental rights) or supranational bodies (who lack the will and the means to intervene). At present, it is not possible to live separately from technology, hence the need to establish emancipatory and transformative measures at the global level so as prevent social reality becoming a mere function of the rates of economic growth. Elements such as public policy, artificial intelligence and the algorithms themselves must be reconfigured to include more guarantees and ethical regulation. The market in itself is not enough to ensure fairness, nor is mere faith in the system or the perceived trustworthiness of data custody. Furthermore, regulation is required to ensure greater coverage by technology platforms of areas that are not perceived as profitable. For example, no company has shown interest in facilitating basic public services due to the lack of

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11 Google Introduces 6-Month Career Certificates, Threatening to Disrupt Higher Education with “the Equivalent of a Four-Year Degree. Available at OpenCulture <https://bit.ly/37v79SN>. 05/11/2020

associated commercial opportunities. Therefore, for practicality to be extended to all areas of life, regulatory intervention is required.

Adding value to a product or service by, for example, removing advertising or improving the quality of music is desirable as long as this does not interfere with individual rights. Economic monopolies and the advancement of private interests should not be made more acceptable by being dressed up in the trappings of modern technology.

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Luque González, Arturo

*Practicality, support or premeditated calculation in the digital age: the case of Ecuador*

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