IMS LUXEMBOURG

Inspiring More Sustainability

PREVENTING INFORMATION OVERLOAD IN THE WORKPLACE

A PRACTICAL GUIDE

Luxembourg's leading network for Corporate Responsibility

CONTENTS

INTRODUCTION

Executives and employees in all organisations spend most of their working day managing information. It comes to them by e-mail, text, online messages, notes, post-it notes, lists, links, diagrams, tables, in meetings, between meetings, by phone, urgently or less urgently, in one language or another, for immediate action, integration into a long-term strategy or simply for information. Managing this deluge of information is a daily challenge for professionals, who must be able to sort, prioritize, and effectively process this data to make the right decisions.

All of these communications have one common goal : to enable the person receiving it to make THE right decision at the right time and adopt the most appropriate attitude in service of the organization's vision for which they work. And the principle has been the same for decades or even centuries. When it used to take several days on horseback or several months by boat to receive a letter, everything is now just a click away. Digital tools represent phenomenal progress that has optimised almost all of our professional functions. In relation to information, they allow us to produce more and more quickly, transform or exchange information for and with everyone. Today, organisations themselves must put in place solutions to channel and guide information flows, which also requires new managerial and organizational skills.

Noting the need to develop specific individual and collective skills to ensure a truly "tech-savvy" workforce and ensure that digitalization positively affects everyone, IMS Luxembourg has developed the "Info Flow Savvy" project. This is a project funded by the European Social Fund, the Ministry of State, the Ministry of Labor, Employment and Social and Solidarity Economy, the Chamber of Commerce, and the Chamber of Employees. It is built around three stages - knowledge, experimentation, awareness - with the aim of providing concrete elements to reduce professional information overload.

For info...

WHAT IS INFORMATION OVERLOAD?

Information overload, also known as information overload, refers to the overwhelming amount of information we have in the digital age.With the proliferation of the internet and social media, we are constantly bombarded with an overwhelming amount of information, making it difficult to effectively process and manage all of this information. Information overload can have a range of negative consequences, such as decreased productivity, difficulty making decisions, and even health problems.The Info Flow Savvy project aims to provide tools and strategies to help individuals and organisations better manage the flow of information and reduce the negative effects of information overload.

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A. PROFESSIONAL INFORMATION: FOR EVERYONE, ALL THE TIME

1. ALL THE INFORMATION FOR EVERYONE

Let us quickly evoke the very concept of information. Etymologically, the word comes from the Latin "informare" which means «to shape, to form». In this case, it is an operation, that of giving form to something. Another meaning of information is to be a content, a data, a piece of information about something or someone. An event brought to the attention of a dense public is also information. This is also the case for all press agency or media communications, and it is also valid by metonymy. Information is linked to the system that gives it meaning, i.e. to the elements of context, the senders, the receivers and the communication channels. We will therefore use this complex notion by accepting that it can also be understood in the sense of an action, an indication, a fact, a communication or even a whole linked to knowledge and thought. We deliberately omit its legal, computer, cybernetic and mathematical definitions and we shall endeavour to remain as far as possible in professional environments.

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Information has always been a professional issue; for a long time its power lay in its accessibility, quantity and timely use. Withholding information was an extremely powerful act of domination. The digital revolution accompanied by the spread of information has reversed this relationship. On the one hand, the volume of information available is constantly increasing: "At the end of 2018, the total volume of information stored globally in computer systems reached 33 billion terabytes. This volume is expected to increase 5.3 times by 2025 to 175 billion terabytes, the equivalent of a stack of Blu-ray discs high enough to span the distance between the Earth and the moon 23 times"[1]. On the other hand, access to information is also becoming increasingly democratic, and finding information is now only a small part of the job. Since all information is available to everyone, it must be filtered, verified, hierarchised, linked, classified and stored in order to be useful: it is the handling of information that now makes it valuable.

Illustration blue-ray stack (source: Dall-E)

1 Hoai Thu Nguyen Doan, Corine Briault, Catherine Moisy, Artificial intelligence: the future of humans, Merkur, March 2019, p. 46.

Not only is there an increasing amount of information available, but also a multiplication of platforms: there are more and more media for consulting, sorting, or exchanging and they add to each other: the new popularization of one never really leads to the disappearance of the other. From search engines to corporate social networks to intranets or instant messaging, we now operate in a media mille-feuille and good information must now be shared on the appropriate channel to optimize its value or impact. Within each medium, there are new systems for coexisting with information. Caroline Sauvajol-Rialland, an expert in communication and information management in business, gives the example of the web and its system of hypertext links, which model information not in two, but in three dimensions[2]. With a concept of depth that fundamentally raises the question of the value of one layer in relation to another. Are they complementary? Does one illustrate the other? Are we dealing with virtual digression, with a possible loss of focus in the research object?

2. THE QUALITY OF INFORMATION

The volume of available information and the ease of access to it can be perceived as both a power of openness and a risk of suffocation, an inexhaustible amount but ultimately a weakening of the quality of the information. How to distinguish useful information from the useless in abundance and redundancy? One of the specificities of the Internet is the prefiltering or classification of information by popularity. Supposed to save us time by getting to the information that has been most useful to the "researchers" who preceded us on a subject, this inevitably leads to normative biases pushing us collectively towards algorithmic conformity that escapes us individually. Our very relationship with digital tools puts us in a paradoxical situation of almost no choice. The vigilant user can decide to list the billions of references chronologically to slightly mitigate this submission to popularity, but this will have little effect. It will therefore be necessary to increase the sorting time on each subject as the information about it is multiplied, completed, questioned and duplicated. It must be understood that in order to claim to understand a subject, we must cross-reference and use different sources of information, or even know exactly what we are looking for.

Why do we only verify the veracity of information on April 1? Indeed, while we have long hoped that the quantity of information would also increase its quality, it must be recognized that in fact, the multitude of available information is quickly synonymous with potential misinformation, or even complete disinformation. In the digital world, the devastating power of rumor is multiplied by the viral power of the web: fake news or infox, false or deliberately biased information, currently damage the reputation of the organisations that are victims of them but are already beginning to spread internally. In general, a fake news circulates six times faster than a verified information[3] and appeals to readers' emotions rather than their reason or rationality. One of the primary factors in the proliferation of fake news in the personal sphere is the evolution of media usage[4], especially the use of social networks as a source of information, how can we not imagine that corporate social networks generate, on the same model, a dynamization of these false-information internally?

2 *Caroline Sauvajol-Rialland, Infobesity: understanding and controlling the flood of information, Vuibert, 2016, p. 84.*

3 *Soroush Vosoughi, Deb Roy, Sinan Aral, The spread of true and false news online, Science, March 9, 2018, p. 1146-1151.*

4 *François Miquet-Marty, Aurélien Preud'homme, Chau Steward, The impact of «fake news» on corporate reputation, Viavoice Paris, March 2018.*

The multiplication of fake news and their normalization are the gateway to the era of post-truth, in which we collectively accept the existence of "alternative" truths and in which reality and facts no longer count as references, or have even become obsolete. This notion is defined by the Oxford dictionary as "circumstances in which objective facts have less influence on public opinion than appeals to emotion and personal opinions." According to philosopher Myriam Revault d'Allonnes, the particularity of post-truth is the appearance of "factual truths" whose definition falls between opinions and rational truths. The concept of post-truth inherently constitutes an ethical problem for the various leaders of digital media and social networks who are often the first to relay them. While the term is currently commonly reserved for the political world, it is already present in professional circles, as researchers in philosophy Anne Sophie Moreau and Adélaïde de Lastic describe when they write "Conditional truth, neatly tied narratives, multiplication of points of view... Is the company the world of post-truth?"[5].

BONUS

HOW TO COUNTER THE EMERGENCE OF FALSE INFORMATION IN THE PROFESSIONAL CONTEXT?

1. FACT-CHECK

One of the most effective ways to counter fake news is to fact-check before sharing. This means verifying the information using reliable sources such as government websites, respected media outlets, or experts in the field. By fact-checking, you can help ensure that the information you share is accurate and credible.

2. ENCOURAGE CRITICAL THINKING

Encourage your colleagues to think critically about the information they receive, and to question the sources and motivations behind it. This can help them better evaluate the credibility of the information and determine whether it is likely to be true or false.

3. USE CREDIBLE SOURCES

When sharing information in a professional context, make sure to use credible sources that have a proven track record of accuracy and reliability. This can help ensure that the information you share is trustworthy and credible.

4. ENCOURAGE TRANSPARENCY

Encourage your colleagues to be transparent about their sources and the methods they use to verify information. This can help build trust and credibility, and allow others to more easily evaluate the information.

5. EDUCATE YOUR COLLEAGUES

Share resources and advice with your colleagues on how to identify and counter fake news, such as fact-checking websites or guidelines from trusted organisations. By educating others, you can help foster a culture of critical thinking and skepticism within your professional network.

6. REPORT FAKE NEWS

If you discover fake news being shared within your professional network, consider reporting it to the platform or website where it is being shared. This can help prevent the spread of false news and promote accurate and reliable information.

→ **BY FOLLOWING THESE GUIDELINES, YOU CAN HELP COUNTER FAKE NEWS AND PROMOTE ACCURATE AND RELIABLE INFORMATION IN YOUR PROFESSIONAL ENVIRONMENT.**

5 Adélaïde de Lastic, Anne-Sophie Moreau, *Can we lie at work? Fifty Shades of True*, Philonomist, September 23, 2018.

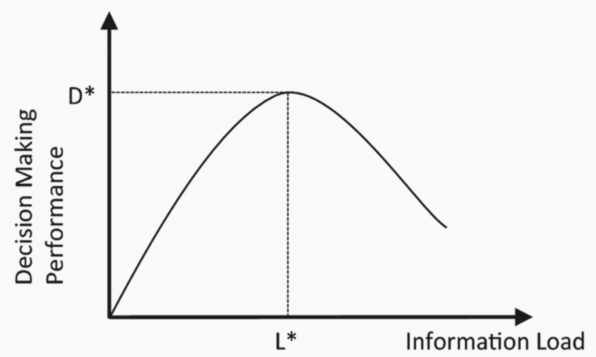
3. CIRCULARISATION OF INFORMATION

The way businesses operate based on the model of the Industrial Revolution is completely inadequate for the existing and circulating information. In their book, Sandra Enlart and Olivier Charbonnier summarized the following well: «Work organisations have shortened non-operational times: but this also means less time and fewer people to do better more demanding activities. One might have thought that [...] if more information had to be processed, then more time would have to be spent processing more information»[6]. If there is more information to consider and less time to do it, it is impossible to maintain the same methods, the relationship to information must be re-evaluated at its core. The accessibility of data allows for a shared conception of information, that is, thinking of the knowledge of a company as a collective work, the result of ecosystems of knowledge blending individual implicit and explicit knowledge for the benefit of the network or the overall project.

Only circular knowledge can allow for disruption and the space for new reference points. Nicolas Récapet of the Talan group highlights the causality between the circularization of information and critical internal and external evolution of work[7]. To the outside, he explains that it is time to reconsider the sale of services as a transfer of skills rather than a purely contractual and transactional relationship. As for the functioning within organisations, it is a matter of moving from a pyramid system with positions of "knowers" to a collaborative model where knowledge is shared (one's own and others') through the existence of communities. Sharing knowledge can represent a loss of power and is very rarely natural in a professional organization or in a simple team work.

6 Enlart, S., Charbonnier, O. (2018). *Société digitale: Comment rester humain ?*. Dunod. page 57
7 New Work, *The Learning Company: Welcome to the Knowledge Economy*, April 9-10, 2019, Paris, France.

Circulating information is ultimately the implementation of the trivial saying "Alone, we go faster. Together, we go further!" And it specifically questions the definition of human performance in a professional context. To do this, the principle of knowledge management must move away from the idea that the acquisition of knowledge is achieved through individualistic, exhaustive and linear processing of information, and move towards a structured way of functioning based on sharing consistent and reliable information with all individuals who may need it. Taking into account the exponential increase in the amount of available information and the diversification of communication methods, the sustainability of a company's economic performance may be compromised if it does not take into account the new realities of the world of work. The democratization of information and social and political changes in favor of empowering individuals are part of the new paradigms that Jeremy Rifkin considers essential. He mentions the idea of building resilience in the new industrial revolution that the world is experiencing[8].



Source : https://link.springer.com/article/10.1007/s40685-018-0069-z

According to this dominant view, there is an inverse relationship between the amount of information to be considered and decision-making performance. This means that a moderate amount of information can improve performance, while an excessive amount can decrease it. This relationship is represented by an inverted U-shaped curve (Driver and Streufert 1969; Driver et al. 1990; Schroder et al. 1967).

8 Les rendez-vous du futur, Jeremy Rifkin: the 3rd Industrial Revolution, February 6, 2013, Paris (France).

HOW TO PROMOTE KNOWLEDGE SHARING WITHIN THE ORGANIZATION?

1. **Establish a knowledge management system:** A knowledge management system is a platform or system that is used to collect, store, and disseminate knowledge within an organization. It can be a digital platform, such as a collaborative software application or a document management system, or a physical location, such as a library or resource center. The key is to create a central repository of information that employees can easily access and use.

2. **Encourage collaboration and communication:** Collaboration and communication are essential to knowledge sharing. Encourage employees to work together and share their knowledge and expertise. This can be done through team meetings, group discussions, and online forums.

3. **Encourage learning and development:** Offering employees the opportunity to learn and develop new skills is important for knowledge sharing. This can include training programs, workshops, and other development activities.

4. **Promote a sharing culture:** Encourage a culture of knowledge sharing by recognizing and rewarding employees who contribute to the organization's knowledge base. This can be done through recognition programs, awards, or any other form of recognition.

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B. THE RELATIONSHIP TO TIME

1. THE CHALLENGE OF PROFESSIONAL TIME: INTERRUPTION, URGENCY AND ADDICTION

Christiane Demontes, president of the working group on "New Forms of Employment" within the Social and Solidarity Economy Lab in France, reminds us that the greatest value of any enterprise is time[9]. Indeed, the issue of time is inherent to any effective work organization. Before being a constraint of deadline, rhythm or reactivity, working time is first and foremost our overall feeling of the passing of time when we work. According to Olivier Lajous, President of BPI Group, living well at work means living well through the time of work and routine is the number one enemy, which explains why a military ship is organized into quarters by thirds[10]. In addition, when looking at the jobs impacted by the digital boom, we observe what sequences daily work and shapes time beyond prior organization. These are the information that reaches us without us "seeking" it (e.g. receiving an email) and which are not systematically opportune but often lead to the interruption of the current activity and the intrusion of a task to be performed adding urgency to another. Deadlines and work tempo are increasingly linked to multi- form and multi-channel digital interruptions.

In professional communications, it is essential to differentiate between synchronous communication, which is intrusive and highly engaging for the recipient (such as phone or instant messaging), and asynchronous communication, which is much less directive if used properly. In addition, in the continuous flow of solicitations, we sometimes forget that our attention can only be focused on one thing at a time and that our only possibility

9 New Work, *Redonner du sens au travail*, April 9 and 10, 2019, Paris (France).

10 The quarter refers to the duration (by extension the rhythm) of your activity at sea. During a quarter, you will have a precise activity, working in «quarter by thirds» means working one quarter out of 3 with the variations of activities that follow. Produrable, Working better to live better, 9 and 10 April 2019, Paris (France).

of doing two things simultaneously is by doing one automatically. A study published in 2009[11] highlighted the weaknesses of "frequent multitaskers": when asked to concurrently perform four tasks, they had difficulty filtering out irrelevant information. The information did not circulate well between short-term or long-term memory and working memory. Finally, despite their habit, these «frequent multitaskers» were destabilized each time they had to switch from one activity to another and ended up losing time.

SYNCHRONE VS. ASYNCHRONE

Quelle est la différence entre les deux ?

SYNCHRONE	ASYNCHRONE
communication synchrone ;	communication asynchrone ;
intrusive, très engageante, exigeant une réponse immédiate.	moins intrusive, peut-être utilisée efficacement sans interrompre l'activité en cours du destinataire, la réponse n'est pas requise immédiatement.

An illustration of the concept and the use of communication tools in a synchronous and asynchronous manner.

11 Eyal Ophir, Clifford Nass, and Anthony D. Wagner, Cognitive control in media multitaskers, PNAS, September 15, 2009, p. 15583-15587.

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Time has not been modified, it is our perception of time that has been disrupted and gives the impression of a generalized acceleration as Paul Virilio has themed. Already in 2004, 81% of business leaders in France believed that communication technologies had created a new sense of urgency related to the speed of information transmission and the expectations that followed[12]. It is our relationship with time that shapes our behavior towards work, our consumption, our vision of society and our organization with others. The very nature of digital tools and their responsiveness activate the release of dopamine through the immediate reward produced by the instant response or virtual "like". This is both an individual and collective addiction to communication media and could potentially influence our biological and hormonal rhythms in the long run[13]. "Do you sometimes press the 'refresh' button in the absence of a notification to check if you have missed a new email by chance?" - Thierry Venin[14] He noticed that almost all the participants in his focus groups answered yes! Nobody was required to, but everyone had done it.

2. THE TYRANNY OF SHORT TIMES TO THE DETRIMENT OF THE IMPORTANT

This redefinition of time creates new collective fears: to step away from one's messaging or disconnect during a meeting or lunch break is to risk seeing the number of urgent emails, missed calls, or notifications of all kinds multiply, and to be overwhelmed by the mass of information to be processed later. This also explains the experienced inability of some people to not consult their emails or other types of messages or to not respond during a meeting. Ultimately, it is about never focusing on a single subject or unique

12 Microsoft, *The Impact of Information and Communication Technology (ICT) on the Development of Corporate Human* Capital, 2004.

13 François Géré, *Dictionnaire de la désinformation*, Armand Colin, May 4, 2011.

14 Thierry Venin, *Techniques de l'Information et de la Communication et risques psychosociaux sur le poste de travail tertiaire*, thèse de doctorat, Université de Pau, 2013.

activity for fear of missing the urgency notified on another channel or falling "behind" in all of one's activity. It is also the risk of hesitation in urgency: being constantly reacting to something, living with the constant anxiety of possibly missing essential information, losing sight of the meaning of actions and their place in a overall strategy, and only having the present moment and the urgent in mind without a connection to long-term goals. Time management, which has always been essential in project engineering, now involves almost systematic management of urgency.

Indeed, it is essential to distinguish between strategic orientations for a vision oriented towards immediate results or future benefits. To focus on short-term issues is to act in reaction to the present moment and not to think about one's present activity in relation to its future and the overall objectives it can serve with resilience over time. By allowing ourselves to be dictated by our work rhythm and professional investment by the urgent, and by forgetting to consider the importance of information, the chance of the "free" time between the arrival of one urgency and the notification of the next determines the depth, quality, and accuracy with which information is processed in each situation. It is vital to regain the ability to emancipate ourselves from the rhythm of notifications and to organize our professional activities according to the Eisenhower matrix[15]. The Eisenhower matrix distinguishes important activities from urgent activities: the latter require immediate attention, are often related to the goals of someone else with a given deadline and come to us through unexpected notifications.

15 The Eisenhower Matrix is a prioritisation tool invented by Dwight David Eisenhower the 34th President of the United States.

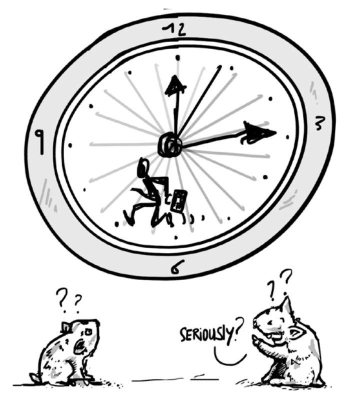
So how do we recognize important activities? First and foremost, they allow us to progress towards our own goals, often in the medium and long term. We commonly approach them strategically in a calm and conducive environment for concentration. The level of importance is generally measured by an approach to risk. Consistently keeping in mind, the degree of importance of a task can allow us to go against our natural tendency to focus on the immediate and concentrate on the essential. Let us not forget that one of Eisenhower's main teachings is to delegate or postpone any urgent but non-important task. Devoting time to important and non-urgent activities is the most satisfying because it does not create stress and allows us to progress towards our own goals. The ability to prioritize activities is increasingly valuable and distinguishing the important from the urgent is crucial in a world that pushes us towards speed and immediacy.

3. AGILITY AT ALL COSTS, THE COMPETITION OF TIME

The temptation to respond to the increasingly strong complexity of professional organisations by multiplying and complicating communication processes is attractive as an immediate but ineffective solution in the long term. Indeed, a complicated system is based on a mechanistic vision of the collective and predictable cause-and-effect relationships, it is the epitome of Taylorism: standardization of procedures, reduction of risks to a minimum, zero innovation or adaptability. This should not be confused with a complex environment which is made up of intertwined cause-and-effect relationships. This is the agile company: a self-adapting, living organism that is aware it will change but whose cycles have an unpredictable end. Its specificities are adaptation and dynamic management within a framework that allows freedom of work and a willingness for continuous improvement. This concept of company agility comes from the digital world and start-ups that are capable of frequently and quickly reviewing their business model. However, agility is now an ambition shared by all types of organisations.

Simultaneity, immediacy, speed, ubiquity, urgency, instantaneousness has become banal professional terms in an environment of global chrono competitiveness. When a deadline of one week was sufficient to respond to a letter, we now expect almost instantaneous feedback for all digital requests. Francis Jauréguiberry points out that, in a world of generalized interconnection, connection has become the norm for all jobs including those requiring concentration and continuous execution, and a non-immediate reactivity is subject to justification or even excuse.[16] The automatic sendings of our email boxes, which justify in an instant the non-immediacy of the response, are proof of this. The activation of this option, which a few years ago was necessary only for extended absences such as holidays, is becoming increasingly common for an absence of a few hours during which we would be without connection.

The digitization of work involves being able to manage permanent changes, being able to work in constant interactivity, and reacting instantly. However, caution should be exercised, the agility permitted by increasingly powerful tools should not be synonymous with "digital slavery". And yet, 78% of executives think that ICTs generate an increasing number of tasks to be performed outside working hours or locations[17]. In fact, technological developments are causing upheaval in the very nature of work modes, and these seem to impose continuous availability and encourage individuals to be increasingly connected. Already in 2014, 60% of French executives claimed to check their professional emails during their vacation, leading to a strong overlap between personal and professional life. The same proportion also said they checked their professional emails in the evening[18]. In origin, agility is a method of work that aims to increase customer satisfaction and the satisfaction of development teams, so reactivity should be built collectively by rethinking organizational culture rather than imposing it on everyone as a dictate of instantaneousness.



16 Francis Jauréguiberry, *La déconnexion aux technologies de communication*, La Découverte, April 2014, p. 15-49.

17 Francis Jauréguiberry, Voluntary Disconnection to Information and Communication Technologies, 2013, p. 5.

18 CFE-CGC *"quality of life at work 2014" barometer* conducted by OpinionWay among French P&MS

HOW TO DEAL WITH THE FEELING THAT EVERYTHING IS URGENT IN YOUR PROFESSIONAL ENVIRONMENT?

1. **Prioritize tasks**: When you have a long list of things to do, it is easy to think that everything is urgent. One way to counter this feeling is to take the time to evaluate each task and determine its level of importance. You can use a system like the Eisenhower matrix to classify tasks into three categories: urgent and important, important but not urgent, urgent but not important, or neither urgent nor important. This can help you focus on the most important tasks and minimize the sense of urgency.

2. **Set boundaries**: It is important to set limits on when and how you respond to emails and other requests in order to effectively manage your workload. For example, you can only check your emails at certain times of the day or designate certain blocks of time as "email-free" zones. This will help you avoid feeling like you always have to be available and will give you the space you need to focus on your work.

3. **Communicate with your team**: If you feel overwhelmed by the feeling that everything is urgent, it is important to communicate with your team about the importance of setting priorities and boundaries. Encourage your team to do the same and consider establishing team-wide guidelines for managing workloads. This can help create a culture of sustainable productivity and prevent burnout.

4. **Take breaks**: It is important to take breaks throughout the day to recharge and refocus. This can help reduce stress and improve your overall productivity. Be sure to regularly step away from your work to stretch, take a walk, or do something else that helps you relax and recharge..

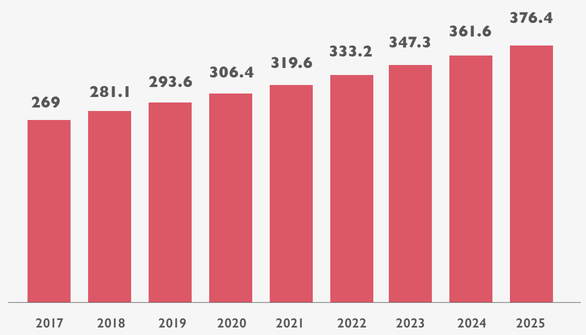
5. **Seek support**: If you feel overwhelmed, don't be afraid to ask for help. Talk to your supervisor, HR, or a mental health professional about your workload and how you are feeling. They can help you find ways to better manage your workload and reduce the feeling of urgency.

C. A NECESSARY MANAGERIAL SHIFT

1. THE END OF VERTICAL FILTER SYSTEMS

The volume of information available to humans has long been greater than their capacity to know, the notion of overload, the idea of "too much" comes from the obligation to integrate an excessive amount of information. In professional environments, the modes of sharing or controlling information are strong managerial markers often built on a devastating excess of communication. If we have long hoped that the technical accessibility of digital tools would lead to a reasoned collective use, the result is clearly that of an increasingly greater production of communications. On average, each employee[19], for a 9 hour working day, receives an email about every 6 minutes[20]. With everyone just a click away, the specific ascending or descending filters of strong hierarchical systems gradually disappear, resulting in widely disseminated information that is exponentially increased at all levels of the organizational chart or pyramid.

Number of emails sent and received worlwide from 2017 à 2025 (in billions)



(Source: Statista, Internet demographics & use)

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The relevance of linear management and the efficiency of vertical hierarchical systems are increasingly being questioned on three levels:

1. The rise of the digital world and the reach of digital tools,
2. Human logic, which is naturally individual,
3. The desire for autonomy of new generations entering the job market.

These three elements are increasingly weakening filtering functions and reinforcing cross-functional management to enhance collaborative organisations, project-based construction, and network operations. Furthermore, the acceleration of time and the need for agility that we have previously discussed require mandatory changes to internal and external decision-making processes, as the pyramid organization relies on processes that are much too long and filtered, which makes it unable to act on weak signals. To be agile, an organization must apply the principle of subsidiarity to most decisions and allow for risk-taking and the right to make mistakes at lower levels. If it fails to do so, it must accept being always out of sync and behind its competitors.

As mentioned earlier, vertical management modes have long been based, among other things, on the asymmetry of information and the relative power that comes with it. Information retention is still practiced when it comes to top-down strategic decisions, but in the case of general knowledge, the digital society is bringing about many fundamental changes in the world of work. This is particularly the case highlighted by Caroline Sauvajol-Rialland of the web 2.0: the democratization of information is leading to a transformation of "information-power" (controlled data with little interaction) to "information-influence" (freely circulating, horizontally produced, and added to each other)[21]. In other words, since information is

19 The Radicati group, *Email Statistics Report 2015-2019*, March 2015.

20 We consider the daily working time as laid down in the European Working Time Directive (2003/88/EC) of maximum 8 hours and we add a lunch break of 1 hour.

21 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 40.

now available to everyone, it continuously influences reference frameworks and collective knowledge. Influence power is no longer tied to possession of information but rather depends on each person's ability to filter and process information.

2. THE CONCEPT OF SPACE AND TELEWORKING

Digital technology allows for the fragmentation or re-organization of tasks. The workload becomes increasingly unpredictable and new organizational models that facilitate mobility appear, such as project-based approaches and networking. The increasingly blurry boundary between professional and private spheres encourages new methods of work and new forms of employment known as "distance work" such as telecommuting or nomadic work. These new collective organisations are often put in place to serve individual needs such as reducing travel time, saving daily expenses, flexibility for personal appointments, or the ability to work in quieter locations. However, the fact of distance does not solve as many problems as one might imagine that are caused by constant interruptions in work. In fact, as remote work grows, space figuratively shrinks technologies easily allow the intrusion of geographically distant people into the digital work environment of their colleagues or collaborators.

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Through digital tools, distance management becomes highly individualized and constant control is surprisingly easy. Computer traceability is almost limitless, and each employee can be monitored in real time or deferred for each of their actions. The level of use of these control means positions the cursor between means management or results management. In the context of means management, on the one hand there is a control of use by managers (illustrated by the expression "keep an eye on their teams") and on the other hand, a control of acute image: a phenomenon of "window dressing", of "display" by employees (illustrated in turn by the expression "make a good impression"). In this case, hyper-connection is the result of a logical game, and the situation is perpetuated because collaborators think they see an advantage. Moreover, this digital presenteeism strengthens a form of addictive connection (already strongly present in young generations before their entry into the world of work) which develops among workers, all age groups combined.

Since everything is possible in the digital age, it is now expected to be able to juggle work tools and workspaces: alternating telework, nomadic work and presence at the headquarters based on professional needs, human connections and personal obligations. It is essential to consider the technical challenges related to the fulfillment of the collaborators, but also, obviously, to consider at each stage the satisfaction of clients/users/beneficiaries and the objectives of the organization. In fact, with the digitalization of the world, work is no longer a place but what we do. For this profound change in the paradigm of spaces not to encourage unproductive hyperconnectivity, the example of the manager and management by trust are more important than ever for the well-being of their teams but especially for that of their company. Indeed, companies with the best results are those whose leaders sleep more than 8 hours a night and/or practice physical activity more than 3 hours a week.

Similarly, when the manager comes to work while sick (presenteeism), the results of the company are worse than average[22].

3. THE MEANING OF WORK IN THE DIGITAL AGE

In order to attract today's highly qualified talents in relation to digital, an organization must take care of its employer brand and offer a significant quality of life at work. Elodie Brisset, co-founder of the OURCO corporate social network, reminds us that well-being at work relies on three pillars:

1. The work environment, which is increasingly being digitized
2. The meaning of our professional action (the purpose and vision of the organization)
3. Individual engagement built on motivation, autonomy, and resources (skills, time, support, etc.)[23]

22 Harmonie Mutuelle, Soregor, Viavoice, *Observatory on the health and well-being of business leaders in Pays de la Loire*, June 22, 2017.

23 Produrable, *Quality of life at work and operational performance*, April 9 and 10, 2019, Paris (France).

24 New Work, *Working better to live better!*, April 9 and 10, 2019, Paris (France).

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According to Gwennaële Chabroullet from ARP Astrance, since digital developments are changing the very nature of work, it is now necessary to consider the journey of employees from their homes, taking into account the different and differentiated timing of professional activities throughout the day[24]. The work environment is no longer the organization's headquarters, but rather the digital environment made available to employees, in fact we work as soon as we are connected. The digital workplace must therefore be designed to serve both individual usage and collective efficiency (collaborative document management, collective task management tool, etc.).

In response to these changes, new business models are emerging. These try to meet both the changes in the world of work and the aspirations of the new generations who are entering the workforce. According to Caroline Sauvajol-Rialland, generations X, Y, and Z do not invest in work in the same way as their elders because they do not see it as the foundation of social success and personal fulfillment[25]. It is a question of building new values within the company that respond to these generational differences and of rethinking the very meaning of the action of the entire organisation in the service of a vision and around issues rather than individual powers. For example, 59% of young people looking for work think that working in the social economy would meet their expectations, while only 23% of young people think that working in a commercial company allows them to "feel useful for society"[26]. Today's talents give increasing importance to social relations, to the logic of contribution and exchange, and to the idea of the search for meaning in the performance of work. These concerns are illustrated by less hierarchical organisational charts, less rigid networks and the development of corporate social responsibility policies.

25 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 53.

26 Avise-Cesor study, Perception of young people on employment in the SSE, April 2014.

It is now clear that improving economic performance requires improving human performance . There is increasing talk of sound or ethical leadership, replacing task management with creating the conditions for optimal performance. Examples of levers for increasing the meaning of work are the possibility of setting up internal or external skills sponsorship programmes, the arrangement of the phygital work environment to make physical and digital exchanges more fluid, using neuroscientific contributions to encourage team spirit and cross-functional links in the service of collective action, or management through nudges. This term is based on our natural irrationality when it comes to making choices. Human beings are indeed affected by heuristics, thinking mechanisms built on our emotions, environment, or context to make extremely quick decisions, which can guide us towards positive choices without infringing on our free will.

WHAT IS "NUDGE"?

Nudge is a subtle form of persuasion or intervention that aims to influence the behaviour of individuals in a particular direction, without resorting to any overt form of coercion or manipulation. The concept of nudge was popularised by economist Richard Thaler and lawyer Cass Sunstein in their book "Nudge: Improving Decisions about Health, Wealth, and Happiness".

In the psychological context, a nudge is generally used to change people's behaviour in a specific way, without changing their underlying motivations or values. For example, in the context of road safety, it is possible to use trees planted in such a way as to give the visual impression that speed is increasing as you approach a bend, in order to encourage drivers to slow down and take the bend more carefully. A nudge can also be used to encourage people to make healthier choices by changing the way food is presented in a cafeteria.

The nudge is based on the idea that people are often influenced by their environment and the context in which they make decisions, and that small changes in this context can have a significant impact on their behaviour. The aim of a nudge is to help people make better decisions for themselves, by providing them with the information and tools they need to make informed choices.

To learn more about the concept of nudging, we recommend reading the following article featured in our magazine: https://sustainabilitymag.lu/eco/a-la-une/nudge

This informative piece delves into the principles and applications of nudging, providing a comprehensive overview of this influential approach to shaping behavior

2 FROM INDIVIDUAL DISTRESS TO COLLECTIVE COUNTERPRODUCTIVE EFFECTS

2 FROM INDIVIDUAL DISTRESS TO COLLECTIVE COUNTERPRODUCTIVE EFFECTS

A. USE OF DIGITAL TOOLS

1. NEED FOR TRAINING AT ALL LEVELS

We noted earlier that access to information is now easier for everyone. This is only partially true, as the use of search or filtering tools gives us priority access to the most popular or best referenced information. It is more complicated to be sure to find verified, useful and valid information for a particular situation . Indeed, as the French writer and economist Jacques Attali reminds us, "anyone who has ever tried to penetrate the Internet knows that one should not speak of information highways but rather of labyrinths"[27]. The need for individual skills in the wake of the digital explosion is therefore very real. The digital transformation increases the risk that a significant proportion of people who have not yet acquired basic skills will lose their employability in the new digital workplace. The development of the digital world will require the adaptation of existing skills. Therefore, workers need to strengthen their digital skills now to carry out their current tasks under future digital conditions.

27 Jacques Attali, *Les labyrinthes de l'information*, Le Monde, November 9, 1995, p. 18.

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The impact of digitisation goes beyond the workplace as it will transform many of the skills required in the years to come. Rather than simply consuming technology, there is a need to develop a culture where all citizens are familiar, flexible, and creative with tools and data so that they can reap the benefits. Digital education must start at an early age: access to training in soft and hard skills such as computer programming and coding is important for all citizens, including students, workers, and job seekers. Long-term perspectives are needed, anticipating the needs of future generations for digital assets as well as sectoral and business developments. The link between current standards of education, vocational training and the types of skills needed in the digital age needs to be reviewed and changed accordingly.[28]

François Neveu of Clustree shares this observation of the significant shortening of the skills obsolescence cycle and highlights the responsibility of organisations in the present and future employability of their employees. At the same time, Yaël Guillon of Imfusio notes that current professional training proposals are not adapted because they are calibrated on past needs and omit the challenges of the near future and immediate learning[29]. Unfortunately, most vocational training catalogues are designed to teach almost prescribed skills. Finally, while digital expansion seems to know no bounds and is accelerating all the time, and the skills required are increasingly specific, training in this sector is declining year by year. Only 7% of vocational training in the private sector in Luxembourg in 2016 concerned IT and office automation (compared to 13% in 2005)[30]. In 2018, 21% of French HRMs already believe that the key skills gap is a reality[31].

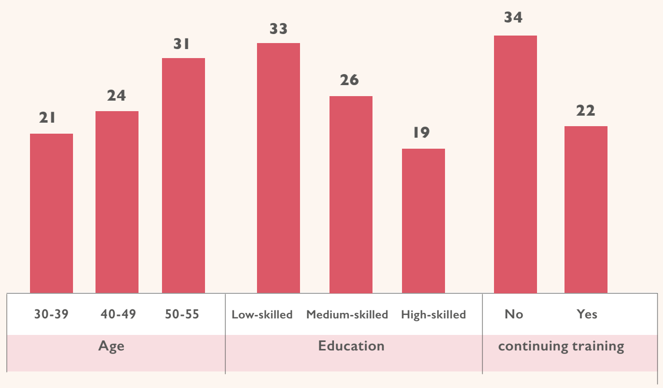
28 European Foundation for the Improvement of Living and Working Conditions, *Foundation Seminar Series 2016: The impact of digitalisation on work*, 2016, Luxembourg (Luxembourg).

29 New Work, *The Learning Company: Welcome to the Knowledge Economy*, April 9-10, 2019, Paris, France.

30 National Institute for the Development of Continuing Vocational Training, Training Observatory

31 Cegos, *International Barometer Transformations*, skills & learning, June 2018.

Skill obsolescence by group of workers (%)



Source: Cedefop pilot skills obsolescence survey (2011)

2. FOCUS ON THE "DARK SIDE" OF EMAILS

Digital tools in themselves do not have negative or positive impacts: it is their use or misuse that can be problematic. It is urgent to learn to choose the right tools for each situation and to adopt the appropriate media. Let's take email as an example: thanks to its low direct financial costs and its ability to abolish temporal and geographical boundaries, it has become the universal tool for business communications since the late 1990s. In 2018, 281 billions emails (excluding spam)[32] were exchanged every day worldwide, the equivalent of 325,231 emails sent per second. Are all these exchanges useful and essential ? It is unlikely, since 80% of the emails sent are **never opened** by their recipients[33]. This astonishing proportion of unconsulted emails can be explained, among other things, by collective habits and inappropriate uses of the email tool. This erroneous and abusive appropriation of email represents both a significant contribution to the phenomenon of info-communication overload and a significant ecological cost for the planet.

32 The Radicati Group, *Email Statistics Report 2019-2023*, February 25, 2019.
33 Céline Deluzarche, *What is the carbon footprint of an e-mail?*, Futura-sciences.

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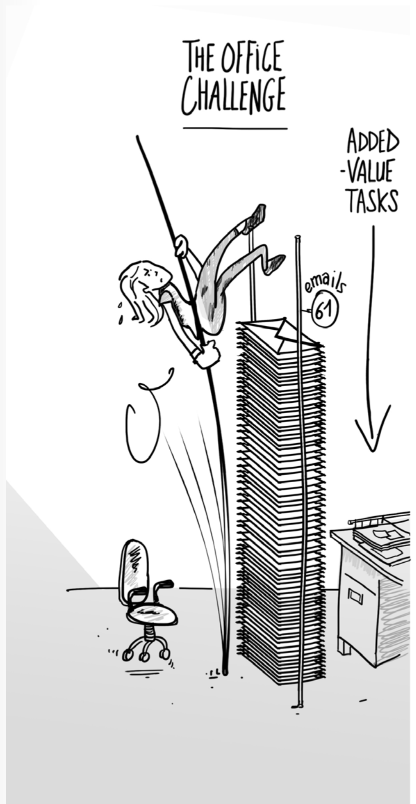
If the energy supplied to a car were emails, it would only take 6.5 seconds to go around the Earth[34].



The major advantage of email is its asynchronous nature, as it normally allows each user to process the information they receive according to their own availability and organisation without being subject to the concomitant availability of others. The normal response time to an email should be between 24 and 72 hours. Unlike the telephone or instant messaging, it is not supposed to be used to express urgency. As Caroline Sauvajol- Rialland reminds us, email should in principle allow for deferred action and thus reduce synchronous intrusions, limit interruptions and offer the possibility of enhanced work organisation[35]. In practice, however, it is common to leave your email inbox open in the background and to be interrupted by visual and audible notifications as soon as new mail arrives. Most of the time, few professionals set up these notifications and therefore there is no distinction in message handling. So we are disturbed in the same way by an important request from our employees or by an automatic newsletter, by a client who requires our direct expertise or by a communication copied "for information" to an entire team.

34 Calculation based on figures from the media dedicated to action on climate change in Quebec "un point cinq"
35 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, pp. 75-76.

The normalisation of email in professional relations implies an obligation for all to handle written, traceable information and therefore an unconventional contractual logic. This "evidence" in the working relationship sometimes encourages the (too) easy addition of recipients in copy in order to share or even drown out responsibilities or to obtain more recognition of one's work. These messages of visibility or protection (umbrella messages) are not directly useful to the professional activity and generate a multiplication of important and useless communications. Moreover, this dispersal of information easily leads to misunderstandings and difficulties of interpretation, or even misunderstandings and the escalation of conflicts, which deteriorates relations between individuals and the performance of a team. Preferring the written word to protect oneself wastes a lot of time, greatly reduces efficiency in solving a problem or making a decision and allows for less rich communication in the exchange.

3. FROM THE DIGITAL SKILL GAP TO THE CONNECTIVITY GAP

With the democratisation of digital tools, Francis Jauréguiberry, a sociologist specialising in the use of information and communication technologies, highlights the inversion of the notion of the digital divide from skills to connection. According to him, in the 1990s, with the arrival of computers and the Internet, not being able to connect to the web (at the time synonymous with progress, new experiences and openness to the world) was seen as an injustice. The 'info-poor' of the digital society were those without physical access to the network and without the minimum technical skills to use it. However, at the beginning of the 21st century, this digital divide in access to the world wide web is narrowing. From 2000 to 2012, the proportion of households with Internet access in Luxembourg rose, for example, from 25% to 93%[36]. What remains of the concept of the first digital divide is "inequality of use and appropriation, where the cross-cutting idea is that the capacity of individuals to fully appropriate information and communication technologies is very unevenly distributed and depends greatly not only on their economic capital, but also on their cultural and cognitive capital"[37].

The second digital divide occurred during a later phenomenon, this time affecting the "info rich" in the early 2000s. This is what Francis Jauréguiberry defines as "tele-communication nausea and technological fatigue"[38]. The observation revealed by these "symptoms" is as follows: even if the new information and communication technologies are indeed synonymous with access to a wealth of knowledge, they are also a source of unwanted or even uncontrolled solicitations, of new forms of addiction and surveillance. The "new rich" of the digital world are those who are able to disconnect as they please. In other words, these people can choose to freely avoid receiving intrusive information or telecommunications. Therefore, the new 'info-poor' today are those individuals who do not have the option of disconnecting and are therefore subject to the digitalisation of society and the resulting sense of urgency and continuous questioning.

Illustration Digital divide (source: Dall-E)

36 Marie-Jo Airoldi, *Le comportement des Luxembourgeois face aux nouvelles technologies de l'information et de la communication depuis le début des années 60*, STATEC, December 10, 2012.

37, 38 Francis Jauréguiberry, *La déconnexion aux technologie de communication*, April 2014, La Découverte, p. 15-49.

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Contemporary 'info-poor' cannot escape the continuous technological rhythm. Indeed, the fear or real risk of committing a serious professional error or of being found responsible for a failed contract or a bad decision provokes behaviour symptomatic of an addiction to digital tools. The smartphone is the flagship of this ATAWAD (AnyTime, AnyWhere, Any Device) connection, it can be carried everywhere, synchronised with all our professional tools: calendar, emails, instant messaging, etc. and personal tools: social networks, means of payment, transport card, etc. Thanks to tailor-made applications, it allows an optimised and permanent connection without distinction between professional and private time or even between day and night. The fear of disconnection is then embodied by the smartphone object and the anxiety of forgetting it or not being able to recharge its battery has a name: nomophobia, a neologism created from the contraction of "no mobile phobia". According to TNS Ilres, 26% of Luxembourg residents declared in 2018 that they would be unable to do without their phone for 48 hours, and this percentage rose to 38% among 16-24 year olds.

10 TECHNIQUES TO COUNTERACT THE NEGATIVE ASPECTS OF E-MAILS.

1. **Use spam filters** : Most e-mail programs have built-in spam filters that identify and block unwanted messages. You can customise these filters to your preferences and train them to recognise spam by marking unwanted messages as such.

2. **Be careful with links and attachment** : Be careful not to click on links or download attachments from unknown or suspicious sources, as they may contain malware or lead to phishing attacks.

3. **Use strong passwords**: Use strong and unique passwords for your email accounts, and enable two-factor authentication if available. This can help protect your accounts from hacking.

4. **Manage your email inbox**: Set aside regular times to check your email, and try to avoid checking it constantly throughout the day. Use tools such as filters and labels to organise your messages and prioritise the most important ones.

5. **Use alternative communication channels**: Consider using alternative communication channels, such as instant messaging or video conferencing, for quick and informal communication. This can help reduce the volume of emails and make them more manageable.

6. **Unsubscribe from junk email lists**: If you receive a lot of spam or junk email, look for an unsubscribe link in the message or contact the sender to ask them to remove you from their email list.

7. **Use a separate email address for online accounts**:To protect your primary email address from spam and phishing attacks, consider using a separate, dedicated email address for online accounts and registrations.

8. **Use an email client with built-in security features**: Some email clients, such as Gmail, have built-in features to protect against spam and phishing attacks. For example, Gmail uses machine learning to detect and block spam, and also provides warnings for potentially dangerous links and attachments.

9. **Use encrypted email**: If you need to send sensitive or confidential information via email, consider using an encrypted email service that provides an extra layer of security. This can help protect the confidentiality of your messages and prevent unauthorised access.

10. **Beware of social engineering tactics**: Phishers and other cybercriminals often use social engineering tactics to trick people into revealing sensitive information or clicking on malicious links. Be aware of these tactics and be cautious of emails that ask for personal information or contain urgent or threatening language.

Overall, there are many strategies you can use to counteract the bad aspects of email and make it a safer and more productive tool. By being aware of the potential risks and challenges, and taking steps to protect yourself, you can manage your email effectively and avoid common pitfalls.

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B. CHRONIC STRESS AND HYPER-CONNEXION: INDIVIDUAL RISKS

1. ATTENTION DEFICIT AND STRESS

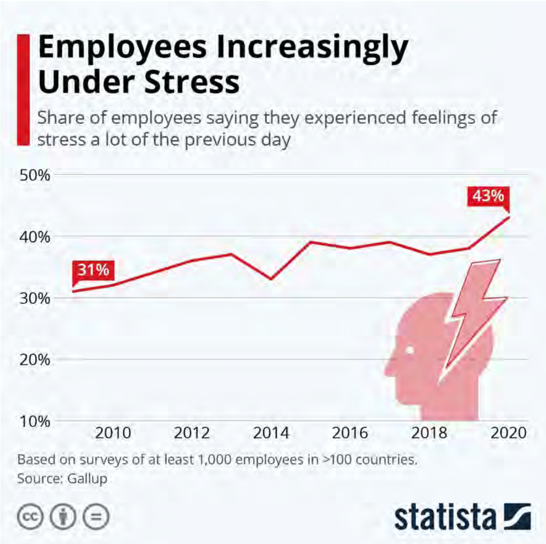
Constantly in demand and via different media, we sometimes don't know exactly where to turn. Our attention is dwindling and although it is vital for action and work, it is unfortunately not considered today with the same value as a supply of drinking water or breathable air. Caroline Sauvajol-Rialland illustrates this observation by reporting the analyses of the American psychiatrist Edward Hallowell, who considers that the younger generations are weakened by an attention deficit due to the bombardment of information. Indeed, the use of Ritalin in Canada[39] has more than doubled since 1994 among school-age children, and attention deficit is the most common mental disorder among children who are also experiencing 'cognitive overload'[40]. Our ability to focus has dropped from an average of 12 seconds to 8 seconds in a decade[41]. The crisis of attention is inherent in the democratisation of digital tools which bring with them an infinite number of possibilities, continuous notifications, a constant invitation to express oneself, to produce and to share everything.

According to the European Agency for Health and Safety at Work in Bilbao, "a state of stress occurs when there is an imbalance between a person's perception of the constraints imposed on them by their environment and their perception of their own resources to cope with them. Although the process of assessing stress and resources is psychological, the effects of stress are not only psychological. They also affect physical health, well-being and productivity".

39 Drug used since the 1990s in the symptomatic treatment of attention deficit disorder.
40 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 113.
41 Microsoft Canada, *Microsoft attention spans*, 2015.

Apart from managerial support, our professional resources are mainly the tools at our disposal, our skills in using them and the time we have to carry out our tasks. 59% of managers generally consider that digital tools contribute to making their professional life more stressful through excessive demands and operating in a hurry, through the difficulty of managing their working time and through the encroachment of the professional sphere on the private sphere[42].

It is important to differentiate between acute and chronic stress, which do not have the same effects on health and do not represent the same risks. Acute stress responds to a one-off stressor (threat or challenge) (unexpected situation, public speaking, change of job, etc.). To cope with it, the body secretes adrenaline, which causes an acceleration of the heart, muscle tension, an increase in blood pressure, respiratory rate and alertness. When the situation changes, the symptoms of stress quickly disappear. Chronic stress is a state in which our body is confronted with a situation that persists over time: every day the feeling that what we have to accomplish is beyond our means or skills. Chronic stress always has negative consequences on health: it is very costly for the body and is characterised by the secretion of cortisol which causes memory loss and in the long term prevents the production of new neurons.



Increasing stressed employees (Source: Gallup)

42 Francis Jauréguiberry, *Voluntary Disconnection to Information and Communication Technologies*, 2013, p. 5

WHY DO EMPLOYEES' ATTENTION SPANS DECREASE?

There are several factors that can contribute to a decrease in the attention span of workers. Some of these factors include:

1. **Increased use of technology**: The proliferation of smartphones and other devices has made it easier to multitask and switch between different tasks and information sources. This constant change can make it more difficult for people to focus on a single task for an extended period of time.

2. **Distractions in the workplace**: Noise, interruptions and other distractions can disrupt an employee's concentration and reduce their attention span.

3. **Stress and fatigue**: Chronic stress and fatigue can make it harder for people to concentrate and pay attention.

4. **Lack of variety in tasks**: Doing the same task repeatedly can lead to boredom and reduced attention span.

It is important to note that attention span can vary from person to person and can be influenced by a range of individual and environmental factors.

2. CRISIS OF DECISION AND TETANY OF ERROR

In the professional world, the challenge of making the right decision at the right time is crucial. In their book, Sandra Enlart and Olivier Charbonnier highlight the paradox between the need for quick and relevant decisions and our work habits, which lead to brain paralysis: "Information inflation creates a feeling of mental overload, which is conducive to asphyxiation of the mind and exhaustion of thought [...] The number of messages we process throughout the day, the number of replies we have to send, the floating attention we have to mobilise all the time, the mental concentration we have to develop in a world of noise, distraction and information overload... all this raises the level of demands expected of workers and above all prevents the existence of a mental distance which alone would protect us from the continuous flow of investment"[43]. The digital society gives us permanent, almost immediate access to an almost infinite amount of information through ever more numerous channels. This reality gives rise to several phenomena that are symptomatic of a continuously expanding decision-making crisis.

Indeed, the anxiety to disconnect for even a minute, the desire not to miss any information and the ambition to know all aspects of a subject is conceptualized under the name of FOMO "Fear Of Missing Out [44] ". FOMO results in an addiction to the connection and prevents us from taking a step back from a situation or a subject of reflection. The next level of this phenomenon is the FOBO (Fear Of a Best Option), which materialises at the moment of making a decision, of deciding on a situation by the fear that a better option will present itself in a minute, an hour or a week. This need for certainty over time is impossible to satisfy in the professional world as in private life. The third level is also well-named: FODA "Fear Of Doing Anything" and is the result of the two previous phenomena: remaining continuously connected to all communication channels and postponing a decision until being certain of its permanence is equivalent to locking oneself into a stagnation of action and a decision-making paralysis that is catastrophic in the age of entrepreneurial agility.

Illustration of FOMO - (source Dall-E)

The opportunity is increasingly significant because let's remember once again: information exists in a continuous flow and a decision, to be good, must be taken at the right time based on an overflow of data of different natures and diverse quality. To meet today's agility requirements, there is a lack of a shared logic of the right to make mistakes to enable acceptable accountability for decisions made in a working environment that is more than ever VUCA (Volatile, Unstable, Complex and Ambiguous). Currently, the right to make mistakes is not commonplace in work organisations, which is why we still find the "chains of responsibility" that stun the majority of employees in a rigid pyramidal organisation with no autonomy and above all inability to adapt to weak signals and react with agility. Without a hierarchical responsibility built on trust and assumed with benevolence, the fear of error corrodes the entire system and leads to an inability to make decisions without confirmation and re-confirmation of their validity.

43 Sandra Enlart, Olivier Charbonnier, *Société digitale : comment rester humain?*, Dunod, 2018, p. 50-56.

44 Fear of missing out = the fear of missing something.

WHY AND HOW CAN WE CREATE A WORKING ENVIRONMENT THAT RESPECTS AND ALLOWS FOR MISTAKES?

A work environment that accepts failure is important because it can foster a culture of innovation, continuous improvement and learning. When employees feel comfortable taking risks and trying new things, even if they might fail, they are more likely to be creative and come up with new ideas and solutions. This can contribute to the growth and success of the company.

In addition, a work environment that allows for failure can help employees feel more engaged and motivated in their work. When employees feel supported and encouraged to try new things, they are more likely to be engaged in their work and be more productive.

Finally, a work environment that embraces failure can help create a culture of openness and honesty, which can foster better communication and collaboration among employees. When employees feel comfortable discussing their difficulties and mistakes, they can learn from each other and work together to find solutions.

HERE ARE SOME STEPS YOU CAN TAKE TO CREATE A WORK ENVIRONMENT THAT ALLOWS FOR FAILURE:

1. **Encourage a growth mindset** : Encourage employees to see challenges and failures as opportunities for learning and growth, rather than setbacks. This can be done through regular communication, training and feedback on progress and development.

2. **Encourage open and honest communication**: Encourage employees to talk openly and honestly about their mistakes and challenges, and create a safe and non-judgmental space for these conversations to take place. This can help employees feel more comfortable taking risks and trying new things, knowing that they won't be punished for failing.

3. **Encourage risk-taking and innovation**: Encourage employees to take risks and try new things, even if they might fail. This can help create a culture of innovation and continuous improvement, and can help employees feel more committed and motivated in their work.

4. **Provide support and resources**: Provide employees with the support and resources they need to succeed, including training, coaching and mentoring. This can help employees feel more confident and empowered to take on new challenges and try new things.

5. **Celebrate failures** : Recognise and celebrate the learning and growth that can come from failure. This can help move from avoiding failure to accepting it as a learning opportunity, and can help employees feel more comfortable taking risks and trying new things.

6. **Create a supportive, open and non-judgmental culture** : by doing so, you can create an environment that is more conducive to learning, growth and innovation, and more accommodating of failure.

3. WHAT ARE THE BOUNDARIES BETWEEN THE PROFESSIONAL AND PRIVATE SPHERES?

Although digital advances have historically been linked to military needs, since the beginning of the digitalisation of work we have seen a back-and-forth between professional and personal tools: like emails, which first served professional relationships and then found their place in private habits. Then, the popularity and intuitiveness of private tools imposed them in team organisations: for example, social networks were adapted into corporate social networks. Finally, we are now seeing project engineering tools being used for family life again, as with Slack recently. As our habits and tools for private and professional life become closer and closer, it is easy to understand the entry of professional stress into the home, a lengthening of working time due to digital irruptions in the evenings and at weekends, and a reduction in mental or physical recovery time[45]. In 2014, 63% of French executives believe that connected tools disturb their private life[46] and, conversely, everyday worries have also found their digital way into the workplace.

The influence of digital technology on our private lives is therefore significant, particularly because the changes in the relationship to space and time brought about by the digital society have broken down the walls and working hours that used to separate the professional and private spheres. Now that we are increasingly using the same applications for both, cutting off notifications is tantamount to cutting ourselves off from the world, isolating ourselves professionally but also personally. Cyberaddiction and communication addictions characterised by the fear of missing something or the intense desire to receive emails and other digital solicitations are part

45 Virginie Govaere, *Stress and email: what prevention can be put in place*, Occupational Health Reference, September 2014.

46 APEC survey conducted between November 6 and 24, 2014 among 450 private sector executives

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Source: INRS

of the new drug-free addictions and present the symptoms of a psycho-social addiction: obsessive behaviours noticed by relatives but kept (or even denied) by the subject which take up a lot of time, are exercised to the detriment of other activities and are a vector of stress. These addictions, which are involuntarily encouraged during working hours, now exist permanently and without any partition between the professional and the personal.

The blurring or even disappearance of the boundary between professional and private communications increases the risk of burn-out, a state of professional exhaustion due to excessive exposure to psycho-social risks: elements that affect the physical integrity and mental health of employees within their professional environment. A report written in 2011 at the request of the French Ministry of Labour rightly states that "it should be considered that what makes a risk to health at work psychosocial is not its manifestation but its origin" [47]. Classification as a psychosocial risk therefore depends on the causes, which must be linked to the professional activity, and not on the mere observation of the consequences, which can be expressed both professionally and privately. For the reasons we have already mentioned, informational, communicational and cognitive overloads, stimulated by the digital explosion in the workplace, are well-recognised factors of psychosocial risk. They are generally grouped together under the name of infobesity, a catch-all term that combines the notion of information with that of obesity.

47 Michel Gollac (ed.), *Mesurer les facteurs psychosociaux de risque au travail pour les maîtriser* (Measuring psychosocial risk factors at work in order to control them), République Française - Ministère du Travail, 10 May 2011, p. 31

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HOW TO CREATE BETTER WORK-LIFE BOUNDARY?

Here are some strategies you can use to create better work-life boundaries:

1. **Set limits on working hours**: Decide on the hours you will work each day and stick to them as much as possible. This prevents work from spilling over into your personal time.

2. **Set clear limits on communication**: Set clear guidelines for when and how you will communicate with colleagues and clients outside working hours. For example, you can set limits on responding to emails or phone calls after a certain time of day.

3. **Take breaks and holidays**: Make sure you take regular breaks and holidays to rest and recharge. This can help prevent burnout and allow you to focus on your work better when you are in the office.

4. **Create a designated work space**: If possible, create a dedicated work space in your home, separate from the rest of your living space. This can help you focus on your work when you are at your desk, and can also help you mentally "get away from work" when you are not at your desk.

5. **Set personal goals and priorities**: Clearly define your personal goals and priorities, and make sure your work is aligned with these goals. This can help you maintain a balance and ensure that your work does not become all-consuming.

By setting clear boundaries and priorities, you can create a better work-life balance and reduce the risk of burnout.

C. STRATEGIC STAKES FOR THE COMPANY

1. THE COMPOSITION OF THE TEAMS HAS A DIRECT IMPACT ON THE RESULTS

In 2018, the direct cost of absenteeism in the private sector reached 696.4 million euros in Luxembourg[48]. This financial cost is likely to increase in the years to come, as the Luxembourg Ministry of Social Security reports that the overall absenteeism rate has been rising since 2006[49]. This increase can be explained, among other things, by the fact that the acceleration of rhythms and changes in the work environment are a significant source of stress for employees. Also, the Luxembourg Labour and Mines Inspectorate notes that there are direct links between the appearance of psycho-social risks, absenteeism and reduced productivity within an organisation[50]. In the same vein, Howard Davies, Director General of the Confederation of British Industry from 1992 to 1995, reminds us that "the mental health of employees can have a major impact on a company's performance, in the same way as the quality of relations at work or training"[51]. Psycho-social factors have a significant financial and human impact on the company and that in order to maintain good results, vigilance is required with regard to the well-being of employees.

48 Mazoyer Thierry, *L'absentéisme pour cause de maladie en 2018,* Government of the Grand Duchy of Luxembourg - Ministry of Social Security, June 2019, p. 16.

49 Mazoyer Thierry, *L'absentéisme pour cause de maladie en 2018,* Government of the Grand Duchy of Luxembourg - Ministry of Social Security, June 2019, p. 2.

50 ITM, *psychosocial risk prevention*, December 17, 2018.

51 C WHO European Ministerial Conference on Mental Health, Meeting the Challenges, Finding Solutions, 12-15 January 2005, Helsinki, Finland.

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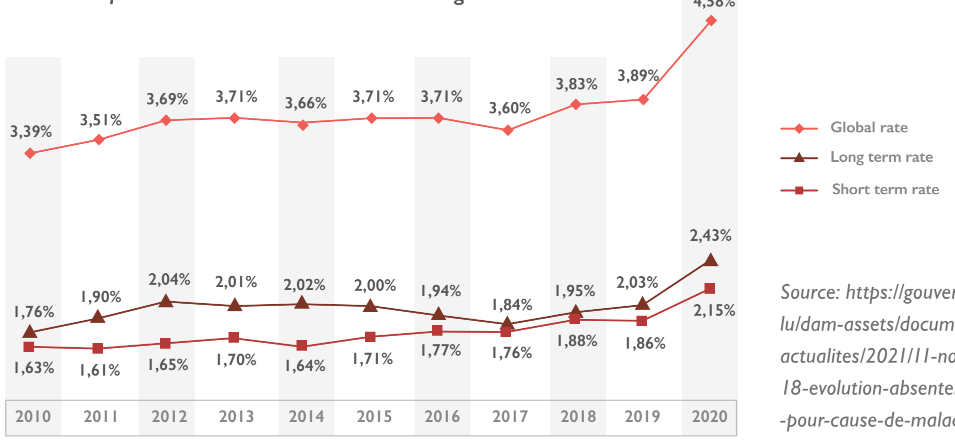
Traditionally, the priority of production companies was to be concerned with the execution of tasks carried out on the production line to ensure its performance. This is the old model based on short-term productivity without worrying about "breaking" its workforce: the employees. Since the industrial revolution, 200 years of social demands coupled with the digital revolution have complicated this equation. To be successful today, an organisation must rely on a complex system of many variables. Gwenola Bliek of Infusethic talks about a work environment that ensures the well-being of everyone and in which each employee has know-how and interpersonal skills that are developed and renewed every day in the performance of meaningful work. From this point of view, to ensure the overall performance of the company, it is necessary to reconcile the imperatives of competitiveness and the involvement of employees and their needs. In other words, not taking care of your human resources means exposing yourself to mediocre performance.

We have previously presented the concept of "employer brand", a factor in the attractiveness of the company. As a reminder, Sarah Mellouet of the IDEA Foundation sums up that "to attract (the best) talent, a good quality of life at work seems to be becoming a real charm asset"[52]. Company culture is a key factor in limiting excessive turnover. Turnover is an indicator of the social climate, working conditions and staff loyalty. While a low turnover rate can lead to a stagnation of the overall action, a high turnover rate is often costly for the company. Job vacancies, breakdowns in external relations, reduced productivity - the direct costs are fairly simple to assess. The indirect costs are less obvious: severance pay, the recruitment process, integration and training of the new employee, lower productivity at the time of departure and even more so in the case of recruitment errors. Furthermore, too many departures often have a negative impact on the team organisation and the quality of working life of colleagues.

52 Sarah Mellouet, *Beware of happiness at work...*, Business magazine, January 30, 2019, p. 1.

Evolution of the absenteeism rate in Luxembourg



Source: https://gouvernement.lu/dam-assets/documents/actualites/2021/11-novembre/18-evolution-absenteisme/Absenteisme-pour-cause-de-maladie-2020.pdf

2. CREATION AND INNOVATION AT A LOW EBB

The digital revolution has changed the way we work, resulting in ways of operating in which immediacy has taken precedence over reflection. As early as 2003, 73% of French business leaders felt that working with a sense of urgency led to a lack of perspective that could result in irrelevant decisions being made in a hurry[53]. In France, Cfdt Cadres cites the work of Yves Lasfargue, creator of the "Obergo" Research Unit, the observatory of working conditions, telework and ergostress[54], in a brochure, pointing out that it becomes impossible to "react" when one must always "react," especially when the time to think, to reflect, and to decide is undermined [55]. This submission is typical of the neo-liberal enterprise and, according to the sociologist and psychologist Nicole Aubert, creates a clear dichotomy between the individual object and the individual subject[56].

53 Microsoft, *The Impact of Information and Communication Technology (ICT) on the Development of Corporate Human Capital*, 2004.

54 The rate of ergostress is the combination of physical fatigue, mental fatigue, stress and pleasure.

55 Serge Casasus, François Fatoux, Lydie Recorbet, *Du meilleur usage des outils de communication numérique dans les entreprises*, ORSE, January 2015, p.62.

56 Nicole Aubert, Acceleration and hyperconnection in the age of financial capitalism: self-fulfillment or self-possession? In: @ la recherche du temps, Erès, Sociologie clinique, October 2018, p. 22.

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By "robotising" its actions and generally its entire activity, the company denies the existence of the individual and deprives itself of its most precious resource: human creativity.

In addition to creating a widespread sense of urgency, information and communication technologies in our work patterns also threaten our creative capacity through a loss of analytical knowledge and attentional capacity. Indeed, by devoting more and more time to searching for information, people negate the need to process and memorise it. As a result, our memory and analytical skills, which are necessary to transform an idea into practical steps towards its realization, are lagging behind. Caroline Sauvajol-Rialland defines this phenomenon as a state of "chronic impatience" and an "over-solicitation of reactionary attention"[57]. The widespread use of these "character traits" among professionals jeopardises the time for deceleration and self-focus. This is essential to enter a state of deep individual reflection allowing a collective renewal of ideas ensuring the prosperity of companies.

If creation is individual, its collective counterpart is innovation, the undisputed basis for the development and sustainability of a professional organisation. Indeed, if innovation and disruption are the markers of a company's potential for success at birth, they are also its means of remaining attractive on the market and ensuring its development and positive evolution in the long term. Damien Thouvenin of Goood emphasises the obligation of all leaders in a complex and uncertain environment to understand that every decision is fundamentally a gamble. He insists on the fact that to be innovative, an organisation must put in place collective working intelligence and take into account the numerous factors stemming from the intangible capital of the company such as the skills, motivations and values of each individual[58]. this capital only exists in the possible breathing and retirement times of employees at all levels.

57 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, pp. 98-100.

58 New Work, *Agile enterprise, sustainable enterprise, same fight*, April 9 and 10, 2019, Paris (France).

3. THE LIMITS OF THE DIGITAL SOCIETY

Digital tools were supposed to be instruments for liberating workers from any kind of function and yet they contribute to the explosion of burn-out in hyper-connected professions. The downtime and informal interactions that are so beneficial for a professional organisation are in fact greatly reduced by digital over-communication and the impression of being able to connect to anyone at the click of a button. The hyper-connectedness of employees and the fear of being absent that we mentioned earlier reduce break times and encourage isolation. Not taking the time for direct face-to-face communication contributes to the deterioration of relationships between colleagues as well as to lower levels of commitment and job satisfaction. Less pleasant human interactions, a less obvious sense of professional activity and a growing frustration at not 'getting it done' are worrying indicators of our digitalised organisations.

Another problem emerging from the hyper-digitalised modes of operation of professional organisations is their subordination to a simple breakdown. Indeed, many professional tasks are now completely or partially dependent on the proper functioning of digital tools: a network or computer hardware failure can have increasingly serious consequences. Yves Lasfargue already described this situation at the end of the 1980s when he explained that we have moved from "the civilisation of pain to the civilisation of failure". "Replace concrete steps with an escalator and you have invented the staircase breakdown," he continued, ironically referring to the global automation of society[59]. Excessive digitalisation without back-up systems is weakening certain systems that were previously resilient. In fact, in just a few years of dazzling technological progress, man has reduced his room for manoeuvre and lessened his digital independence in carrying out his work.

59 Yves Lasfargue, *Techno jolies, techno folies*, Les Éditions D'organisation, 1988.

Finally, the most worrying limitation of digital operation today is obviously security, especially the possible security flaws of digital tools. As we have mentioned, all our actions carried out on computers, smartphones and other tools are traceable, our research can be cross-referenced and our results are stored unfiltered. We currently have four generations invested in the professional market, including millennials who were born with digital tools in their hands and are less wary of them. Applying their everyday digital uses to their working patterns for collective efficiency. If the tools provided by their employers are not sufficiently adapted to their needs, they use the so-called "home" applications developed for personal use without any ulterior motive. However, these parallel communication flows are not as secure as the intra-company flows controlled by IT departments, and the fingerprints left behind by present or future manipulation of "big data" represent a considerable risk in terms of data protection, confidentiality of innovative ideas or professional secrecy.

A hyperconnected workplace, where employees are constantly connected to the internet and can work remotely or access company resources remotely, can have several potential drawbacks or disadvantages. But there are also several solutions to the disadvantages of a hyperconnected workplace.

Challenges	Recommendations
Une surcharge:	
Being constantly connected can lead to information overload, as employees may feel pressured to respond immediately to emails and messages. This can lead to increased stress and decreased productivity.	Employers can and should set clear guidelines on when and how employees are expected to respond to emails and messages, and encourage employees to take breaks and disconnect from work regularly. Employers can also provide resources to manage stress and workload.
Blurring of Boundaries	
It can be difficult to distinguish between work and personal life when employees are always connected to work resources. This can lead to a blurring of boundaries and an inability to disconnect completely from work.	Employers can develop clear policies on when and how employees are expected to be available for work, and encourage employees to establish clear boundaries between work and personal life.

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Challenges	Recommendations
Communication difficulties	
Communication can be more difficult in a remote or hyper-connected workplace, as it is more difficult to have spontaneous face-to-face conversations or to pick up on non-verbal cues. This can lead to misunderstandings or a lack of cohesion between team members.	Employers can encourage regular virtual team meetings and use video conferencing tools to facilitate face-to-face communication. Employers can also provide training on effective communication in a remote environment.
Isolation	
Working remotely or being constantly connected can also lead to feelings of isolation, as employees may not have the same level of face-to-face interaction with their colleagues.	Employers can encourage regular social interactions between team members, such as virtual team building activities or group outings. Employers can also provide resources for employees to connect with colleagues and support networks outside of work.
Security risks	
A hyperconnected workplace also exposes businesses to an increased risk of cyber attacks and data breaches, as employees can access company resources from a variety of devices and locations.	Employers can establish security protocols and policies for accessing company resources remotely, such as requiring strong passwords and two-factor authentication. Employers can also provide training on security best practices and invest in security tools and technologies.

D. WHAT POSSIBILITIES FOR DEALING WITH INFOBESITY?

1. ON AWARENESS OF BRAIN LIMITS...

In order to live in today's world of information, Steve Majerus, researcher in neuroscience and cognitive psychology at the University of Liege, explains[60] that it is essential to be aware of the limits of our cognitive system in order to optimise our professional organisation and to reduce the levels of guilt in all of us. Contrary to popular belief, our brain is not a computer but operates with a multi-level memory system. Steve Majerus chooses to comment on three of them. The first, working memory, is the memory of the present, which allows us to keep information at an instantaneous level of consciousness. Its capacity is extremely limited, it allows us to inefficiently juggle three or four pieces of information simultaneously but is only capable of correctly processing one piece of information at a time. Attention is a concept strongly linked to working memory, it requires a strong investment in concentration and can lead to mental exhaustion if overloaded. The second level is episodic memory, which is a little less limited than working memory but very difficult to mobilise in the moment.

The third level is semantic memory, which is a more or less infinite cognitive resource. It is our long-term memory, well used it allows us to prioritise information and to differentiate between the urgent, the important and the priority. By using our semantic memory in an optimal way, we classify new information at the moment, so that we can call on it in a timely manner in the future. This classification is based on categories that are specific to each individual: the more precise and appropriate they are, the more efficient the categorisation of information will be. The better the tree structure we create, the better our ability to retrieve interesting information, to have the elements we need to act and to use this almost unlimited brain resource. To make maximum use of our semantic memory, we need to work on categorisation, which is the key element in the immediate arrangement of information, allowing it to be processed later at an appropriate time and in an appropriate environment.

In our daily work life, in order to favour the use of semantic memory, it is essential for an employee to have a good understanding of the categories that exist in the company and that are necessary for his or her function. A clear classification is not only found in the construction of the brain, but also in the management of files: the network tree or the personal organisation of an e-mail box must be adapted to professional needs. For an optimised "cerebral arrangement", our cognitive and material information reception strategies must be constructed in mirror image of each other. In addition, in order to avoid burn-out, i.e. beyond one's cognitive capacities, it is important to be lucid about these, to respect sleep times and to adapt the work environment to the functioning of the brain. As the brain takes thousands of years to evolve, it is important to adapt the work environment to the cognitive functioning of the brain and not the other way around. In fact, it is necessary to have working times in silent environments and without visual pollution as often as possible.

60 Video conference interview with Dr. Steve Majerus, PhD in neuroscience and cognitive psychology, conducted on September 5, 2019.

2. ... TO PRACTICAL APPLICATIONS...

Once we are aware of our cognitive limits, we can adapt our professional practices in a relevant way. Individually, for example, we need to stop reading everything and slow down the pace of responses; collectively, we need to change our decision-making protocols. It is important to recognise that the problem of infobesity comes from our consumption of information and not from the very existence of information. Caroline Sauvajol-Rialland states on this point that "exhaustiveness is an obsolete concept in a digital world and the certainty that we will eventually 'see everything' and 'process everything' must be abandoned for good. [...] it is important to move away from the reflexive and situational mode of information processing - rapid, primary and technical, in order of urgency - to a structured and organised mode of information activity, as a strategic activity for the organisation[61]. In parallel, Yaël Guillon explains that in order to cope with the ever more intense and immediate need for agility, organisations must integrate trust as a primary rule and move down the decision-making levels as much as possible[62].

After understanding the managerial changes that digital tools imply, it is possible to adopt the networked enterprise model in practice. Let's start with collective evaluation, reasoned information sharing and the right to make mistakes that will allow agility and room for innovation in our business systems. It is high time to leave behind the old habits of division of labour, closed work teams, compartmentalisation of resources and individual performance. Professional organisation must be thought in terms of collective intelligence and knowledge management. Caroline Sauvajol-Rialland presents collective intelligence as the cognitive capacities of a community resulting from the multiple interactions between its members[63].

61 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 125
62 New Work, *The learning company: welcome to the knowledge economy*, April 9 and 10, 2019, Paris.

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To rely on this collective intelligence, it is necessary to rely on the four elements that are essential to any solution that has the ambition to fight against infobesity, namely: technology, organisation, strategy and identity (culture)[64].

However, it should be noted that infobesity is above all subjective, it is an individual feeling and everyone's resilience is different. Indeed, the threshold for triggering it varies according to personal skills and the context of professional action[65]. Just because it differs from one individual to another does not mean that its reality is not common to all, one of the specificities of inbesity being that it has a collective form and consequences on the whole organisation. As our relationship to time has become more complex in an environment of increasingly present and intrusive telecommunications, self-discipline is necessary, which involves finding ways to re-establish a healthy and balanced relationship to time. For leaders and managers, an effort to exemplify and embody change is mandatory. To facilitate the implementation of new ways of working, applications or software exist, for example, to force us to have a discipline of connection by controlling access and connection time to the Internet or social networks.

3. ... AND TECHNICAL

A collective balance must be found in professional communications, in particular to put technology at the service of people and common professional objectives. Taking the inequalities of digital maturity in the sectors of activity and considering the steps of digital transformations in a progressive way including "the will to achieve better combinations between physical and digital interactions". In the same spirit, Caroline Sauvajol-Rialland reminds us

63 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 154
64 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 33
65 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 183

that "new technologies are no more responsible for information overload than they are capable of solving it alone. [...] The unified workstation will make it possible to monitor its flows, both synchronous and asynchronous, emails, alerts, networks, conversations and will have the capacity to continue or initiate an exchange, whether it be a reply, a comment or a new idea, from the same interface.[66] ».

To work in accordance with the functioning of the semantic memory and to be able to collectively capitalise on the information processed individually, it is essential to categorise it: to add metadata which makes it possible to organise the knowledge and to enhance the value of the selected information in a common context. Jacques Attali said back in 1995 that "in the world of information, complexity reigns; it is no longer a question of saving energy but of producing and transmitting information"[67] This highlights the communication overload without a dissemination system and an efficient filing system. The time spent processing information is still too often counted as "wasted" time or as an illustration of poor organisation. However, as the quantity of information is constantly increasing, its "sometimes hazardous" processing leads to a drop in productivity if the information worked on is not shared. As a reminder, it is essential to note that employees behave as they are measured: in order to encourage behaviours that serve the collective, performance must be evaluated collectively.

66 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 140-141
67 Jacques Attali, *Les labyrinthes de l'information*, Le Monde, November 9, 1995.

Artificial intelligence (AI), self-learning technology, like any other advanced digital tool, cannot solve infobesity alone. It is already integrated into certain collaborative software: for example, chatbots that integrate each contribution immediately and make it possible, among other things, to inform users about validated collective decisions or information already shared. This function allows for the partial reduction of multiple and useless solicitations within a project team. AI still generates a certain amount of mistrust even though its development seems unstoppable: according to the Malakoff Mederic Humanis survey[68], For most French people, the use of AI seems very likely but not very desirable. According to Laurent Moscetti, Director of Accenture Luxembourg, the development of AI will benefit humans: "It is the best support for a user. AI helps to make decisions by having access to all the knowledge and skills of an organisation"[69]. However, it should be kept in mind that only when a tool is appropriated by its users can the technology have a positive influence on the organisation[70] In other words, introducing a new "miracle tool" will not work without collective acceptance.

68 Malakoff médéric humanis, Artificial Intelligence and human capital in companies, June 11, 2019
69 Fanny Jacques, *The future of consulting will involve AI*, Paperjam, April 2, 2019.
70 Caroline Sauvajol-Rialland, *Infobesity: understanding and controlling the flood of information*, Vuibert, 2016, p. 147

INTERVIEW WITH GAËTAN DE LAVILLÉON

Gaëtan De Lavilléon,
Doctor of Neuroscience,
Chairman and CEO of Cog'X

Doctor in neuroscience, Gaëtan has worked for several years on understanding the role of sleep in memory consolidation.

His research work has been awarded several times, including by the Academy of Sciences. In 2017, he joined forces with other young researchers in cognitive sciences to use knowledge of brain and behavioural functioning as a lever to improve working environments and modes. He now runs Cog'X, a consulting and training agency in cognitive sciences.

What do you think are the main causes of information overload and how does it affect individuals and organisations?

The first main cause of information overload comes from digital technology and the ease of communication it brings. Indeed, work is like a gas that occupies all available space and individually we tend to be attracted by notifications and have difficulty prioritising. So we will seek out the solicitations and often respond to them. Our brains are designed to pick up on all the stimuli in our environment, which can lead to an increase in interaction, especially since the COVID-19 pandemic. However, this interaction can be disruptive if we are working or doing something else. There can be a snowball effect, where the sum of small individual vulnerabilities can lead to an explosion in the amount of information generated in organisations.

The second main cause is the lack of work on this subject and the lack of control of the information circulating in organisations. There are charters to disconnect, but few organisations are working on the issue at a local level by determining what information can circulate, between whom and for what purpose. The consequences of information overload are harmful, because our working memory is limited and cannot process as much information as we would like. In general, the working memory cannot process more than 7 to 9 pieces of information at the same time in a few seconds. Information overload can lead to mental overload and a disruption of the cognitive system with difficulties in concentration, emotional regulation and increased fatigue. We would all benefit from controlling this information for our efficiency and well-being, but unfortunately this is not the case. Information overload therefore has an impact on cognitive functioning and the reverse is also true, as a disturbance in the cognitive system can lead to information overload.

How can individuals manage information overload and prioritise their tasks more effectively?

To manage information overload and prioritise their tasks effectively, individuals need to act preventively. Unfortunately, our brains don't always alert us to mental overload, yet we may already be experiencing the consequences and start making mistakes. To avoid this, it is important to put up barriers between the flow of information and our attention. We also need to regain control of our attention and ensure that the collective and individual organisations in which we work allow us to decide at any given moment where to direct our cognitive resources. For example, it is common to leave our email box open during a conversation, but this can distract our attention and compromise our productivity.

It is therefore important to separate times of concentration - when we need to focus on a single task - from times when we can open the floodgates and be available to receive new information and requests. Once we have received this information, it is crucial to prioritise it. However, we naturally struggle to do this, as we are often tempted to seek immediate rewards. To remedy this, it is important to formulate requests clearly and precisely, indicating the objective and the level of urgency of the task. Finally, it is important to structure the information in such a way as to avoid unnecessary urgent requests.

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Is this responsibility more at the individual or collective level?

In my opinion, it is important to consider responsibility at all individual and collective levels in organisations. This means that everyone has their own responsibility, which cannot be ignored, in managing information and workload. For example, if I decide to check my email late at night or surf social networks during my break, I am responsible for the flow of information and my own workload. At the same time, there is a collective responsibility, because when I reply to my colleagues or do not take the time to structure information that I am going to send to several people, I have a responsibility to the whole organisation. Indeed, many companies are putting in place charters to encourage disconnection, but there is often this belief that having access to all information as quickly as possible is synonymous with increased business performance. This means that there is also a clear organisational responsibility in managing information overload and workload.

To solve this problem, it is important to deal with these responsibilities in a balanced way and not to put all the responsibility on individuals or on the organisation. Companies that try to solve the problem of information overload only by signing a charter or putting rules in place will not be able to solve the problem effectively. Similarly, employees and managers who refuse to consider their own role in managing information overload and wait for HR to solve the problem will not help the situation. That is why it is important to deal with this issue in a balanced way and to take into account all aspects of individual, collective and organisational responsibility. Although I would stress that the responsibility lies much more with the management.

Pour résoudre ce problème, il est important de traiter ces responsabilités de manière équilibrée et de ne pas mettre toute la responsabilité sur les individus ou sur l'organisation. Les entreprises qui essaient de résoudre le problème de la surcharge d'information uniquement en signant une charte ou en mettant en place des règles ne parviendront pas à résoudre le problème de manière efficace. De même, les employés et les managers qui refusent de prendre en compte leur propre rôle dans la gestion de la surcharge d'information et qui attendent que les RH règlent le problème ne feront pas avancer la situation. C'est pourquoi il est important de traiter cette question de manière équilibrée et de prendre en compte tous les aspects de la responsabilité individuelle, collective et organisationnelle. Même si j'insiste, la responsabilité est bien plus à la charge de la direction.

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What strategies can organisations use to prevent information overload and increase productivity?

There are several approaches to explore. Firstly, it is important to work on the tools used to ensure that they are appropriate and effective. For example, by improving the functionality of deferred sending on Microsoft suites, or adding a setting for urgency and desired return date. Secondly, rather than waiting for it to come from the top, it is important to give the teams a hand and help them find their own way of working. This can be done by training and encouraging managers to discuss these issues with their teams and to create collective responsibility. Finally, it may be useful to create new social norms around information handling, as has been observed in the context of the current energy crisis. Although structural reforms are needed, changes at the individual level can also have an impact on the collective.

How does the proliferation of digital devices and the Internet contribute to information overload?

I'm not a specialist in new technologies, but I would simply say that it's easier to circulate information. Before, you had to send me a letter and maybe I would have received it, but nowadays, in two emails you can see each other. So, since it's easier and organisations want to produce more and more, if I have the means to do so, I'll generate a lot more information and it will go faster and faster. The question to ask is: at what point, in wanting to go faster, did we sacrifice certain things on the altar of productivity? I think that some companies are beginning to realise that by seeking to collaborate ultra-fast and en masse, they may have sacrificed certain things. We see this with psychosocial risks and crises of meaning and commitment in the companies we support. We find ourselves with an activity that is so fragmented by digital technology that we spend our day seeing bits of information circulate without having a global vision, and on top of that, it is tiring. If this continues, it can lead to a lack of motivation and to employees leaving the company.

How can information overload in the workplace be managed to improve employee well-being and mental health? Is it really about making it a concern in its own right, which is communicated internally?

Yes, I think it's something that companies need to engage with and communicate internally. It's paradoxical because it's a subject that bores everyone today - we've been talking about information management for 15 years, and yet we still must talk about it. We need to reinvent our communication on this subject, but we also need to recognise that the problems of information overload are still the same, even with the new digital tools. That's why it's crucial that everyone gets involved in solving this problem by contributing. This should not be confined to quality of work life teams, HR teams or IT teams, but should be a structural reflection on how we move information around.

For a company that exchanges a lot of information, how can we reduce the impact of information overload on the well-being and mental health of employees?

First of all, I think we need to challenge the status quo. In some companies, like the media for example, where in the accounting department we were told "we are a media company so we have to react quickly" but it's the accounting department, there is a constant pressure to react quickly even if it is not necessarily necessary. That's why it's important to make decisions at the local level, i.e. within the teams. If, for example, the marketing department of an industrial company needs to react quickly to social networks, then it is acceptable to be constantly asked to do so, but this also means that they should not be disturbed by other e-mails that have nothing to do with their business. Teams need to decide how they want information to flow according to their own needs and times of concentration. This is also true for sales departments or start-up developers who have to deal with urgent feature changes when bugs occur. Ultimately, it's up to the teams to define how they want information to flow."

... finally focusing more on your main function and not necessarily taking into consideration other things that are perhaps more secondary?

Yes, that's the point of staying close to the field and asking employees what they need to work effectively. We can guide them by asking them to detect when they have difficulty concentrating and when they lose control of their attention, which can prevent them from carrying out their activity. This amounts to a form of cognitive ergonomics, like the one used in factories to improve workers' comfort and productivity by adjusting the workstation. We should adapt this approach to digital interfaces and processes, considering the cognitive limitations of users. When we make people aware of this, we find that they can do it themselves, and it can be easily implemented at team level.

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CONCLUSION

Infobesity, a term used to describe the excess of available information and the strain it puts on our cognitive capacity to manage it, as well as the surplus of communication surrounding its dissemination, has been a growing concern in recent years.

This phenomenon, made worse by digital tools, has spread to everyone and has transformed the skills we need to effectively process and share information. It is no longer enough to simply know where to find information - we must also master the efficient and timely triple action of filtering, processing, and sharing it.

At the same time, digital professional practices have increased the speed of information circulation, intensifying expectations for rapid or even immediate feedback, and influencing the evolution of management systems. The constant influx of information creates a temporal issue, with the time needed to process it taking precedence over productive time.

Like Schopenhauer's paradox in which a group of porcupines must find the ideal distance between them to use collective heat without hurting each other with their spikes, it is a collective challenge to find the best balance between performance, politeness, and solidarity in the workplace.

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PREVENTING INFORMATION OVERLOAD IN THE WORKPLACE

Information overload is a common phenomenon in modern companies, amplified by the increasing digitization of workplaces. It can have negative consequences on the quality of information received, time management, and professional agility, as well as individual risks such as divided attention, difficulty making decisions, and digital skills gaps. Information overload can have negative collective effects on team structure, creativity, and innovation, not to mention it exacerbates the limitations of digital society. It is important to raise awareness of the limitations of the human mind and to put in place information management strategies, as well as practical and technical tools to manage this overload.

To combat information overload, IMS Luxembourg has launched the "Info Flow Savvy Academy" project, financed by the European Social Fund, the Ministry of State, the Ministry of Labor, Employment and Solidarity Economy, the Chamber of Commerce and the Chamber of Employees. The project aims to develop the specific individual and collective skills necessary to ensure a truly "tech-savvy" workforce and to promote the positive impact of digitization on all employees. The goal of "Info Flow Savvy" is to provide concrete elements to reduce professional information obesity and preserve the mental health of your employees.

This guide provides suggestions for finding the most appropriate solutions for your company and helping you implement practical applications to manage information effectively.

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IMS Luxembourg
B.P. 2085
L-1020 Luxembourg

Siège Social :
33 rue du Puits Romain
L- 8070 Bertrange

Tel: +352 26 25 80 13
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