

THE 5R OF DIGITAL TECHNOLOGY

Authors and date

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All digital actions, contrary to their "dematerialized" label, are responsible for various **environmental impacts** ranging from electricity consumption to mineral resource depletion, water, soil and air pollution, greenhouse gas emissions, and others that are not well quantified. Much of this impact takes place far from the eyes of the user, during the manufacturing and disposal of equipment. The power consumption of the devices during their use phase is responsible for one of the lowest impacts.

In general, widespread and easy-to-use digital tools are not the ones that minimize all these impacts. Rather, they correspond to the dominant economic model in which these impacts are "**externalized**": it is not the manufacturers who repair the damage caused. The consumer is therefore in a position to choose, through his or her daily actions, tools and practices that reduce all of these impacts, including those occurring during the manufacturing and disposal phase. **Extending the lifespan of equipment** is the number one priority for reducing the environmental impact of digital technology.

Stemming from the "zero waste" community's belief that "The best waste is the one we don't generate", the 5 R's describe sobriety strategies at all levels of action accessible to users of digital devices.

1) Refuse

- To buy additional equipment, especially without eco-label and not easily repairable
- To buy a replacement equipment (keep the old one or reduce the number of equipments)
- To subscribe to a service (streaming subscription, social network subscription, etc)
- Click (on a video, a download link, etc.)
- A donation (goodies, giveaways, etc)
- Ads, cookies, web bugs, useless newsletters, harmful applications (rogue, obsolete), automatically triggered videos, etc.

2) Reduce

- The frequency of device renewal (extend the warranty period when purchasing, buy according to usage, take care)
- Video viewing (VOD, streaming, pornography, tubes, social networks, etc.)
- The amount of data (lower the resolution of videos and images, ban attachments to many recipients, delete files once used)
- Data sprawl (save data on a disk rather than in the cloud)
- The number of apps on your phone, tablet; accounts on commercial sites or social networks
- The number of web searches (save the usual sites as favorites)
- The time spent in front of screens (do something else)
- The power consumption of my equipment (reduce the brightness of screens, turn off boxes and devices, put on standby)

3) Reuse or Spare

- By buying second-hand or reconditioned, by giving or reselling to actors of the circular economy
- By diverting the use
- By sharing resources with relatives, colleagues, neighbors
- By organizing data to download them only once

4) Repurpose or upcycling

- Composting all organic waste (including some packaging)

5) Recycle

- Bringing irreparable equipment to approved WEEE (Waste Electrical and Electronic Equipment) collection points

TO GO FURTHER

- Les 5R de la sobriété numérique, Profs en transition. 2019. Available at profsentransition.com [09/07/2021]
- La pollution numérique, Profs en transition. 2020. Available at profsentransition.com [09/07/2021]
- Raphaël Lemaire. La règle des 5R [en ligne]. 2021. Available at blog.zenika.com [09/07/2021]