

# Innovations

## Technostress: The Dark Side of Technology

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**Abstract:** *Technological developments have fundamentally changed how people live, work and interact in the digital world. Technostress is one of the dark sides that technology brings along with its many positive aspects. In the era of the fast technological advancement comes a new psychological phenomenon known as "technostress", due to extreme use of technology. Individuals who experience anxiety, pressure and discomfort when interacting with technology are said to be experiencing technostress. The term "technostress" describes the detrimental psychological, emotional and physical impacts that people encounter because of excessive use of technology, which is characterized by the anxiety, pressure, and discomfort individuals experience when interacting with technology. The concept of technostress is examined in this research paper, along with its impact in both personal and professional contexts. This study will also try to find out the approaches to mitigate technostress and its negative effects on individuals in the modern digital age.*

**Key words:** *technostress, technology, burnout, FOMO*

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### Introduction

Technology has become an essential aspect of daily life in the twenty-first century. Communication, entertainment, education, and the workplace have all been transformed by innovations like smartphones, social media, cloud computing, and artificial intelligence. But even though these developments have created a great deal of convenience and opportunity, they have also brought about a negative aspect known as technostress. This phenomenon happens when people become stressed, anxious, or burned out as a result of the excessive demands that technology places on them. It has become more common as technology has advanced at an accelerated rate, and it impacts people of all ages and backgrounds. Fear of Missing Out (FOMO),

a sense of unease or insecurity brought on by the perception that others are enjoying more thrilling, fulfilling, and enriching experiences, is one of the main causes of technostress. Workers, students and the Individuals are being exposed to more and more situations that can result in technostress as the digital age goes on and information technology (IT) continues to advance.

It is more crucial than ever to comprehend the causes, consequences, and potential remedies for technostress as society grows more dependent on technology. The main ideas, models, effects, and mitigating strategies related to technostress are all examined in this review of the literature.

### **Problem statement**

Technostress is a response to how people use technology and the expectations that are placed on them, rather than just the use of technology itself. It is characterized by emotions of exhaustion, anxiety, helplessness, and overload that can appear in both personal and professional front. This literature review examines the models, sources, impacts, and coping mechanisms associated with technostress.

### **Literature Review**

The term "technostress" refers to the mental and physical stress brought due to excess use of technology. It is a type of stress brought on by the need to manage the steady stream of information, stay up to date with technological advancements, and adjust to new tools and platforms. Since the psychologist Craig Brod first used the term in the 1980s, it has developed into a prominent area of study in the disciplines of organizational studies, sociology, and psychology.

Number of models have been created to measure and understand technostress. The Technostress Model, put forth by Tarafdar et al. (2007), is one of the noteworthy frameworks. Five main stressors are identified by the model:

1. **Techno-overload** (feeling overwhelmed by technology)
2. **Techno-invasion** (the intrusion of technology into personal life)
3. **Techno-complexity** (difficulty in using new technology)
4. **Techno-uncertainty** (uncertainty about technology's role or effectiveness)
5. **Techno-insecurity** (fear of being left behind due to technological change)

The relationship between these stressors and employee outcomes like job dissatisfaction, exhaustion and turnover intentions was further investigated by Tarafdar et al. (2015).

The Positive-Negative Technostress Model by Salanova et al. (2013) is another significant model that differentiates between the positive (engagement) and negative (stress) effects of technology. The model investigates how the balance between these two extremes is influenced by personal perceptions and coping mechanisms.

Multiple factors contribute to the development of technostress. These factors are typically factored into external and internal sources:

#### **External Sources**

- **Information Overload:** One of the most important sources of technostress is the kind of volume of information that users are required to process. According to Eppler and Mengis (2004), information overload can result in cognitive overload, leading to stress and reduced productivity.
- **Constant Connectivity:** The advent of smart phones, email, and social media has made individuals continuously available. This leads to boundary blurring between personal life and work, resulting in work-life conflict and increased stress (Tarafdar et al., 2007).
- **Technological Complexity and Learning Curve:** The fast pace of technological advancement can create stress among individuals who struggle to keep up with new software, systems, and devices. Users often feel the pressure to quickly adapt to these technologies, which can lead to frustration and exhaustion (Kramer, A., et al. (2019).

#### **Internal Sources**

- **Techno Anxiety:** Individuals may develop a sense of anxiety related to the fear of technology failure, as well as a sense of insufficiency when they cannot operate new tools efficiently (Salanova et al., 2013).
- **Lack of Control:** When users feel they lack control over their technological atmosphere or are not given enough independence to manage their digital tools, this can persuade feelings of helplessness and stress (Ayyagari et al., 2011).

The impact of technostress can be seen in both personal and organizational end.

#### **Personal Impact**

- **Psychological and Emotional Well-being:** Technostress can lead to anxiety, depression, and exhaustion, often manifesting as fatigue, irritability or frustration (Ragu-Nathan et al., 2008).
- **Cognitive Fatigue:** Continuous exposure to digital devices can lead to cognitive burnout, as individuals are forced to switch between tasks frequently, resulting in reduced efficiency and focus (Lazarus, 2012).
- **Health Issues:** Research has linked technostress to physical ailments such as headaches, neck pain, eye strain, and disturbed sleep patterns, often stemming from long exposure to screens (Kramer et al., 2019).

#### **Organizational Impact**

- **Reduced Productivity:** High levels of technostress can lead to a reduction in employee productivity due to distractions, inefficiency, and burnout (Tarafdar et al., 2015).

- **Job Satisfaction and Retention:** Employees who experience technostress are less likely to be satisfied with their jobs and are more prone to turnover intentions. A study by **Harris et al. (2020)** found that technostress is an important predictor of job dissatisfaction and attrition.
- **Organizational Commitment:** A high level of technostress can reduce an employee's commitment to an organization, as stress is closely tied to disengagement and feelings of alienation (Salanova et al., 2013).

## Findings

A psychological disorder known as "technostress" is carried on by a person's interactions with technology. It includes a variety of feelings brought on by excessive use of digital tools and platforms. Constant use of technology has been connected to several mental health problems, such as depression, anxiety, and sleep disturbances. By development a sense of urgency and a need for continual use of digital platforms, technostress worsens these conditions. The feeling of "never being off" can result in emotional exhaustion, burnout and elevated stress levels.

Based on different published research paper in this field, number of factors contribute to the development of technostress:

1. **Information Overload:** Individuals may become overwhelmed by the constant bombardment of information from emails, social media notifications, news updates and messages related to their jobs. Cognitive overload, which makes it hard to concentrate and complete tasks effectively, is most frequently caused by the incapacity to filter or process this huge amount of information.
2. **Constant Connectivity:** The emergence of internet connectivity and mobile devices has created a culture of "always being on." Individuals are under pressure to reply to emails, messages and work-related tasks outside of regular business hours because they are expected to always be available. Burnout may result from the blurring of the lines between work and personal life caused by this frequent connectedness.
3. **Technological Change and Adaptation:** Individuals frequently need to pick up new tools and platforms fast due to the rapid advancements in technology. For people who are not tech-savvy or who feel overtaken by the rate of change, this can be particularly stressful. The pressure is increased in a tech-driven world by the fear of falling behind or becoming out-of-date.
4. **Social Media Stress:** Social comparison, the fear of missing out (FOMO) and online annoyance are some of the new stressors brought about by the widespread use of social media. Anxiety and feelings of inadequacy can be made worse by the pressure to uphold a particular online identity or image.

5. **Lack of Technological Skills:** Individuals may find it difficult to stay up to date with new software, tools, or gadgets as technology gets more complicated. Feelings of frustration and inadequacy can result from this unfamiliarity, particularly when being proficient in multiple technologies at once is expected.
6. **Workplace Expectations:** In the professional world, employees frequently have to meet high standards for their use of technology in the workplace. Stress levels can rise because of the pressure to manage several communication channels, meet deadlines, and stay responsive. Additionally, using technological scrutiny tools at work can make people feel more watched all the time, which makes them feel more stressed.

Impact of technostress can manifest in various ways based on current research, both physically and psychologically. Some common indicators are below.

1. **Physical Symptoms:** Based on research headaches, eye strain, neck and back pain, sleep disturbances, and exhaustion are all possible symptoms of technostress. Prolonged use of electronic devices, poor ergonomics, and insufficient breaks are frequently linked to these symptoms.
2. **Cognitive Overload:** Cognitive burnout may result from the demands of multitasking and continuous information processing. Individuals may struggle to focus, make choices, or remember information. Overloading the human brain makes it more difficult to concentrate and finish tasks quickly.
3. **Emotional and Psychological Effects:** Common emotional reactions to technostress usually include anxiety, depression, irritability, and a sense of powerlessness. In the face of constantly changing technology, individuals may feel overburdened by the need to stay connected and worry that they are not doing well enough.
4. **Reduced Work Productivity:** As expected, technology is supposed to increase productivity, stress can be the opposite effect. Excess use of technology can impair productivity by reducing motivation, creating distractions, and resulting in burnout.
5. **Social Isolation:** Even though technology connects people globally, technostress can lead to feelings of social isolation. Individuals may get the feeling of a disconnect from real-world relationships as they become more occupied in digital interactions, leading to loneliness and a sense of isolation.

### Way Forward

The consequences of technostress can be extensive, impacting individuals on both personal and professional front. To tackle the negative effects of technostress, individuals and organizations may adopt strategies that promote a healthier

relationship with technology. Some effective approaches suggested by different researcher.

### **Individual Mitigation Strategies**

- **Time Management:** By adopting efficient time management can help individuals to reduce the feeling of being overwhelmed by technology. Strategies like making boundaries for work-related technology use and taking regular breaks can mitigate stress (Maier et al., 2015).
- **Learning and Development:** Ensuring that users have the skills and knowledge to operate technology confidently can reduce anxiety and increase technology acceptance (Ayyagari et al., 2011).
- **Mindfulness and Resilience Training:** Training employees in mindfulness techniques or resilience-building activities can help them manage stress and remain engaged with technology (Sonnetag, 2018).

### **Organizational Mitigation Strategies**

- **Training and Support:** Organizations can offer training programs to improve technological proficiency among employees, thus reducing techno-anxiety and complexity stressors (Lazarus, 2012).
- **Workplace Design:** Creating a work environment that supports flexibility, such as clear demarcation of work-life boundaries and reasonable expectations for technology use, can reduce stress levels (Maier et al., 2015).

So broadly adhering the belowsuggestion can be leverage for mitigating technostress

1. **Digital Detox:** Taking regular pauses from technology, like "screen-free" periods, can help lessen the constant onslaught of information and offer a chance for rest and mental recuperation.
2. **Time Management:** People can regain control over their digital lives by establishing limits on how much time they spend on social media, emails, and work-related activities. While avoiding burnout, time management strategies like the Pomodoro method can also increase productivity.
3. **Mindfulness and Stress-Relief Techniques:** Stress-Reduction and Mindfulness Techniques: Yoga, deep breathing techniques, and mindfulness can all help people focus better and manage stress. These methods can lessen the negative effects of technostress on the body and mind.
4. **Technology Training and Support:** Giving people the tools and training they need to use new technologies can boost their confidence and reduce feelings of inadequacy.
5. **Workplace Policies:** Companies can put in place measures that promote work-life balance, like restricting communication after hours and offering assistance to staff members who are feeling stressed by technology.

**Conclusion:**

Technostress is still a one of major problem in today's digital world. It's impact on both organizational performance and personal well-being. In today's technologically advanced world, technostress is a serious problem. Although technology can improve well-being, productivity, and communication but excessive use of it and the stress of being constantly connected can be harmful to Individuals mental and physical health. Individuals and organizations can reduce the negative effects of technostress by being aware of its causes, effects, and mitigating strategies. Addressing technostress will be essential to ensuring that technology continues to be a positive influence in humans lives as society changes in the digital age.

Future research should examine on exploring emerging technologies, such as artificial intelligence and automation, to evaluate their contribution to technostress. Apart from that investigate long-term interventions for managing this technostress phenomenon for better world in this new era.

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