

Creative Product Design in Hybrid and Virtual Teams

Teaching Case

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Abstract

The teaching case is based on two teams that were tasked with the design of two different digital products: a *planned* five-month project (known internally as Seasonal Sales Team; SST), in view of the forthcoming sales season; and an *impromptu* 24-hour project (known as Elec24) in response to unexpected national elections. Despite their similarities, the two projects differed in terms of their degree of virtuality (hybrid vs. virtual) and temporality (long vs. short lifespan). By focusing on Lorena, an experienced product designer who has taken on the responsibility for the two projects, the case explores how virtuality and temporality influence the team's coordination plan and creative process.

Keywords

Coordination, design and creativity, digital work, product design, management of software organisations, virtual organisation and collaboration

Learning Objectives

- Evaluate how contextual characteristics of hybrid and virtual teams may impact their coordination and creativity.
- Understand creativity as a process — rather than as an ability or output — within a temporally condensed project lifespan.
- Explore suitable coordination practices for temporally diverse virtual teams.

The protagonist: A product designer with expertise adapting digital products and experience working virtually

As a digital product designer, Lorena is responsible for all aspects of product design, including tabs, filters and content. Lorena is well-aware of the challenges of working in short-term virtual projects; but is she prepared to work in a virtual project that will only last for 24 hours? Lorena had just finished a meeting with her manager who identified her as the best-placed person due to her expertise in product design and her widespread experience in virtual work to collaborate with a sibling organisation on an impromptu project (introduced with the name of Elec24). The new project will start tomorrow with a final product design to be delivered the day after tomorrow! Elec24 is about incorporating new digital content about the forthcoming elections (e.g. candidates, polls, interviews) into the existing news portal, in light of the unexpected national elections that the government has just announced. Lorena is still expected to work for a recurring (yearly) product design virtual project (known in the company as Seasonal Sales Team [SST]), scheduled to start in the middle of the month with a planned duration of five months. SST is an established project that runs every year before the sales season. Although still a temporary project with a specific lifespan, SST is not a challenge for Lorena as she has, by now, developed well-established practices in managing the project effectively. But a 24-hour project! Is there room for creativity (a paramount expectation in the digital product design industry) in such a short lifespan? And how does Lorena deal with the fact that she will be an ‘external’ member from a different organisation? How should virtual team members — who, in the most part, do not know one another — coordinate their activities and produce creative digital products when everybody needs to

work around the clock non-stop? And finally, what are the best coordination practices for virtual teams with short lifespans to achieve their creative potential?

Case Introduction

Creativity is generally seen as the generation of ideas that are novel and useful (Amabile et al., 1996). Existing relevant literature confirms that virtual teams can be creative despite their unique challenges (e.g. geographical dispersion), and it has identified specific factors that influence creativity within the virtual context (Chamakiotis et al., 2013; Ocker, 2005).

However, these studies were based on *planned* virtual team projects which had the required material resources at hand, and whose members had the time to make the necessary preparations. But what happens to virtual teams that emerge on the spot and which may lack the luxury of time? This was the case in the Covid-19 pandemic, whereby we saw traditional teams transition to virtual ones overnight, for instance. Another example are teams set up for time-sensitive tasks (Driskell et al., 2023), whose lifespan may be unusually short. Due to such challenges, therefore, members of those teams may not have the luxury of time to develop strong interpersonal relationships and, ultimately, trust. Therefore, it is essential to understand what leaders and members of these teams can do to ensure they can produce creative solutions, despite their unique challenges.

In this teaching case, we explore this issue by focusing on a case of a virtual team with an extremely short lifespan (Elec24) our protagonist has been instructed to join, and comparing it with another project of hers (SST), which, although still temporary, is hybrid (that is involving face-to-face communication too) and of a much longer duration.

In what follows, we discuss existing literature on creativity in virtual teams and continue by introducing the two contrasting virtual projects (SST and Elec24). While the two projects we use in the teaching case are real and formed part of a larger empirical research project, they have been partially modified by adding some fictional characteristics to protect the anonymity of the organisations involved. Their contextual characteristics, however, remain intact.

Literature on Creativity in Virtual Teams

Over the last 30 years, scholars across numerous fields — such as Information Systems (IS), Human Resource Management (HRM) — have written papers that deal with the management of virtual teams. When virtual teams emerged in the mid-1990s, they were seen as an innovative way of working that broke traditional boundaries (e.g. Gilson et al., 2021). For example, workers could be part of *global* virtual teams dispersed across countries, continents, languages, cultures, and time zones. Clearly, despite the evident benefits of virtual work, such as being able to work ‘round the clock’ and to access global talent and foreign markets, virtual teams came with unprecedented challenges (e.g. Kimura, 2024). For example, how could employees trust their virtual teammates when they never met them in person? How could leadership be exercised at a distance? And how could creativity emerge when virtual workers were not able to sit down and generate ideas together?

So, what do we know about creativity in virtual teams? The existing literature in this area focuses primarily on the factors that influence creativity (Chamakiotis et al., 2013; Chamakiotis & Panteli, 2023; Ocker, 2005) and on the stages of the creative process in this context (Chamakiotis & Panteli, 2017; Nemiro, 2002). These studies show clearly that achieving creativity in virtual teams is possible, but they also reveal factors that can inhibit creativity, as well as factors that can have either an enabling or an inhibiting role depending on leadership style. For example, the issue of cultural (and often linguistic) diversity in global virtual teams is one such factor; on one hand, it may lead to language misunderstandings and slower communication, but on the other hand it may bring more ideas to the table (Chamakiotis et al., 2013). In a review paper, Abi Saad and Agogué (2023) group the factors that influence creativity in virtual teams into five categories: individual, team, leadership, technology, and climate-related.

There are also studies that focus on the creative process in virtual teams. For example, Nemiro (2002) identifies the four stages of the creative process — i.e. idea generation, development, finalisation/closure, and evaluation — and identifies different digital technologies that are found to work well for each stage. In another study, Chamakiotis and Panteli (2017) show how different leadership styles can help to boost creativity at different stages of the creative process. For example, they find that having a formal (centred) leader is important at the start of the process when team members get to know one another, while shared and emergent leadership styles work better later in the process. Shared leadership, in particular, is found to be beneficial for creativity as it allows different subgroups of experts to take on leadership positions for tasks that match their expertise.

Still, although there is evidence that creativity is present throughout the virtual team lifecycle (Chamakiotis & Panteli, 2017, 2023), Reiter-Palmon et al. (2021) argue that most literature in this area focuses on the idea generation stage and that less is known about the other stages of the creative process (e.g. idea evaluation). Additionally, given that not all virtual teams are the same, researchers have highlighted the importance of understanding how virtuality (e.g. Reiter-Palmon et al., 2021) and temporality (e.g. Abi Saad & Agogu e, 2023) influence creativity in virtual teams. Given the growing (digital) transformation of the workplace, virtual teams have become much more widespread; *hybrid* teams, in particular, whose members work partly virtually (from home or other locations, such as caf es and working spaces) and partly in the office have become even more popular. However, despite their increasing popularity and the availability of more sophisticated technologies that could help, creativity in hybrid and virtual teams is not a given.

With the presentation of our comparative teaching case, we explain what coordination practices may help teams with different degrees of virtuality and temporality (lifespans) to maximise their creative potential.

The Two Projects

Seasonal Sales Team (SST) and *Elec24* (both fictional names) are two virtual project teams in the digital product design industry. However, the two projects are not identical: SST is about *product development*, a homepage (including, for example, tabs, filters, content), in view of the sales season, whereas Elec24 is about *content design* in the light of national elections that the government has just announced. Evidently, content design forms part of product development, but it does not include any type of product implementation. Let us have a closer look at the two projects in order to understand the teams' characteristics and the two tasks in question.

SST: A virtual project with a five-month lifespan

We first begin with the presentation of the project team and the tools that will be available to them. SST has been set up to comprise eight members dispersed across Greece, Spain and the UK (i.e. one digital product designer [Lorena], five software engineers, one product manager,

and one User Experience [UX] designer who is external to the organisation). The participants include females and males of a total of four different nationalities (and four different mother tongues), as these are the members with the required experience and skills for this type of work. English, a second language for all, will be used as the formal language for communication and collaboration.

The available tools for the team are as follows:

- *Slack*, a common instant messaging application for business, for everyday chat communication between the team members;
- *Jira*, a ticketing system which allows features to be described by the product manager and for the team to pick them up and implement them;
- *Figma*, a UX design tool, for designs; and
- *Zoom*, a popular tool for team meetings, for videocalls.

We now continue with the project itself. The team will be tasked with the redesign of the product's homepage in view of the upcoming seasonal campaign, and will have five months, with incremental deliveries ('product increments') and reviews every two weeks. 'Product increments' refer to adding new features to the product in question. In the case of SST, new design of product description, search capabilities, Frequently Asked Questions (FAQs), and campaign banners could be possible product increments.

The project involves two phases: *product discovery* and *product delivery*. The product discovery phase typically starts with a meeting with all key team members who explore product ideas, and possible alternatives. This phase typically involves research, interviews with customers, and low-resolution design, with the aim (or desired output) being coming up with some ideas that the team considers are suitable for implementation. This process is ongoing, resulting in feature selection and feasibility checking with the engineers in the team. This phase will be executed in parallel with the implementation, which makes communication crucial for a successful delivery. In the digital product manager's own words,

“The general idea of the Discovery Phase is to research current tendencies in the digital market realm, getting feedback and relevant information from our customers; and to basically create the general idea of the product. This will allow us to draft the low-fidelity designs and product requirements that can be handed over to the engineers for implementation.”

Moving on, according to the digital product manager, the team is supposed to start generating product increments in the Delivery Phase:

“The team should discuss the outputs generated in the Discovery Phase, define the upcoming increment to be delivered based on the final high-fidelity design product requirements and acceptance criteria, and the engineers will implement the agreed features to include on the Homepage for the upcoming two weeks.”

The features will then be split into smaller tasks by the product manager who will be assigning them to different team members. After each product increment has been completed, the UX designer and the product manager will approve the implementation, and it will be presented to the stakeholders and taken to a new round of interviews with clients. Their feedback will be incorporated into the upcoming Discovery cycle.

Elec24: A virtual project with a 24-hour lifespan

Like before, we start with the presentation of the project team again. The team that has been put together involves two subgroups from the organisation’s offices in Spain and France, who are now expected to work on the project 24 hours non-stop in order to meet the organisation’s deadline. In this newly composed virtual team, the members of each subgroup are highly homogeneous in terms of educational, national, cultural background and mother tongue spoken (the participants from Spain are all Spanish, whereas the French participants are all French). Lorena will be joining the Spanish subgroup. English is used as the official language for communication and collaboration at the team level. Although the members of each subgroup know each other well and have worked together on other projects in the past (with the exception of Lorena who will be meeting everyone for the first time), the two subgroups will come together for the first time; they have no working history and are not expected to work together again in the foreseeable future. The virtual team has been given complete freedom to organise and coordinate themselves as they see fit throughout the 24 hours.

The technologies available to the team are as follows:

- *MS Teams*, MS Office’s messaging application for business for communication;
- *Trello*, a tool that organises tasks into boards for visualisation, organisation, coordination and record-keeping; and

- *Google Workspace*, Google’s suit of tools for synchronous documentation.

Given the extremely short lifespan of this this project, the team have been given the freedom to make their own decisions as to how they use the tools available to them as they see fit.

So, what is Elec24 tasked with? Elec24 is a virtual project that has emerged unexpectedly due to the national elections that have just been announced by the government. The task here is to design digital content that will be inserted into an existing homepage (i.e. news portal).

According to the instructions given by the digital product manager,

“Define the content related to the upcoming elections that we want to provide for our customers, such as candidates’ profile, electoral programme, polls or interviews.”

A videocall has been organised with the digital product manager where the organisation’s top management will also be virtually present at the start of the 24 hours so that the team has an opportunity to go through the brief and ask questions. The team will have to communicate with related departments (e.g. IT department to explore available capabilities and limitations of the existing news portal; news/journalism department to explore what type of content they have access to).

Comparison of the two projects

While the two projects have a lot in common (e.g. both are projects in the digital product design industry), they also have differences (e.g. team characteristics, such as degree of virtuality). The similarities and differences between the two projects are presented in Table 1 below.

INSERT TABLE 1 HERE

Table 1. Similarities and Differences between SST and Elec24

		SST	Elec24
Similarities	Geographical dispersion	Global (European)	
	Diversity of team members	<ul style="list-style-type: none"> • Multiple national cultures • Multiple native languages 	

	Organisational configuration	Inter-organisational (two or more organisations involved)	
	Continuity	Temporary (project-based)	
	Industry	Product design	
	Team size	<10 members	
	Technologies	Both synchronous and asynchronous technologies	
Differences	Degree of virtuality	Hybrid	Virtual
		Product development	Content design
	Temporality (lifespan)	Long (5 months)	Short (24 hours)
	Occurrence	Recurring	One-off
	Time for preparation	Yes	No
	Continuity	Yes	No

Discussion Questions

- What is the impact of a hybrid/virtual team's lifespan on team creativity?
- What actions can help to enhance creativity in the two projects?
- What is the impact of the degree of virtuality on team creativity?
- How could the prescribed digital technologies be used by the two teams and why?
- Can you develop a coordination plan to help Lorena with the management of each project?

Essential Readings

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