Navigating Between Order and Chaos: Temporal Organizing and Event Time in Hackathons

Christina Haefliger[1], Ioana Stefan[2], Paavo Ritala[1, 3] and Henri Hakala[1]
[1]LUT University, Business School, Finland
[2]Mälardalen University, Eskilstuna, Sweden
Entrepreneurship and Innovation, Lulea University of Technology, Lulea, Sweden

christina.hafliger@lut.fi
ioana.stefan@mdu.se
paavo.ritala@lut.fi (corresponding author)
henri.hakala@lut.fi

Abstract: Hackathons are temporary collaborative events that have the potential to accelerate innovation. While temporal pressure – which boosts creativity – has been studied from the hackathon participants' perspective, it is less clear how hackathon organizers orchestrate the temporal aspects of hackathons. Therefore, this research investigates the temporal organizing dynamics in hackathons, using a qualitative case study approach. We identify temporal organizing in hackathons as consisting of three main structuring processes: temporal preparation, temporal sequencing, and temporal condensation. We analyze how time pressure is used for creativity and the temporal structuration mechanisms that facilitate collaboration and innovation. Further, we examine how subjective and objective notions of time are intertwined in these accelerated innovation events and how the temporal design benefits the actors. Our research contributes to the literature on hackathon organizing and temporal organizing, and it contributes to practitioner insights on innovation contest management in time-restricted settings.

Keywords: Temporal organizing, Objective and subjective event time, Orchestration, Time-Constrained innovation, Knowledge creation, Creativity

1. Introduction

Hackathons are accelerated innovation processes in which individuals develop new ideas, products, software, or solve other types of challenges in an extremely limited time frame (Lifshitz-Assaf et al., 2021). The events can be held onsite with in-person attendees, fully online, or in a hybrid format, and typically span one to three days (Heller et al., 2023). Typically, hackathons are perceived as unstructured and creative innovation processes, where ad hoc "timing of tasks and knowledge flows is critical for effective innovation outcomes", and the "temporal dimension of coordination is particularly important" (Lifshitz-Assaf et al., 2021:687). Hackathons are about developing new solutions in a competitive environment and emphasize collaboration, flexibility, and speed (Flores et al., 2018).

Hackathons often bring unfamiliar solvers together to quickly solve complex challenges. The ability of temporary solver teams to swiftly exploit and leverage their team members' expertise is crucial for successful co-creation and innovative outcomes (O'Toole et al., 2023). Despite the growing popularity of hackathons as a tool for accelerated innovation, research on their temporal organizing dynamics remains limited. Prior studies have focused mainly on how hackathons are organized to attain their goals within settings that involve coordination mechanisms that boost creativity, interaction, and flexibility (e.g., Haefliger et al., 2025). Studies have also focused on the outputs of hackathons—such as the novelty of ideas generated—rather than on the underlying processes that enable successful coordination in time-constrained conditions (Lifshitz-Assaf et al., 2021). Furthermore, while prior work has examined the role of time pressure for creativity (Amabile et al., 2002), studies have not specifically looked at the mechanisms by which hackathon organizers can structure time to facilitate both collaboration and innovation. In addition, there is a call for research to understand how time is experienced subjectively in different types of organizations (Bansal et al., 2025).

Prior research has emphasized how time pressure and condensed work schedules can enhance creativity by fostering rapid experimentation (Amabile et al., 2002). However, while time compression can drive innovation, it also introduces significant challenges related to coordination, cognitive overload, and stress (Elsbach & Hargadon, 2006). To better understand such temporal organizational dynamics, hackathons provide a unique context to explore how different actors make sense of time. The different types of actors involved (solvers, mentors, partners, and organizers) also have different assumptions and expectations regarding temporal sequencing and rhythms. This results in varied subjective time perceptions, but actors also respond differently to objective decisions on how time is or should be managed (Shipp & Jansen, 2021).

Based on the research opportunity discussed above, we examine the following research questions: *How are temporal organizing processes effected in hackathons, and how do they affect temporal perceptions and dynamics of the participating actors?* To address this question, we collected rich qualitative data from five different hackathon events, including field notes, observations, and 23 interviews from the actors involved.

The findings illustrate how organizers set up temporal structures that are experienced differently by the various hackathon actors. Our insights build on the literature on temporal organizing (Bansal et al., 2025; Mosakowski & Earley, 2000; Reinecke & Ansari, 2015; Shipp & Jansen, 2021) and contribute to our understanding of hackathon organizing by identifying three different mechanisms for temporal organizing in hackathons. Temporal preparation, sequencing, and condensation help to achieve clarity, yet organizers need to carefully consider the intertwining of objective clock time and subjective, experienced time in using these mechanisms.

2. Theoretical Background

2.1 Hackathons as Temporal Events

Hackathons are short-lived collaborative innovation contests, also described as time-intense (Beretta et al., 2022) or ephemeral (Endrissat & Islam, 2022). There is a considerable amount of research done *with* hackathons, using them as examples or means in the research approach, but less *on* hackathons, focusing on the innovation format (Falk Olesen & Halskov, 2020). Hackathons have been viewed as tools to accelerate innovation in organizational culture (Komssi et al., 2014), as reflecting design activity simulating real-life settings (Flus & Hurst, 2021), popular formats to accelerate creativity (Falk et al., 2025), coupled open innovation processes where actors participate in collective intelligence generation and get value from that (Attalah et al., 2023), or as promoting entrepreneurial orientation and practices (Cavallo & Burgers, 2025). The events bring diverse people together who do not necessarily know each other from before, and who are organized in temporary teams to work on or solve a problem (O'Toole et al., 2023).

Participants in hackathons have been found to experience time pressure (Lifshitz-Assaf et al., 2021), but the organizational decisions leading to those temporal perceptions, as well as the implications of those, are little explored. In broad terms, successful collaboration in temporary teams is associated with efficiently using individuals' expertise, storing and retrieving knowledge, and aiming for productive task coordination (O'Toole et al., 2023). In this regard, hackathons can provide a setting for 'ad-hoc problem solving' which enables non-routine solutions under time constraints (see Ritala, 2013). We expect that this can lead to creativity-inducing time pressure and can be facilitated by deliberate temporal organizing mechanisms by hackathon organizers. At large, the time compression that occurs during events such as hackathons has been shown to affect participants' perceptions of time (Lifshitz-Assaf et al., 2021), yet temporal perceptions beyond participants' perceptions have been less explored in prior research. To gain deeper insight into such issues, we draw from temporality literature in the following section.

2.2 Temporal Organizing

In temporality literature (Bansal et al., 2025; Mosakowski & Earley, 2000; Reinecke & Ansari, 2015; Shipp & Jansen, 2021), the notion of time in organizations has been primarily distinguished as objective or subjective time. *Objective time* refers to time that can be precisely measured and that is not related to individual perception, but external to it (Mosakowski & Earley, 2000). 'Chronological time' or 'clocktime' are terms used to describe objective time, which is seen as unitary, thus, it can be interpreted in only one way, mechanical, related to exact measurement, and as constantly progressing and linear (Bluedorn & Denhard, 1988). *Subjective time,* i.e., how individuals and collectives experience the past, present, and future (Shipp & Jansen, 2021), is key for understanding temporality beyond objective time, yet it has not been studied much in management research (Bansal et al., 2025). Objective and subjective time are closely related in that subjective time is seen as enacted through the actions of perceiving (objective) time, mentally 'traveling through time', and interpreting time (Shipp & Jansen, 2021). Time can also be experienced as *events*, as different *rhythms,* and as *cycles*. From a hackathon perspective, *event time* refers to the perception of time as shaped through events instead of linear clock time (Lifshitz-Assaf et al., 2021). In fact, event time can be "crafted in ways that completely diverge from, or even contradict, objective time" (Shipp & Jansen, 2021:306). Accordingly, in hackathon events, we refer to event time as the way time is experienced as shaped by an event itself, by its rhythms and its cycles, rather than by the clock time (Shipp & Jansen, 2021).

An underpinning tension related to theorizing time refers to an inclination towards thinking in dualities: for instance, Bansal et al. (2025) mention the duality between objective time and subjective time as specifically prominent in management research related to temporality. However, calendar and clock-based objective time

and experiences, and perceptions and interpretations based on subjective time, are described as a conspicuously interrelated duality. Another concept from temporality literature concerns the *periodization* of time. Periodization relates to how perceived time is divided into distinct parts, using *punctuation points* (Sadeghi et al., 2025). In a similar vein as with subjective and objective time, periodization may result in dualistic interpretations, e.g., different individual and collective temporalities, creating so-called pluritemporal modes and possibly creating temporal demands (Blagoev & Schreyögg, 2025; Sadeghi et al., 2025) – a manifestation of the inherent tensions in dualities.

It is important to note that while dualities such as subjective and objective event time can be conceptually separated, in practice, such dualities are often fundamentally interrelated and complementary concepts, even if they would be in contradiction (Farjoun, 2010; Bansal et al., 2025). Therefore, it is valuable to explore how objective and subjective time intertwine during hackathons, going beyond the participants' perspective to better understand their pluritemporal aspects. Temporal structures established through social practices such as periodization can contribute to the perception of continuity and discontinuity, shaping the actions of the actors involved (Sadeghi et al., 2025). Furthermore, interpretations of events by management are seen as temporally linked to organizational change actions (Kunisch et al., 2017), hence, the timing of events affects decisions or evaluation deadlines, and actions. From a hackathon perspective, it is unclear how such different temporalities and their inherent dualities are created with periodization and how these are managed in the processes of organizing hackathons, striking a balance between the competing demands of objective (clock) time and subjective (event) time, which in turn may be perceived differently by organizers, participants, and other actors involved.

3. Methodology

We conducted a qualitative field study of hackathon events, organized by the same professional hackathon organizing firm.

3.1 Empirical Context

The empirical setting was a series of five innovation contests organized by a professional Finnish-based hackathon organizer. The hackathons are short-term events that usually last two to three days. The events usually take place during weekends, rarely during weekdays, and focus on specific challenges that need to be solved. The solutions developed are presented and evaluated by the end of the event, followed by the handover of a prize and an award ceremony. The first author collaborated closely with the hackathon organizer, which allowed us rich data access. Beyond interviewing different actors, the researcher participated as an observer in five hackathon events. While the organizer uses all three hackathon formats, onsite hackathons, hybrid, and fully virtual or online events, the researcher observed only onsite and hybrid hackathons. The organizer focuses on both technology-oriented and issue-oriented hackathons; the competitions can, for example, focus on business concepts, circular economy-oriented challenges, or on technology-focused 3D-interaction using smart devices.

3.2 Data Collection

Our main data source is derived from interviews with actors in a series of five hackathon events, all organized by one hackathon organizer. The events were all either fully onsite or in hybrid mode, which included an onsite and an online part. One of the researchers spent three months (September to December 2022) with the hackathon organizer. The 23 qualitative individual and group interviews were held in English, took place from September 2022 to May 2023, and lasted between 16 and 91 minutes. They were audio recorded and transcribed, and complemented with informal conversations, observations, and field notes. The interviewees were either solvers, coaches, partners, or from the organizing team. In the interviews, semi-structured questions were asked to understand the interviewees' views on the organization of hackathon events. Based on the responses, the temporality aspects emerged inductively. Participant observations during the events yielded further data and evidence and deepened our understanding of the empirical context. The observations were mainly done during the hackathon events, but also during the organizer's planning work, team meetings, pre-event webinars, and event preparation activities, as well as during post-event activities and the event evaluation phase.

3.3 Data Analysis

Following an inductive qualitative approach (Gioia et al., 2013), first-order codes were established and later incorporated into second-order themes. An open coding approach was used to analyze the interview transcripts

in NVivo, to establish first- and second-order codes. This took place over several months, and the coding process required iterative decisions on what temporal aspects to focus on. Initially, the first author open-coded the interview transcripts to identify temporal aspects. A critical review by the first, second, and third authors led to the removal of some codes and the recombination of several second-order themes. Joint discussions about the aggregate dimensions were held among the team. In multiple meetings, the coding structure was refined and eventually led to a new aggregate dimension for subjective temporal elements, named 'subjective event time'. Multiple rounds of coding and reviewing followed until no new insight could be drawn, and the data structure was finalized. In a subsequent step, additional aggregate dimensions to 'temporal organizing' were identified. The review then led to 'temporal organizing' as comprising three processes, namely three aggregate dimensions, 'temporal preparation', 'temporal sequencing', and 'temporal condensation'. The fourth aggregate 'subjective event time' was then included in a separate aggregate named 'benefits of temporal design', reflecting the benefits of 'creative pressure', 'learning and network expansion', and 'procedural clarity'.

In our analysis, we refer to the hackathon event organizer as the *orchestrator*, and the actors participating in solving the challenges as *solvers*. In the interviews, solvers are frequently referred to as *participants*, though this needs to be distinguished from other participating actors such as *partners* or the organizations that collaborate in organizing the event. In the interviews, *partners* are occasionally referred to as clients, yet in our analysis, we do not distinguish between the two. We use the terms 'mentors' and 'coaches' interchangeably to refer to actors engaged in coaching the solvers.

4. Findings

We identify three mechanisms for temporal organizing – temporal preparation, temporal sequencing, and temporal condensation – and the benefits of temporal organizing. *Temporal preparation* is a mechanism used by the event organizers in collaboration with the client(s) and partners in the earlier stages of organizing the hackathons to clarify time resource distribution and to create temporal structures for the event in question. *Temporal sequencing* is enforced throughout the organizing process to punctuate event phases and their specifics. *Temporal condensation* is mainly used during the event to create a sense of urgency for participants and to set tight deadlines for solvers, mentors, and evaluators. Finally, *the benefits of the temporal design* include creative pressure, learning and network expansion, and procedural clarity.

Figure 1 provides an upfront summary of the results and demonstrates how temporal organizing mechanisms are used to affect the objective and subjective temporal dynamics and eventually lead to benefits of temporal design.

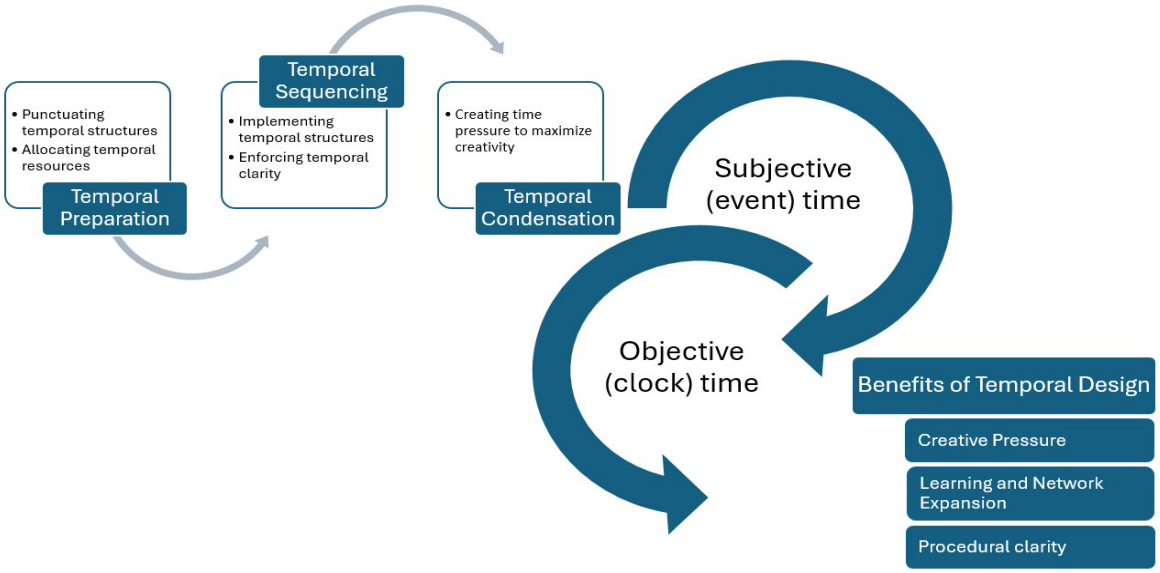

Figure 1: Conceptual model

4.1 Temporal Organizing Mechanisms

While hackathons are short-term events that usually last only a few days, these intense happenings may need long-term preparation. Preparatory activities mainly take place among the organizing team in collaboration with the client(s) and partners. Successful event organizing relates largely to the planning that goes into it.

4.1.1 Temporal preparation

The organizer initiates the planning of the event, collaborates with client(s) and partners, and involves them in the planning process. An event format is then elaborated according to their expectations. Preparation involves *planning the event*, including aspects such as understanding and including partner expectations, establishing partners' and clients' extent of involvement and time invested, discussing and deciding on the event design, and advertising the event. While the *preparation time is long, the actual event is fast*. Although short-lived, hackathon events often involve long-term planning and preparation over several months. Yet the event itself usually lasts only a few days or a weekend.

> *"The set-up of a hackathon is a big project. It starts maybe half a year at least earlier, so it doesn't happen in one day" (Partner 5).*

Knowing this, the organizer sees pre-event activities as just as important as the ones during the event phases. Emphasizing support for teams' and partners' preparation, the organizer provides a structure that guides them well ahead of the event. Registrations for an event often take place within the last few days before the registration deadline. With planning done and preparations in place, *solvers' decision on participation often clusters to the last minute*. Around half of the solvers register relatively late, as they often need to organize both their work life and private life before deciding to participate. After registration, solvers are not automatically enrolled for the hackathon event. *Selecting teams* capable of solving the challenges is a step taken by the organizers. Oftentimes, *team formation* takes place under time constraints.

4.1.2 Temporal sequencing

Throughout the planning and the implementation phases, a *temporal sequencing* process guides the structure of the activities taking place. An *efficient design and flexible format, adapted to stakeholders' interests,* provides a context that aligns and adapts to stakeholders' evolving needs. Efficient information flow supports partners in making the most of their time onsite. Similarly, being managed flexibly is appreciated by solvers. Collaboration is structured by the organizer, by defining interactions early in the planning phase and by *facilitating collaboration* among the actors. For fast-moving events such as hackathons, *temporal clarity* is paramount. Defining goals, time schedules, checkpoints, and processes contributes to promoting clarity. Transparently communicating the resources needed, schedules, and expected contributions brings clarity and is reassuring for all attendees.

> *"So, everybody knows (that) when you have a sort of clear time schedule and how much resources needed and when." (Organizer 1)*

So-called 'checkpoints' represent punctuation points, set by the organizer to structure the events. These checkpoints are built into the program to guide collaboration and are perceived as useful. Temporal clarity is, therefore, a high priority for the organizers and the solvers and contributes to a positive experience.

4.1.3 Temporal condensation

Temporal condensation happens mainly during the hackathon event phase. Its focus is on the shortened time frame, the optimal use of time and efficiency, and speedy processes to reach innovation goals quickly. Yet despite the acceleration, the organizers are aware of the lengthy 'development runway for innovations' taking longer than the short time available during an event.

Advancing efficiency is crucial in condensed event settings. Thus, *optimizing time investment and structuring for efficiency* are among the organizer's priorities. This includes communicating openly about temporal and other resources needed for the work ahead. For instance, it is crucial for the organizer to know that the client can spend time on a hackathon project. Efficient organizing and acknowledging solvers' time investment are important for solvers as it shows them that their benefits are considered, and their contribution is valued. In the planning process, a suitable temporal framing is set up. In this negotiated process between the organizer, client, and partners, finding common ground can be challenging. For example, in a *discussion about temporal framing* between the client, partners, and the organizer, a two-week period had initially been debated. This was the

client's original intention. Technology experts then argued for a weekend time span instead. Following the experts' advice, the client decided on the shorter time frame. Likewise, *event design affects condensation* in hackathon settings. Overnight work or staying late are prevalent features in this time-limited format, affecting the event's experience. The main *goal is to achieve innovation results fast.* A short, continuous time frame is seen as suitable; therefore, the events are shortened by design. While they are experienced as hard and focused work by solvers, the upside is seen in the events having a predetermined, foreseeable end.

> *"You have only this amount of time to solve a problem, come up with a solution for some broad thing, make something with it." (Team 3, solver 7)*

Innovating in a fast context is challenging, regardless of teams' talents. Yet, coming up with solutions and potentially winning a prize is exciting for solvers. Essentially, achieving results quickly adds to a positive experience for solvers and partners alike.

4.2 Benefits of Temporal Design

The temporal design that structures the event's activities, interactions, and outcomes yields benefits regarding creative pressure, learning and network expansion, and procedural clarity. A fast pace and a short time frame are considered efficient and productive. *Creative pressure* is built by keeping the preparation time for solvers relatively short. For example, the organizer keeps the time between team selection and event start short to maintain the solvers' interest.

> *"If we have a bit more time, great, but then if we start having too much time, people drop out, because they lose interest, because it's happening too slow for them." (Organizer 5)*

Solvers like to test their capabilities and develop new business concepts. To them, a short time frame and creative pressure are attractive and accelerate testing and learning. Moreover, the speedy format can produce feelings of stress and urgency due to pacing. Solvers might drop out early or decide not to join at all if the challenge feels overwhelming. As such, time is of essence in hackathons, not only for solvers but also for coaches who might only attend part-time. Technological challenges may cause delays and increase pressure, forcing solvers to prioritize. Partners were impressed by how solvers did not get stuck and overcame technological problems, and by the solutions delivered.

Interaction among the attendees generates benefits for *learning and network expansion*. Among mentors and teams, among mentors themselves, and with partners, interactions led to learning and networking opportunities. Some coaches had previously attended hackathons as solvers and were therefore well acquainted with the temporal pressure.

Organizing complex, rapid programs gets easier through iterative learning. An accelerated temporal design is thus enabled by previous organizational learning. Positive perceptions and exceeded expectations contribute to an event's *procedural clarity*. Partners expect the organizer to bring efficiency to the process; for example, planning of onsite logistics early on is seen as advantageous. Role clarity additionally contributes to partners' positive perception. Finally, framing innovation competitions towards future outcomes adds clarity. For example, instead of awarding a prize for the best (past) service provider, hackathon prizes award outcomes with the best potential for implementation or benefit for potential users. Framing awards as forward-looking, instead of backward-oriented accolades, benefits the way the innovation format and the prize are perceived.

5. Discussion and Implications

In this study, we addressed the research questions: How are temporal organizing processes effected in hackathons, and how do they affect temporal perceptions and dynamics of the participating actors? Temporality in hackathons has mainly been explored in terms of time pressure from the participants' perspective (Lifshitz-Assaf et al., 2021). We build on this research by exploring how hackathon organizers create temporal structures for hackathon events and what mechanisms they use to do so (Pentland et al. 2025). We identify three mechanisms for temporal structuring, namely temporal preparation, temporal sequencing, and temporal condensation. The mechanisms help organizers intertwine subjective (event) and objective (clock) time (Shipp & Jansen, 2021) by planning and applying objective time structures and orchestrating the different subjective time perceptions of participants, mentors, evaluators, and even clients. This reinforces an ecosystem approach on such temporary collaborative events (Poblete et al., 2022; Jensen et al., 2024). Our empirical analysis further shows that this type of temporal structuring achieved by the hackathon organizers produces several short- and long-term temporal benefits, including creative pressure and procedural clarity (short-term) and learning and network expansion (long-term).

5.1 Theoretical Contributions and Future Research Implications

Our findings allow us to make three contributions to the literature. First, we contribute to the hackathon organizing literature (e.g., Lifshitz-Assaf et al., 2021; Heller et al., 2023; Flus & Hurst, 2021; Cavallo & Burgers, 2025; Haefliger et al., 2025) by unbundling temporal organizing mechanisms that organizers can utilize, and we connect these mechanisms with the benefits of this temporal design, demonstrating the usefulness of such mechanisms in hackathon organizing. While previous literature has recognized the importance of temporal aspects in hackathons as a driver for innovation (Lifshitz-Assaf et al., 2021), as well as more general hackathon organizing mechanisms (Haefliger et al., 2025), this is the first study focused on how temporality can be deliberately designed as an organizing principle in hackathons. Temporal mechanisms complement the other mechanisms and organizational practices that hackathon organizing involves and provide an important dimension to the overall organizational framework of hackathons and other time-bound innovation events.

Second, our study provides a broader contribution to temporal organizing literature. While previous literature has shown the benefits of temporal pressure for creativity (Amabile et al., 2002), including hackathon settings (Lifshitz-Assaf et al., 2021; Beretta et al., 2022; Flores et al., 2018), our study demonstrates how time-bound events can be designed to utilize different temporal organizing mechanisms, including preparation, sequencing, and condensation of time. All these mechanisms have different effects on temporal perceptions of different actors and demonstrate the 'temporal toolbox' that organizing entities have at their disposal. Furthermore, more knowledge on temporal contexts in innovation contests is needed, since novelty, usefulness, and creativity are in these cases situated within a specific time frame, and generated value may be lost over time (Falk et al., 2025). We call for further research on these and other temporal aspects of creativity and innovation.

Third, we contribute to the broader organization management literature by proposing concrete mechanisms that help event organizers intertwine subjective and objective time (Bansal et al., 2025; Shipp & Jansen, 2021). Prior studies have shown that such mechanisms used for temporal structuring also have a role in shaping organizational becoming and stability in permanent, established organizations (Pentland et al., 2025). However, such mechanisms for temporal structuring and their roles have been less explored in temporary organizations such as hackathons (see e.g., Endrissat & Islam, 2022).

Future research can build on our insights to better understand the management of time in organizations (Bansal et al., 2025), temporary teams (such as hackathon teams), and in broader collectives such as meta-organizations and ecosystems. Furthermore, our finding that subjective time and periodization of time are helpful in achieving creative outcomes leaves open questions about the variety of resulting temporal complexities, which is an important topic for further research (see also Sadeghi et al., 2025).

5.2 Practical Implications

While complex cognitive processes take time, and spurring creativity without a fair amount of time is unlikely, the absence of time pressure does not lead to creativity either. A key to promoting creativity is getting solvers to buy into being on a mission, seeing their work as important and urgently needed. Likewise, it is vital to set aside specifically blocked worktime for solvers to focus on the task at hand and to be shielded from interruptions and distractions, thus offsetting the effects of time pressure (Amabile et al., 2002). Framing hackathon challenges as missions – with a clear time limitation – and relatedly adopting an 'ad-hoc problem solving' approach can further help to overcome the 'rigidity trap' typically occurring in organizational change and ideation (Ritala, 2013). Furthermore, hackathon organizers can consider adding more time and space pre- and post- events. Hackathons require considerable planning time to ensure a fast pace when event time kicks in. Likewise, ample time is needed for post-event evaluation and analysis, enabling organizational learning and follow-ups for the organizers as well as those who have sponsored the competitions.

Ethics declaration: For this research, ethical clearance was not required.

AI declaration: For this research, the writing assistant software tool *Grammarly* was used.

References

Amabile, T.M., Hadley, C.N. and Kramer, S.J., 2002. Creativity under the gun. Harvard Business Review, Vol 80, pp 52–63.

Attalah, I., Nylund, P.A. and Brem, A., 2023. Who captures value from hackathons? Innovation contests with collective intelligence tools bridging creativity and coupled open innovation. Creativity and Innovation Management, Vol 32, No. 2, pp.266-280.

Bansal, P., Shipp, A.J., Crilly, D., Jansen, K.J., Okhuysen, G.A. and Langley, A., 2025. Theorizing time in management and organizations. Academy of Management Review, Vol 50, No. 1, pp 7–19.

Beretta, M., Obwegeser, N. and Bauer, S., 2022. An exploration of hackathons as time intense and collaborative forms of crowdsourcing. IEEE Transactions on Engineering Management, Vol 71, pp 2403–2417.

Blagoev, B. and Schreyögg, G., 2025. Eigenzeit: A new lens on temporal complexity. Academy of Management Review, Vol 50, No. 1, pp 93–113.

Bluedorn, A.C. and Denhardt, R.B., 1988. Time and organizations. Journal of Management, Vol 14, No. 2, pp 299–320.

Cavallo, A. and Burgers, J.H., 2025. Building more entrepreneurial organizations through external innovation contests. The Journal of Product Innovation Management, Vol 42, No. 3, pp.582–613.

Elsbach, K.D. and Hargadon, A.B., 2006. Enhancing creativity through "mindless" work: A framework of workday design. Organization Science, Vol 17, No. 4, pp 470–483.

Endrissat, N. and Islam, G., 2022. Hackathons as affective circuits: Technology, organizationality and affect. Organization Studies, Vol 43, No. 7, pp1019–1047.

Falk Olesen, J. and Halskov, K., 2020, 10 years of research with and on hackathons. In Proceedings of the 2020 ACM Designing Interactive Systems Conference, pp 1073-1088.

Falk, J., Chen, Y., Rafner, J., Zhang, M., Bjerva, J. and Nolte, A., 2025. How Do Hackathons Foster Creativity? Towards AI Collaborative Evaluation of Creativity at Scale. arXiv e-prints, https://arxiv.org/abs/2503.04290

Farjoun, M. 2010. Beyond Dualism: Stability and Change as a Duality, Academy of Management Review, Vol 35, No. 2, pp 202–225.

Flores, M., Golob, M., Maklin, D., Herrera, M., Tucci, C., Al-Ashaab, A., Williams, L., Encinas, A., Martinez, V., Zaki, M. and Sosa, L., 2018. How can hackathons accelerate corporate innovation? In: Advances in Production Management Systems. Production Management for Data-Driven, Intelligent, Collaborative, and Sustainable Manufacturing: IFIP WG 5.7 International Conference, APMS 2018, Seoul, Korea, August 26–30, 2018, Proceedings, Part I. Springer International Publishing, pp 167–175.

Flus, M. and Hurst, A., 2021. Design at hackathons: new opportunities for design research. Design Science, Vol 7, pp 1-24.

Gioia, D.A., Corley, K.G. and Hamilton, A.L., 2013. Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. Organizational Research Methods, Vol 16, No. 1, pp 15–31.

Haefliger, C., Ritala, P. and Hakala, H., 2025. Unbundling hackathon orchestration mechanisms: Relational brokering, contextual configuring, and legitimacy building. Creativity and Innovation Management. [Online ahead of print].

Heller, B., Amir, A., Waxman, R. and Maaravi, Y., 2023. Hack your organizational innovation: Literature review and integrative model for running hackathons. Journal of Innovation and Entrepreneurship, Vol 12, No. 1, pp 1–24.

Jensen, S.F., Kristensen, J.H., Christensen, A. and Waehrens, B.V., 2024. An ecosystem orchestration framework for the design of digital product passports in a circular economy. Business Strategy and the Environment, Vol 33, No. 7, pp 7100–7117.

Komssi, M., Pichlis, D., Raatikainen, M., Kindström, K. and Järvinen, J., 2014. What are hackathons for?. IEEE Software, Vol 32, No. 5, pp 60-67.

Kunisch, S., Bartunek, J.M., Mueller, J. and Huy, Q.N., 2017. Time in strategic change research. Academy of Management Annals, Vol 11, No. 2, pp 1005–1064.

Lifshitz-Assaf, H., Lebovitz, S. and Zalmanson, L., 2021. Minimal and adaptive coordination: How hackathons' projects accelerate innovation without killing it. Academy of Management Journal, Vol 64, No. 3, pp 684–715.

Mosakowski, E. and Earley, P.C., 2000. A selective review of time assumptions in strategy research. Academy of Management Review, Vol 25, No. 4, pp 796–812.

O'Toole, J., Ciuchta, M.P., Neville, F. and Lahiri, A., 2023. Transactive memory systems, temporary teams, and conflict: Innovativeness during a hackathon. Journal of Management, Vol 49, No. 5, pp 1633–1661.

Pentland, B.T., Kremser, W. and Goh, K.T., 2025. Path nets: Concurrence and recurrence in the dynamics of organizing. Academy of Management Review, Vol 50, No. 1, pp 114-137.

Poblete, L., Kadefors, A., Rådberg, K.K. and Gluch, P., 2022. Temporality, temporariness and keystone actor capabilities in innovation ecosystems. Industrial Marketing Management, Vol 102, pp 301–310.

Reinecke, J. and Ansari, S., 2015. When times collide: Temporal brokerage at the intersection of markets and developments. Academy of Management Journal, Vol 58, No. 2, pp 618–648.

Ritala, P., 2013. Linking the unlinked: Knowledge-based perspective on non-routine change. Management Decision, Vol 51, No. 6, pp 1176–1189.

Sadeghi, Y., Islam, G. and Van Lent, W., 2025. Practices of periodization: Toward a critical perspective on temporal division in organizations. Academy of Management Review, Vol 50, No. 1, pp 51–71.

Shipp, A.J. and Jansen, K.J., 2021. The "other" time: A review of the subjective experience of time in organizations. Academy of Management Annals, Vol 15, No. 1, pp 299–334.