A Theoretical Framework for Game Jams in Applied Contexts

Andrew J. Reid, Phillip Smy, Iain Donald
School of Design and Informatics
Abertay University
Dundee, Scotland
{a.reid, p.smy, i.donald}@abertay.ac.uk

INTRODUCTION

Game jams encourage participants to define, explore, create, and disseminate games with respect to a pre-defined time-period and under specified constraints. Various methods and approaches have helped with establishing conventions, rules, and processes, and culture surrounding game jams, with practical guides for participants (Kaitila 2012) and organisers (Cornish et al. 2017) available. The popularity of game jams has resulted in an increased demand for game jams that explore a range of different topics, issues, and objectives through game development (Eberhardt 2016; Pirker et al. 2016). Stakeholders interested in 'applied game jams' have utilized traditional game jam formats to explore game development across various contexts, including health and wellbeing (Preston, 2014), community engagement (Decker et al. 2015), and social development (Myers et al. 2019). There is a perceived gap to establish a universal method with which to design, execute, and evaluate applied game jams against intentional outcomes.

THE APPLIED JAM FRAMEWORK

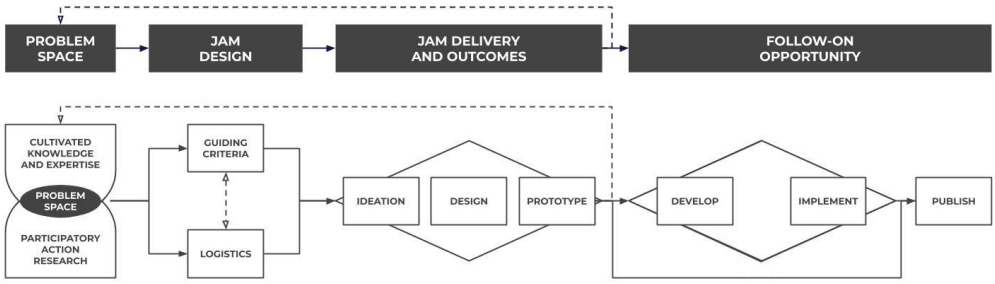

Figure 1: Applied Jam Framework.

The authors present the Applied Jam Framework, a holistic framework for coordinating and assessing applied game jams (Figure 1). The framework considers four dimensions in facilitating and evaluating an effective applied game jam:

- Identifying an issue or outcome to be considered ('Problem Space');
- Defining an appropriate game jam format ('Jam Design');
- Establishing, maintaining, and collating community engagement with the game jam ('Jam Delivery and Outcomes');
- Assessing the game jam against pre-defined outcomes and identifying further partnership opportunities ('Follow-on Opportunity').

Proceedings of DiGRA 2020

Problem Space

The ‘Problem Space’ defines the overall intention of the applied game jam. The Problem Space emerges from a cultivated understanding and expertise, combined with the intent to discover solutions through participatory action research such as game jams. The Problem Space outlines intentional design constraints: the specific objectives or outcomes to achieve through game jams. This defines an objective and transparent set of criteria with which to design a game jam, and objectively evaluate its outcomes.

Jam Design

The ‘Jam Design’ considers the manner in which the game jam approaches the issues outlined by the Problem Space. The manner encompasses two characteristics to consider when using the Applied Jam Framework. Firstly, the ‘Guiding Criteria’ considers the available criteria to direct and support the development of games during the game jam. The is typically expressed as a ‘theme’ evidenced by events such as the Global Game Jam and Ludum Dare, but this can also be defined beyond the constructs of an abstract topic, such as a creative brief or hypothetical scenario, with which the development of games can emerge. Any supporting materials with which to support participants during the game jam, such as presentations and documentation, should be readily available at this stage.

Secondly, the concept of ‘Logistics’ defines matters which relate to affordances of time and resource for the game jam. This is ring-fenced by the duration of the game jam, such as hours-, week-, and month-long, but should also consider any hours that participants should expect to engage with the event. This is effective in setting expectations and positive work behaviors within the game jam. A strategy on resources should include, but not be limited to, hardware and software provision, work- and desk-space, technical support, and supervision and community management. The game jam should be explicit in its logistical provision and operation in order to minimize assumptions of participant expectations, which could influence participants’ game jam experience and, ultimately, the developmental outcomes.

The design and confirmation of the Jam Design is usually organic and inclusive of the expertise of all stakeholders. Stakeholders with knowledge of a problem to solve can define the contents of the Guiding Criteria and establish the key features that a game should aim to address. Stakeholders with experience of game jams as a participatory action research activity can guide the Logistics of the event with respect to available time, resource, and the realistic expectations of what is achievable within these constraints. In designing applied game jams, it is common to have continual negotiation in order to align expectations with outcomes.

Jam Delivery and Outcomes

‘Jam Delivery and Outcomes’ concerns the running and maintenance of the game jam. Delivery of game jams can vary in nature. In one case, game jams facilitates exploratory approaches built upon self-direction, disruption, and autonomy. In other cases, the delivery of a structured process attempt to focus development on a specific outcome to the game jam, while minimizing the risk of diversification.

Value from a game jam can be deduced from two perspectives. Firstly, value is determined through reviewing the game jam's achievement of intended outcomes as defined within the Problem Space. This could be assessed through evaluating created games and their alignment with the intended outcomes, the volume and level of participant engagement, and the satisfaction of client stakeholders with investment in the game jam. Secondly, value can be deduced implicitly through participation and experience of the game jam. This includes participants' learning of skills and subject

matter as a result of the game jam, and stakeholders understanding and appreciating the game development process.

Follow-on Opportunity

'Follow-on Opportunity' categorizes potential opportunities that emerge following the delivery of the applied game jam. The CDC Games for Health Jam supported a two-month internship resulting from the game jam, which operated as an exploratory and facilitative process to identify and support a single applied game project and its continuous development post-event. Other opportunities within this space include securing funding to continue the project, using applied game jam as evidence of professional partnerships, compiling and disseminating outcomes from events as contribution to the field of applied game jams, and knowledge-transfer partnerships between industries and academia.

FUTURE WORKS

The Applied Jam Framework intends to assist in the co-design, delivery, and evaluation of applied game jams with relevant stakeholders. The framework benefits from defining the purpose and intentions of an applied game jam, particularly in managing stakeholder expectations of intended outcomes. The Applied Jam Framework aims to conceptualize a trajectory for related follow-on opportunities, which aimed to establish and sustain partnerships between industry and academic stakeholders. The ongoing application and critique of the Applied Jam Framework is required to evidence its contribution to the practice, delivery, and analysis of applied game jams.

BIBLIOGRAPHY

Cornish, S., Farber, M., Fleming, A. and Miklasz, K. (2017) *The Game Jam Guide*. Pittsburgh, PA: ETC Press.

Decker, A., Eiselt, K. and Voll, K. (2015) Understanding and Improving the Culture of Hackathons: Think Global Hack Local. *Proceedings of the 2015 IEEE Frontiers in Education Conference (FIE), 21-24 October, El Paso, TX*.

Eberhardt, R. (2016) No One Way to Jam: Game Jams for Creativity, Learning, Entertainment, and Research. *Proceedings of the International Conference on Game Jams, Hackathons, and Game Creation Events (ICGJ 2016), 13 March, San Francisco, CA*.

Kaitila, C. (2012) *The Game Jam Survival Guide*. Birmingham, UK: Packt Publishing.

Pirker, J., Kultima, A. and Gütl, C. (2016) The Value of Game Prototyping Projects for Students and Industry. *Proceedings of the International Conference on Game Jams, Hackathons, and Game Creation Events (ICGJ 2016), 13 March, San Francisco, CA*.

Preston, J. A. (2014) Serious Game Development: Case Study of the 2013 CDC Games for Health Game Jam. *Proceedings of SeriousGames'14, 7 November, Orlando, FL*. pp. 39-43.

Myers, C., Piccolo, L. S. G. and Collins, T. (2019) Game Jams as a Space to Tackle Social Issues: an Approach Based on the Critical Pedagogy. *Proceedings of the International Conference on Game Jams, Hackathons, and Game Creation Events (ICGJ 2019), 17 March, San Francisco, CA*.