# From Tiny Use Cases to JVMG Labs: An iterative approach to infrastructure development and training in the Japanese Visual Media Graph Project

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Note: The numbers in the square brackets in the text indicate the slide number to which the given part of the text belongs.

[1]
Hello, and welcome to our project showcase on behalf of my co-presenters, Magnus Pfeffer and Zoltan Kacsuk, and myself, Martin Roth.

[2]
The Japanese Visual Media Graph project – JVMG for short – is based at Stuttgart Media University in cooperation with University of Tübingen and University Library of Tübingen, and funded by the German Research Foundation.

[3]
The JVMG project is premised on the insight that often we as researchers of Japanese visual media such as manga,

anime or games rely on the online databases and wikis compiled by fan and enthusiast communities to look up details about works, franchises, or genres. The amount of high quality data in community-based online resources is unmatched.
Thus, the aim of our project is to work together with online fan and enthusiast communities in order to combine their databases into an integrated knowledge graph that can be queried across individual resources and used for large-scale quantitative research on Japanese anime, manga, video games and related domains.

[4]
Our project has three guiding principles: as already mentioned, we wish to respect the licenses and guidelines of the communities and to work together with them whenever possible. Second, the aim of the JVMG is to be useful for research, thus our development is guided by the needs and feedback of the researchers working with Japanese visual media. Finally, we are committed to open development on every level.

[5]
We currently have three main community sources and two other data sources in our knowledge graph. Some of these

have wider scopes of interest, others focus in on one specific media or genre, or a particular aspect of the domain, such as characters.

[6]
The Tiny Use Case workflow methodology – or TUC for short – is a central aspect of the way our project is run. The TUC approach was pioneered by the Databased Infrastructure for Global Games Culture Research project team. It is inspired by agile software development principles, emphasizing a cycle of continuous incremental innovations and assessments. Thus, each TUC is ideally three to four months long, and each one confronts the data with a specific question or aim, and should deliver new insights and requests for the infrastructure development process.

[7]
The aim of TUCs is first of all to explore the data's usability and adequacy for research: uncovering its limits, quality issues and fit. Second, they act to empower the researcher, bringing their needs to the forefront, for example, in relation to the functions of the frontend. Third, the TUCs serve as a zone of encounter where a common language is forged and disciplinary boundaries are

crossed between library and computer science on the one hand, and humanities and social science on the other.

[8]
Tiny Use Cases are, of course, not without their pitfalls. First and foremost among them, the fact that they might not be so tiny after all. Overambitious use cases are the biggest threat, as these can drag on without yielding timely feedback for the development process. Vagueness in formulating questions for TUCs can also be a serious issue, especially since inadequately defined research questions can remain undetected for quite some time within the TUC process. Finally, the TUC approach requires that an end point be reached and the research question be closed, which can be much harder than it seems, as researchers can get more and more invested in a given topic.

[9]
Here are four example TUCs that were undertaken as part of the project. Exploring recurring patterns in character creation in visual novel games. Examining the concept of media mix by looking at networks of co-appearing characters. Do character personality traits follow ideas about the connection between blood type and personality?

And, a census of characters in Japanese visual media exploring their changes in gender and age distribution over time.

[10]
Our TUCs in the project have yielded numerous insights. In particular, they have helped us understand how the data can be used for corroborating prior findings, generating new hypotheses, or identifying connections across data sources. They have also been crucial for identifying both the limits of the data and the types of questions that can be answered with the data. Furthermore, we have learned a lot about data literacy issues that can hold humanities researchers back, as well as the limits of the tools and hardware available to us.

[11]
JVMG Lab events hope to distill all these experiences into an in-person hands-on training opportunity, where we work together with a small number of participants to enable them to conduct research with the JVMG knowledge graph. These Labs are also built around TUCs, which will be used as a vehicle for introducing humanities researchers to data work. We will be focusing on pre-discussed mini-TUCs with each participant during the

event, and also use these mini-TUCs as the focal points for active discussion around the possibilities and challenges that come up when working with the JVMG knowledge graph.

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Thank you very much for your attention and we look forward to your questions. Please don’t hesitate to reach out if you are interested in learning more about or participating in the JVMG Labs.