## EDITORIAL PREFACE

## The Dancing Bear is Gaining Endangered Status: Games User Research for Development

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A Dancing Bear is a piece of code, or software functionality that is written to do a task; not to do it well, not to do it optimally, but just to do it. Often, its value derives from the quick fix, and introduction to the market. One can typically identify software that is a Dancing Bear by examining how much training support is necessary to help people use it. Often, the Dancing Bear is the result of a lack of user research, which should examine how people expect to do a task.

It is important for development and design teams that they realize that they are not their users. By recruiting actual users, learning methods in contextual inquiry, and applying learning research and methods, teams can develop products with effective ergonomics, difficulty tuning, and insight into the behavioral economics of software usage for their users.

This approach is of great interest to developers and product managers. There is currently great demand for students trained in user experience research. User experience is now viewed as a process that happens before, during, and after usage. It is more than usability; it is the

emotional response to a device. Great design allows the device to disappear, and the experience to become central and present.

As game research on the design and outcome of human interaction moves forward, the experience of the user becomes more important as a measure. The presence of Internet of Things is emerging, although subtle, and we are no longer relied upon to knowingly interact. Our homes observe our presence or absence, and adjust accordingly. Our personal software adapts to usage, and predicts what we would like to do, what we are looking for-and much of this adaptive behavior comes from the growing accessibility for beginners and game play. This accessibility has lowered the barriers and of game play for beginners, and has been adapted to increase accessibility a greater range of devices. It has become a given that user experience is important, and that we identify the importance of the user's experience in research and development as methods and measure for successful development. In many ways, it portends endangered status for the Dancing Bear. This issue ranges from research on user coping strategies; when players experience harassment and their coping strategies; the psychophysics of 3d vision on stereoscopic displays; a post mortem of the development of a serious game; an examination of development heuristics; and a meta analysis of exergames research.

In article one, the authors Michikyan, Lozada, and Tynes examine adolescents' increased use of virtual environments (e.g., online games, social networking sites) for coping strategies when they experience harassment. The study used qualitative methods to describe adolescents' (N = 245; Median <sub>age</sub>  $\approx 16$ ) worst online experiences and to examine their coping strategies in managing these stressful events online. They speculate, that youth may use social and emotional competencies to successfully manage their negative affect and decision making related to social media use.

In article two, McMahon and Garrett examine the potential for enhancing the development and application of spatial knowledge within a 3D space. They posit that 3D virtual environments can approximate simulated interactions from the real world by providing users fluid control inside a dynamic three-dimensional space. They examine whether high visual fidelity affords depiction of authentic virtual spaces, where the behavior of between depicted objects, their relationships with each other, and the user can be faithfully represented, while fostering sensations of presence and immersion.

In article three, Strååt, Rutz, & Johansson argue that games that are challenging and immersive depend upon the story, mood, and gameplay –not in the interaction with the video game. They present a method examining this position and whether video game heuristics are able to capture and evaluate these softer values of flow and immersion of gameplay in video game interaction.

In our invited article, Katz, Goldberg, Khanal, Kahol, and DeMaria provide a post mortem of their development of a serious game for medical training. They describe the production of video game technology to provide healthcare practitioners a realistic and highly interactive simulated environment so they can learn not only psychomotor skills (e.g., lumbar puncture, endotracheal intubation), but also key management and non-technical steps, which make their tasks safer. Their game trains in the placement of central venous catheter (CVC). CVC-related complications are a large burden on our healthcare system. Many of these complications can be prevented by the use of proper technique provided in video game simulations. The manuscript examined the challenges encountered while designing and executing their serious game as medical research. Ultimately, the data showed the game to be an effective teaching tool, and provides insight for similar projects in the future.

These articles offer a range of insight and approach to game research, development, and on the design of human interaction. Interactive media can be found in smart homes, vehicles, personal electronics, and even coffee mugs. As the internet of things comes to include a greater range of devices, it is important that we identify the importance of the experience in research and development in methods and measure for usage and successful development. I hope you enjoy reading these.

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