

GAME ON



At nearly \$16 billion worldwide per annum, the electronic games industry is bigger than, and very much like, Hollywood. Project managers can help guide designers through the myriad of complex options in this fast moving and increasingly sophisticated sphere. **James Butler** of Program Framework takes a look at how this is done and how to gain valuable knowledge from the experience.

CREATING a computer game is similar to producing a movie, except games are built on a constantly evolving technology infrastructure. Film technology remains relatively stagnant, apart from such shifts as video replacing film and editing going from splicing film to electronic arrangements on a computer.

In games, developers are creating, modifying and enhancing their tools as they build the game itself, analogous to the proverbial task of changing an engine on a jet while it is flying.

It often takes designers one or two generations of games to explore the capabilities of new hard consoles like Sony's Playstation 3 or Xbox 360. An executive producer wants the best possible innovation, but at some point he needs to freeze tool modifications to ensure a stable software platform for development.

In our discussions with game development firms, we were impressed by the challenges of handling software platform development while building games that incorporate visual drama, entrancing sound, convincing backgrounds and startling special effects.

Chris Hegstrom from Electronic Arts says producers face a constant push and pull between feature sets and stability. Programmers, by their nature, want to take an existing development tool and improve it, but their efforts mean that, during development, the team is often doing alpha and beta testing of the tools while they are trying to create elements of the game.

Project management can help navigate the necessary choices — developing new features, stabilizing the platform, and achieving high levels of technological and artistic sophistication.

It's easy to see why games demand a high level of creativity from participants all across the team — producers, game designers, programmers, character modelers, car modelers, and environmental artists who work on the background.

There are also sound designers, special effects artists and licensing managers, who work with film companies when a game is based on licensed characters or other outside intellectual property.

Unlike a film, where most of the initial production is done in a single location under a director, the 100-200 creators of a new game work quasi independently at workstations around an office or from remote locations.

As project management professionals, we see several strands that must come together smoothly to create a successful game:

- the latest technology so the game will impress the most sophisticated player;
- a software platform that is sufficiently stable in time to meet deadlines;
- an immersive game experience.

Here the term often overused in technology — seamless — does make sense. Contributions from all the team have to create a “seamless” experience with no gaps between characters, cars, background and sound effects, even though they are all created separately by highly skilled professionals.

There is also a need to keep the development experience fresh, so the results don't look strained. This is where the opportunity for skilled project managers comes in to support the team players in providing creativity on-time and on (or even under) budget to create an excellent game.

While project managers are skilled in balancing time, cost and quality elements, how do they manage in this environment with its inherent tensions? We think a high degree of sensitivity and appreciation of creative team members is required.

Project managers can use their skills with project management software to support, rather than restrict, the demands of the various team members, from producers to developers to visual and sound artists.

The dynamic in a game development team can spur each group on to deliver elements that will be the best they can produce, so the characters don't overwhelm the background in production quality, for example.

Creatively managed, dynamic tension can help a company deliver superb results. Of course, we all know what can happen when project leadership becomes negative and tools, whether simple time sheets, Excel, or project management, are used punitively. Suffice to say, threats and sanctions are



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With intelligent project management, producers can help their teams to deliver in synch, with the 100-hour working weeks so typical of the industry reserved for just the last couple of weeks.

The software can help track progress, find problems, and provide a shared resource for team members to see the overall program picture and how their role fits into the entire game.

Software developers and artists can help determine when platform development should stop so the requisite stability is available for the game's developers to meet their deadlines.

We also think that project managers can gain valuable knowledge from game developers. Working with diverse teams, after all, is not an unknown experience in managing large projects, from manufacturing to financial services.

Issues of visibility, governance, strictures and the structures of enterprise project management can be used to provide the visibility and openness that is required across a diverse group of firms with their own range of creative tensions, while meeting user demands for timeliness and functionality.

The level of collaboration, creative ambition and online discussion is probably higher in electronic games than many other businesses, but the challenges are similar — changes to underlying technology during development, modification in project scope, shifts in deadlines and budget pressures.

Game developers who think of technology generations in terms of months rather than years can spur all of us to greater productivity while perhaps even having a bit of fun and excitement along the way.

• James Butler is an EPM specialist for Program Framework with six years' experience of programme and project management, including multi-million pound large scale IT projects in sectors spanning retail to defence.

