



# **Quality of Life Summit: An IGDA Think-Tank**

## **-- Proceedings --**

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## About the IGDA

The International Game Developers Association is a non-profit membership organization that advocates globally on issues related to digital game creation. The IGDA's mission is to strengthen the international game development community and effect change to benefit that community. For more information on the IGDA, please visit [www.igda.org](http://www.igda.org) or e-mail [info@igda.org](mailto:info@igda.org).

## Introduction and Summary

The Quality of Life (QoL) Summit was held at the Game Developers Conference (GDC) on Tuesday, March 8, 2005. In the day-long summit, developers, executives, managers, and students listened to and discussed topics ranging from the state of the industry to the different types of unions that exist. QoL is a major IGDA focus. This Summit has been in the works for two years; it is not a knee-jerk reaction to recent events in the industry. IGDA executive director, Jason Della Rocca welcomed everyone to the Summit saying that he hoped it would be a constructive day to discuss the issues, look at the positive, and find solutions. He thanked the QoL Committee, which has volunteered their time to write a white paper, speak at the GDC, answer questions from the press, and more.

Some of the things that the IGDA is looking into:

- Annualizing the QoL survey
- Looking into implementing a 'Code of Conduct'
- Resource page with links to books and organizations
- Studio Recognition – reward companies that are doing things right.

This report gives an overview of the topics presented and discussed during the proceedings, grouped according to the different sessions. All of the original slides and materials from each speaker are available online at the IGDA website. The full audio and video proceedings for the Summit are also available.

<http://www.igda.org/qol/events.php>

## The State of Game Industry QoL Panel

### *7 Reasons Why You Should Care About This Stuff*

**François Dominic Laramée, QoL Committee Chairman**

Laramée jumped into the serious topic of industry Quality of Life (QoL) in a candid manner by exposing seven of the industry's most cherished beliefs about game making as "collective exercises in self-delusional nonsense." Since April 2004, the IGDA's white paper on QoL has been downloaded thousands of times and the now famous EA\_Spouse LiveJournal entry received over 3000 messages of support within weeks. He addressed industry managers, studio owners, and publishers saying that poor QoL practices are not only detrimental to their employees but a jeopardy to the industry's and their companies' long term well-being.

#### ***Myth #1: "Crunch works, and nothing else does."***

Rod Humble, of the *EverQuest* team, wrote in *Game Developer* magazine: "It's our experience that late night crunch introduces so many bugs as to make the work almost worthless in the long run."

Laramée gave examples of companies that have kept overtime to limited, productive levels while still making milestones and successful games: Blue Fang Games (*Zoo Tycoon*), Vicarious Visions (*Doom III* for Xbox), Edge of Reality, and BreakAway Games. British developer Team 17 (*Worms* series), has implemented 40-hour work weeks and still makes its deadlines.

#### ***Myth #2: "Crunch doesn't cost the company anything."***

The bottom line for companies is that employees in crunch mode are like "drunken zombies" as they check in vital code or report to your most important clients. In a Harvard Group study of medical interns<sup>1</sup>, whose demographic profile and work habits resemble those of game developers, they found:

- After a shift, interns are twice as likely to be involved in serious car accidents than the general population
- After being awake for 24 hours, they have the reaction and response time of someone with a 0.1 blood alcohol level – legally drunk in most parts of the world
- They make 36% more medical errors during long shifts than regular shifts

A Journal of Epidemiology and Community Health<sup>2</sup> study shows that within 24 hours of a high-pressure deadline, the incidence of heart attacks is six times higher than usual. According to the National Institute of Health, sleeping four to six hours a night for 14 nights straight is physiologically equivalent to going 72 hours without sleep.

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<sup>1</sup> Helen Branswell, "Sleep-deprived medical interns a danger on roads after their shifts: study," *Medbroadcast.com*, January 12th, 2005

<sup>2</sup> Mathieu Perrault, "Les échéances au travail provoquent des infarctus," *La Presse* (Montréal), February 8th, 2005.

***Myth #3: “You have to work harder to succeed!”***

If this myth were true, German and many Europeans should be producing inferior quality BMWs and Porsches. On the contrary, Americans, who work 350 hours more per year than Europeans and 70 hours more than the Japanese according to author Daniel Pink, had to recall the 2005 Ford F-150 pick-up truck because of a fatal design flaw in the ignition system.

Success can be achieved with proper planning and design; well-trained and well-rested workers and the right tools. Productivity has been studied for over a century and every industry examined found 40 hours a week to be optimal. Why would game development be any different?

***Myth #4: “Our employees are hardcore; they’re willing to pay the price to make games!”*** The concept of the game-obsessed developer may have applied 20 years ago, but is outdated. More than half of the people who expressed a preference in last year’s QoL white paper survey said that they viewed game development as merely one career option among many.

***Myth #5: “OK, the boys are unhappy, but it’s not as if they had any place else to go!”***

The white paper found that 34.3% of current developers expect to leave the industry within five years. Given that the game industry is demographically very young, this means that a third of the current work force is made up of people under 35 who want to leave the industry before they reach the peak of their careers.

***Myth #6: “OK, fine, if the veterans leave, we’ll just replace them with rookies.”***

If an overworked, rookie game developer makes a mistake, it does not cost any lives, but the health of the company is at risk every time you put an employee in a situation for which he or she is not prepared. Taking the example of the Canadian navy’s Sikorski CH-124 “Sea King” helicopter, Laramée compared the complicated maintenance the helicopter required to some of the trickiest game projects. An inquiry into the crash of one of these helicopters showed that cutbacks in spending had forced senior maintenance technicians to retire and be replaced by massively overworked, under trained rookies resulting in over 75 instances of mistakes in maintenance. While there is a seemingly inexhaustible supply of talented kids willing to endure anything to make games, they cannot get the job done by themselves.

***Myth #7: “Well, we don’t have crunch here, so we have nothing to worry about.”***

Although we are dealing with crunch first, there is more to QoL than just free time. Other issues that deserve attention include:

- Having family-friendly policies – only 7% of respondents to the QoL survey are women and 82.9% of them don’t have children yet. Parents need better health insurance, day care and time off for family emergencies.
- Healthy work relationships – many of our leads and managers lack the proper training in people management.
- A healthy, reasonably quiet work environment – free pizza is less of an incentive for a 35-year-old. Healthier food, gym memberships, and \$75 noise canceling headphones are all suggestions to improve work conditions.

- Job stability/mobility – the prospect of a layoff is extremely stressful. In cases where layoffs are unavoidable, implementing industry-wide job descriptions and more freelance opportunities let people move from company to company easily.

### ***Conclusion***

Laramée was optimistic that persuasion is the industry's best bet for reform and there is already anecdotal evidence that last year's white paper has triggered change in a number of studios. He explained that coercion is not likely to bring about reform in the industry since there is no current opportunity for collective bargaining; the current geopolitical landscape is regulation-averse; and class-action lawsuits are heavily biased by the amount that each party can spend on court battles.

### ***The Elephants in the Room***

#### **Clarinda Merripen - Director of Operations, Cyberlore Studios**

In her state of industry QoL presentation, Merripen outlined two impending forces, globalization and labor shortages, that she foresees will affect the game industry in the next five to ten years. She talked about the consequences of these forces and created a sense of urgency to respond to and prepare for them.

### ***Globalization***

The market is changing as more games are being sold around the world. The European market already buys more PC games than the US, and Far East Asia is the fastest growing consumer market. Companies like Electronic Arts are going to compete with local companies who are supported by their own governments and are making games that resonate culturally with that audience. Global outsourcing will become a fiscal reality.

### ***Upcoming Labor Shortage***

This is a worldwide crisis with an impact on both the size of the workforce and the consumer market. The US workforce will decrease by nearly 10 million (US Bureau of Labor Statistics) with the number of retirees and workers over 55 expected to almost double in the next seven years. The EU labor force could lose an average of 1 million workers annually over the next 25 to 30 years.<sup>3</sup> If the pattern continues, by 2030, the world labor market will encompass only 165 million people, a shortfall of 35 million workers (Employment Policy Foundation, Oct. 2003).

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<sup>3</sup> Report of the Employment Taskforce from the European Union - November 2003

*Consequences for the industry*

These gross statistics mean that there will be more work hours and fewer people to do it. Companies will need to find better ways to retain their best workers. Today the complexity and process of game development jobs require much more education. It will be the return of the jobseeker's market with the best, highly trained workers demanding high pay and benefits. The competition in the near future will be 'mom and pop' shops that can offer workers a better QoL.

In Canada and the UK, FSLA and labor laws are being implemented to regulate QoL. The US government is increasing the budget for the Department of Labor and also setting up legislation to increase immigration by allowing more skilled workers into the country on H1B Visas.

*Three possible models:*

1. ***Outsourcing has a new role: only the best survive:*** "Scutwork" jobs will be outsourced both locally and globally. Increasing salaries for the best, slimmer companies for the rest.
2. ***Core Management gets better and more mobile; Operations staff become rockstars:*** The role of management needs to evolve and react to the changing landscape. IT staff must be ready to hook up secure VPN across the country so workers can work from home; human resources staff able to read people and figure out their needs.
3. ***Freelancing goes mainstream:*** Freelance entrepreneurial groups who band together and service many companies on an as needed basis could benefit both the employee *and* companies.

***The U. S Fair Labor Standards Act and Other Legal Considerations Regarding Overtime and the Work Force***

**Tom Buscaglia – Attorney, T.H. Buscaglia & Associates**

This session brought to the forefront some of the labor laws and legal issues that have surfaced in recent events. Buscaglia established that the law is a set of rules that is interpreted by judges and juries and that much of it is open for debate.

Two pending class action litigations are Kirschenbaum vs. EA, which deals with classification of artists under the California Labor Code, and Hasty vs. EA which deals with classification of programmers under the California Labor Code. He said the law firm that filed the suits (Schubert & Reed LLP, present at the Summit), is very familiar with class action suits. In these cases, federal or state law will supersede depending on which is more beneficial to employees.

The U.S Fair Labor Standards Act (FLSA) is the law that states that some employees including Creative Professionals and Computer Employees are exempt from overtime. However, the categorization of all game industry artists and programmers as non-exempt is being challenged based on the following clauses:

**29 CFR 541.302 - Artistic professions**

**(c)(1) The work must be original and creative in character, as opposed to work which can be produced by a person endowed with general manual or intellectual ability and training...**

**29 CFR 541.303 - Computer related occupations under Public Law 101-583**

**(c) The exemption provided by Sec. 541.3(a)(4) applies only to highly-skilled employees who have achieved a level of proficiency in the theoretical and practical application of a body of highly-specialized knowledge in computer systems analysis, programming, and software engineering, and does not include trainees or employees in entry level positions learning to become proficient in such areas or to employees in these computer-related occupations who have not attained a level of skill and expertise which allows them to work independently and generally without close supervision.**

He concluded with a word on unionization saying that it may not be such a bad idea given the current situation: a large publicly traded company is in a tough position where they are responsible to their shareholders and may be sued if they take an action like cutting back on work hours that causes any major drop in share prices. If a company cannot be flexible because of its structure, unionization may not be a bad idea. Unionization in the animation industry in the 1930's raised the bar on employee benefits.

In a question and answer session after, Buscaglia said he would not expect the lawsuits to be settled in less than three years. Certification of the class would take 4-18 months alone, as all the plaintiffs need to be proven to be in identical situations. Electronic Arts would try to indicate that the line between entry level and professionals is uncertain. Buscaglia said in the future he foresees an improved wage act with no exemption loopholes. Under Federal Law, suits could be filed anywhere in the U.S but he thinks litigation will start in California and eventually follow in other states.

## **Case Blasts: Problems > Solutions > Outcomes**

Representatives from a variety of development studios presented brief case studies. Each case covered a quality of life related problem, the solution that was applied to overcome it and the resulting outcomes. The goal was to give everyone a better sense of the breadth of approaches studios are using to overcome quality of life related challenges.

### ***Case 1: Quality of Life @ BreakAway***

**Deborah Tillett – President, BreakAway Games, Ltd.**

Deborah Tillett explains how quality of life and business decisions go hand-in-hand at BreakAway. The 94-employee company has offices in Maryland and Texas, and straddles the entertainment and serious games markets. In the games industry, unless a company owns significant intellectual property, employees are its main investment. Her guiding principle is that happy employees are more productive, increasing ROI.

Breakaway doubled in size from January 2004 to January 2005, and has taken steps to ease the stress of employees adapting to a new workplace and city. New employees must deal with finding a house and helping their family adjust. At the same time, they usually want to prove themselves on the job, working harder than usual. To ease the transition, Breakaway instituted once-a-month social gatherings for the people at home to come into the office and meet each other. Tillett has



seen these gatherings affect morale and relationships positively. Stay-at-home spouses make new friends. Employees feel more comfortable at the office. Kids have fun and get to see where their parents work.

Breakaway works to make established employees happier, too. They remember birthdays and send cakes. They arrange babysitters so couples can have a night out. They throw baby showers for new mothers, and pay for spouses to have dinner out once in awhile to help them reconnect. Tillett maintains that the hit to the bottom line is small, but these little kindnesses make a great impact on morale. She reiterates that happy employees are more likely to be passionate, and that passionate employees make better products.

## ***Case 2: Quality of Life Lessons from Elsewhere in High Tech***

**Kim Pallister – Engineering Manager, Intel Corp.**

Kim Pallister describes Intel as a company that grew rapidly and has 80,000 employees in offices everywhere. He directed his talk at managers and employers, explaining how Intel has grown, suffered, and learned.

Why does quality of life matter? Echoing Tillett, Pallister said happy employees are productive employees. Also, companies must work hard to retain employees. “Everybody goes through bad times -- will your employees stick with you through yours?” People will work hard. Given this, make sure they don't work too hard, or else their work/life balance will suffer. Finally, making games that appeal to diverse audiences requires a diverse team of developers. These people will also have diverse quality of life needs.

“If you can't measure it, you can't manage it.” This is not specific to quality of life, but a general business tenet. Know that you will need to expand effort on measurement. Do postmortems that analyze what you've measured; see where you can improve. However, be careful not to measure too much. A good rule of thumb is 80% work and 20% measurement. Also, be sure you are measuring output, not hours logged. Intel moved from using strict late lists to allowing people flex time, which increased morale and productivity. People will figure out when they need to be in the office and be there. Best of all, your top people will end up working more and feeling better about it. People who abuse flex time would abuse a 9-to-5 system as well.

There is a place for 9-to-5 people and for people who work harder/longer as well; they're not mutually exclusive. Reward tortoises (people who work steadily and plan well), not just hares (crunchers who get job done, but lower quality of life).

Realize that improving quality of life takes work. Are you and your team serious enough about improving that you're willing to do more work in order to work and live better? Initiatives taken at Intel include: daycare and adoption assistance; a sabbatical program; significant recognition for significant efforts; and on-site dry-cleaning, Post Office, gym, and volleyball. Don't forget to measure the success of each program you implement, and prepare to adjust on-the-fly.

### ***Case 3: Quality of Life through Applying Software Quality Management***

**Tobi Saulnier – VP Product Development, Vicarious Visions**

“Why so much overtime? And stress?” Most projects are too ambitious. Unfortunately, we often don’t know what’s possible, so we don’t know what’s too ambitious. We underestimate everything – time to code, time to test, time to fix. On top of this, we can’t manage change well, be it in schedule, scope, or resources. You can’t fight back if you don’t know when you’re getting in trouble.

Vicarious Visions uses software quality techniques. The techniques analyzed next come from Carnegie Mellon’s Software Engineering Institute. In particular, Saulnier outlined the Personal Software Process (PSP) and the Team Software Process (TSP).

PSP teaches software engineers to understand and improve their own process of coding. PSP realizes that people aren’t trained to manage themselves well. However, the entire schedule depends on each person’s schedule. So, PSP proposes that individuals collect data about their work to help them manage themselves. They should collect data about their time estimates versus actual time spent completing tasks. They can use this data to improve their estimates in the future. They should also collect data about the number of bugs in their code found through compilation. There is a fairly reliable heuristic that says the number of bugs caught and fixed through compilation is approximately the number left unfound in the program. We often ignore these bugs, leading to lower quality games and more stress at the end of the development cycle finding and fixing bugs.

Team Software Process (TSP) means applying PSP to an entire team, including those who are not engineers. Vicarious Visions chose the Spiderman DS project on which to test TSP. It was important that the entire team buy into this process. However, once you convince a team that there are bugs out there, what’s the process for tackling them? Here’s how the process works. Launching TSP takes 4-5 days of planning. Most of this planning would happen without using TSP, but it wouldn’t happen within the first week. Vicarious Visions realized that it’s more efficient to plan first. Then, everyone on the team needs to buy into this plan. Planning facilitates communication, and the team enjoys it (they wanted to keep working in one room together after the planning was over).

TSP assumes 4 hours of work actually gets done during an 8 hour day, for someone who’s doing well. The team has to buy into tracking their time against every task. Everyone must trust the management not to use this data to rate performance. Otherwise, people would start to doctor the numbers they record, rendering the data useless. Here’s an example: an employee begins a two week task, starting with 0% completion and 100% time left. One week into the task, the employee is 25% complete and has 50% time remaining. At this point, employees or their managers often come up with the unreasonable goal of completing the remaining 75% of the task in the remaining 50% time. TSP helps people see quickly, possibly within the first day, that a schedule is unreasonable, allowing them to adapt sooner. This tracking also helps everyone focus on adding value, not hours, because even after working a lot of overtime the task completion percentage may not have increased significantly.

Saulnier said that using TSP at Vicarious Visions produced solid, reusable code, but that people stopped following the process near the end of the project, during crunch. Overall, though, the process helps reduce crunch time significantly by allowing the team to identify and address problems early.

## The Business Case for Improved Production Practices

Steve McConnell – CEO and Chief Software Engineer, Construx Software

### Observations

Many different kinds of software exist from games to embedded systems for appliances to aerospace software. The development of each kind of software is very different. Some of the major considerations include: What is the cost of having defects in your software? Is it human life, human safety, economic loss, or inconvenience? How broad is the impact of this software?

Large software development teams are not new: since the 1960s, big software teams have integrated multiple disciplines into projects. McConnell talked about many software industry segments like game developers reinventing the wheel when they could be learning from other segments. McConnell talked about ‘Growth Inflection Points’: the very same practices that served two-person game companies well now hinder success. As they grow, they need to change their practices along the way.

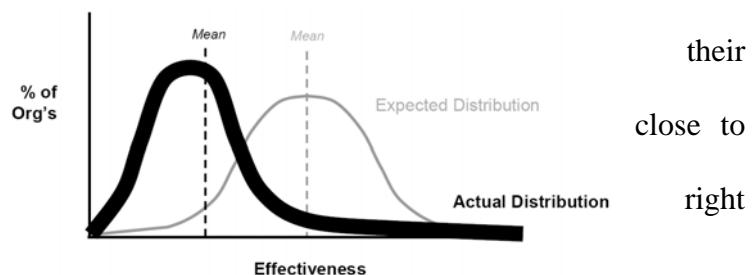
### State of the Practice

McConnell gave an overview of the grim state of practice for software developers overall: Using pie charts, he showed the following data from a business survey:

- The average project overran its schedule
- About one-quarter of all projects are cancelled
- There are complicated factors behind these outcomes

Speaking from experience consulting for software companies, McConnell identified causes behind the disappointing outcomes. Most projects are run inefficiently and *the average developer reads less than one professional book a year and does not subscribe to any journals*. He says that people need to be reading and learning about best practices instead of reinventing from first principles. There are also perceived inefficiencies where management actions actually undermine effective project performance. People always want to push the envelope and it is human nature to over-scope a project by having unrealistic and unachievable expectations.

McConnell showed a graph of organizations and the effectiveness of practices. It shows that most software companies are ineffective and using the worst practices. Some jaded developers even question whether the side of the scale exists.



**10 Tough Questions for Software Executives:**

1. How much are you spending on software?
2. How do your teams’ skills compare to industry averages?
3. How do the capabilities of your organization compare to other, similar organizations?
4. What percentage of your costs arise from unplanned rework?
5. How confident are you that your “buy” decisions should not be “build” decisions?
6. What percentage of your projects are on time and on budget?
7. How confident are you that your current projects will perform to their estimates?
8. What percentage of your current projects are most likely to be cancelled?
9. How satisfied (quantitatively) are users of your products?
10. How much (quantitatively) has your productivity improved in the past 12 months?

McConnell said that most executives could not answer these questions accurately. For instance, 80% of people would say that their team is above average, which is an impossible statistic. *Companies need an accurate assessment of the skills of their team.* They need to know what should be outsourced versus what should be built in-house.

**Return on Investments (ROI)**

Improved software practices are the industry’s ‘Last Great Frontier.’ How can companies effect better practices and cost savings? There are many areas in business where, when making decisions, 10 to 15% ROI is enough to get a company to invest. However, they seem to ignore 1000% ROI options as shown in the following chart of selected practices:

Practice	12-month ROI	36-month ROI
Formal code inspections	250%	1200%
Formal design inspections	350%	1000%
Cost and quality estimation tools	250%	1200%
Long-range technology planning	100%	1000%
Productivity measurements	150%	600%
Process assessments	150%	600%
Management training	115%	550%
Technical staff training	90%	500%

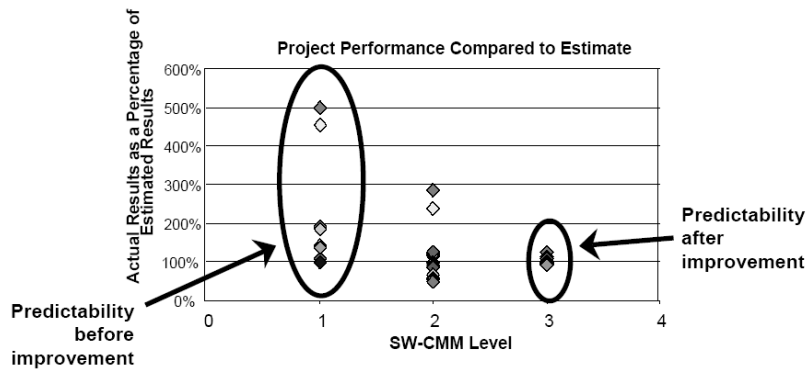
Source: Capers Jones, *Assessment and Control of Software Risks*, Prentice Hall, 1994.

**Where does ‘R’ come from?** The average project spends very little time deciding what it is going to do (preproduction), and how it is going to do it (architecture). It spends most resources on construction. *Companies need to consciously increase cost at the beginning of a project in planning and process overheads to get magnified returns later in the lifecycle.* Changes and planning done earlier in the cycle are cheaper for the company. Improving software practices leads to reduced cost, improved quality and improved cycle time. Poor quality is the single largest cost driver on most projects and with improved practices. The best organizations sustained quality improvements of more than 70% per year.<sup>4</sup>

<sup>4</sup> Sources: Steve McConnell, *Rapid Development*, Microsoft Press, 1996  
 James Herbsleb, et al, “Benefits of CMM Based Software Process Improvement: Initial Results,” Pittsburgh: Software Engineering Institute, Document CMU/SEI-94-TR-13, August 1994  
 For more details: [http://www.igda.org/qol/IGDA\\_2005\\_QoLSummit\\_Business-Case.pdf](http://www.igda.org/qol/IGDA_2005_QoLSummit_Business-Case.pdf)

**Better Predictability:** Drawing on a Software Engineering Institute (SEI) model developed for the U.S. Military, the biggest software production company in the world, McConnell introduced the Capability Maturity Model (CMM), which rates software companies from 1 (worst) to 5 (best).

- CMM Level 1 can be seen as “by the seat of your pants” software development.
- CMM Level 1 and Level 2 are about getting honest about your software creation capabilities. Better predictability is needed to get from Level 2 to Level 3.
- CMM Level 3 is the first ‘good’ level.



Source: Dr. Patricia K. Lawlis, Capt. Robert M. Flowe, and Capt. James B. Thordahl. "A Correlational Study of the CMM and Software Development Performance," Crosstalk, September 1995.

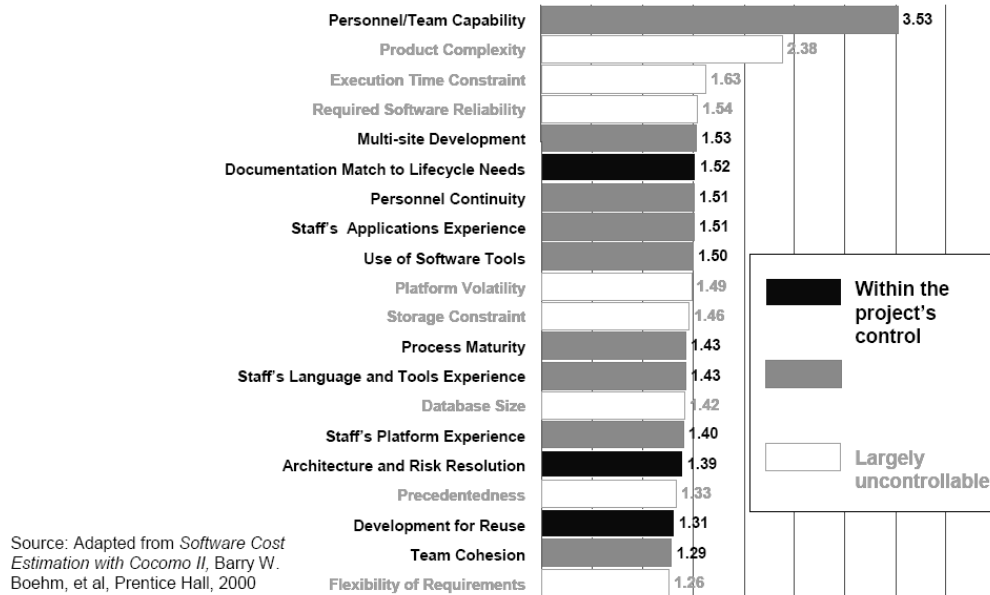
**Enhanced Morale:** McConnell acknowledged the fear that more systematic practices will hurt morale. The reality is actually the opposite as better practices result in better products instead of ‘crummy projects’ that do not meet expectations. A project with many flaws will surely lower morale.

**Other Benefits:** As an example of other benefits that result from good business practices, McConnell referred to one company he consulted for that was able to improve stability on their annual release. Instead of the standard 90 days feature freeze to allow for rework and bug fixes, they were able to shorten it to 45 days because the quality of work was higher. This meant more time that they could spend implementing ‘cool’ new features. More systematic practices do not hurt creativity: “If you are spending 50% of your efforts on reworking mistakes, it is definitely not as good as if you had that time to develop cool, new features.”

**What Prevents Companies from Seizing This Opportunity?**

Given the obvious benefits and returns from improved business practices, McConnell pointed out reasons why these were not being adopted. One reason was that current bad practices still paid off in the short run and therefore people do not want to think about investing in good practices for long term benefits. Also, most software professionals have never seen software development at its best, since they are used to operating under close to worst practices. They do not believe it is possible.

*What is the leverage?* Applying these ideas to the game industry is not a trivial task. *The leverage comes from supporting improved practices across an organization and not just at a project manager/producer level.* For example, it is tough for project managers to make personnel decisions as they usually take whoever is available from within the organization. It is the same for many of the other ‘levers’ reflected in the Cocomo II estimation model:



**Strategy:** In closing, McConnell encouraged organizations to focus on ‘Low Hanging Fruit:’ proven practices that have been tested in other industries, where the risk is higher if they are not used at all. He listed some examples of ‘Low Hanging Fruit’ and the year they were first available:

Project planning and management practices:

- Automated estimation tools (1973)
- Evolutionary delivery (1988)
- Measurement (1977)
- Productivity environments (1984)
- Risk-management planning (1981)

Requirements engineering practices:

- Change board (1978)
- Throwaway user interface prototyping (1975)
- JAD sessions (1985)

**Where to Start?** McConnell listed these areas as starting points for start improvement: requirements, project planning, project tracking, quality assurance, configuration management, and subcontractor management. They are KPAs (Key Process Areas) under the SEI CMM-SW Level 2. The specifics vary greatly for each industry segment and organization however significant results are achievable!

**McConnell addressed some issues brought up by the audience in the question and answer segment:**

- He believes good management practices and making good games are orthogonal. The risk of better, systematic practices stifling creativity is small.
- To sell executives on better practices, talk to them in terms of cost-effectiveness, ROI and present the facts unemotionally. What are the benefits to the business? The kiss of death is seeming to not like working hard.
- The cost of turnover specifically is big. It takes two to six months to get someone new up to speed. With a chaotic development process and less documentation, when someone walks out the door, they bring a chunk of knowledge with them. The cost of replacing someone is much higher in small, less organized companies.
- The 15% reduction in production schedule/cycle on your next game is a shaky number as games differ greatly. Generally, the next game is always bigger, with larger budgets especially if the one before did well.
- Relating general software practices from his book, *Rapid Development*, to games, he pointed to specific practice areas, such as prototyping (make sure you are making something fun before making it).

## Labor Relations 101

**Gina Neff – Assistant Professor, Department of Communication, UC San Diego**

How can organizations and associations improve the quality of life across an industry? What are unions and how do they function? What are the alternatives for solving workforce problems? This session examined cases of how other tech and creative industries have dealt with problems of workforce empowerment, including collective bargaining and other approaches to workforce problems. Along with presenting the pro and cons of unions, this session presented some of the new, innovative solutions to the problems of working in the new economy.

### Venture Labor

Neff wrote her thesis on “venture labor” in high tech industries and worked as a union organizer in the meat packing and home healthcare industries. She used the session to explain how unions work and how they could be both good and bad for the game industry.

Workers have the right to representation. In theory, forming a union is simple: a majority of workers decide to make a union, companies recognize the union, and everyone lives happily ever after. Unfortunately, this is often unrealistic. Companies routinely break the law to stop union drives, and, if union drives win, companies often refuse to bargain in good faith. Forming a union

takes at least three years, but that number relies on the unrealistic assumption that companies won't resist. For example, Wal-Mart fires people who try to unionize. This practice is illegal, and workers can fight to get their jobs back, but they have to be willing to fight (and often aren't). In another example, when graduate students tried to unionize, private universities fought to keep graduates from being legally identified as workers.

Unions face obstacles besides opposing companies, too. Unions are built on the local level – they work within particular companies when people collaborate to create one voice. Union organizers often look for **hot shops** – companies where employee mindsets are ripe for union takeover. However, often venture labor, typical of smaller game studios, identifies with the risks of their company. This empathy makes workers willing to put up with more hardship than they would at a large, faceless corporation.

Unionizing the game industry would face other obstacles too, including the high turnover rate, rapidly changing technology, and flat hierarchies. Employees often leave a company after one or two projects, meaning they don't develop the long-lasting bonds necessary for unionizing. Also, rapidly changing technology requires employees adapt quickly; this makes it hard for a union to put expectations of technological skills into actual contractual statements. Finally, flat management hierarchies typical of the industry mean employees feel autonomous, not oppressed.

Support is available to help new unions overcome these challenges. The first step is to figure out the right “international.” International unions like Communication Workers of America can lend support to local unionizing efforts. Union organizers can help employees talk with their colleagues at work to explain the value and process of unionizing.

Existing unions could benefit from the game industry joining the movement. Union membership is declining, and unions need revitalizing energy. Also, unions need help figuring out how the outdated industrial model translates to a non-industrial context.

However, does the game industry need unions? This is less clear. Hot shops are a throwback to the industrial model, and the lessons learned from them may not apply to game studios. Also, unions may not fit well with flexible workplaces common in the new economy. For instance, Scandinavia has a high percentage of unionized programmers, but is still struggling to make the model work.

Unions may prove most valuable to freelancers in the game industry, allowing them to collectively negotiate for benefits. Unlike traditional unions which tie benefits to jobs, “Freelancer Unions” can help freelancers save on health insurance, obtain needed services, and advocate on important issues.

Unions may also be able to help tech workers overcome inequalities. “Permatemp” workers often do the same work as salaried employees for long periods of time without job security. Outsourcing may increasingly affect tech workers in the future. Older workers face age discrimination from this youthful industry. These issues and others could benefit from a collective voice among tech workers. WashTech and Techs Unite are two examples of organizations that draw together workers from across country.

Neff emphasized at the end of her presentation that unions can help but are not the only solution. “Ultimately for any collective solution to work people have to build and buy into it.”



## **Towards a Sustainable Future: Panel & Discussion**

**Jason Della Rocca (moderator) – Executive Director, IGDA**

**Michel Allard – Vice President of Continuous Improvement, Ubisoft Montreal**

**Julian Eggebretch – President/Lead Producer, Factor 5**

**Joe Minton – President & CEO, Cyberlore Studios**

**David Perry – President, Shiny Entertainment**

**Rich Vogel – Executive Producer, Sony Online Entertainment (SOE)**

### **Opening**

The following is a chronological recap of the final session of the Summit: a one-hour 45-minute long panel and audience discussion. The proceedings have been grouped according to the topics that arose from questions posed to the panelists or from the moderator. Della Rocca started the session off by introducing the panelists. He said that the intention was for the panel to be a dynamic, lively and interactive debate and discussion amongst the moderator, panelists and attendees.

### **Passion**

The panel addressed the issue of passion in game development: whether it is a requirement and how it is often exploited. Perry and Vogel said that people need passion in order to make great games. Vogel explained, "People who have spark will do well in our company. People with passion don't need to be clocked. We all work on a level to make it great until we are done."

Allard noted that passion doesn't last if you abuse it. "We're faced with fading passion due to crunch, so we must find a way to protect it and manage it." Della Rocca reminded the room that Kim Pallister from Intel said management has a responsibility to protect people from overworking.

Minton pointed out that we shouldn't equate passion with number of hours worked. Eggebretch said if you grow beyond a point in a company, the passion becomes different. "We never tracked hours when we were small, but now some people abuse the system. People won't produce at the same level after a while, but they'll sit there."

### **Project Management**

In the games business, there is a need to manage time, resources and money more effectively. "We need to apply some of the basic assumptions in the business world to our games," said Vogel. For instance, adding 100 people to a project will not automatically get it done faster. As companies and team sizes grow, more mature management is needed and most game industry people do not have the experience or training. Often, the best programmer on a team will be thrown into a lead position although he has no background in management *and* the team loses their best programmer. [A quick poll of the attendees revealed that there were about 15 project managers present but out of the 15, fewer than five had MBAs or any kind of project management training.]

Appropriate scale and scope early in the project were mentioned as management solutions. The last two months of polish are important to push it up to the level of a AAA title however it is also

problematic because “fun is hard to schedule.” Vogel said, “One of the things in our business is being able to predict when things will fall, so the end dates don’t keep moving back.”

Attendee Evan Robinson cited studies showing that people who work more than 12 hours a day for weeks on end operate at only 30% productivity. He questioned what measurements were implemented to make sure that 16-hour days did not diminish productivity.

### **Factor 5’s Production Model**

Eggebretch talked about the production model or “scramble” on the game *Rogue Leader*. The team was given a once in a lifetime opportunity to do a *Star Wars* game with an extremely tight schedule of nine months. It was a crazy timeframe but the team was really motivated and ready to sacrifice their lives for the opportunity. For compensation upon completion of *Rogue Leader*, the office was closed and everyone sent home for 16 days. The agreement with publisher Lucas Arts was that the team would be paid until the end of the year regardless of whether production finished earlier. The studio’s relationship with publisher Lucas Arts was good. Management did the job of talking to the publisher to cut features or push milestones back and still keep the money coming. People are driven to extreme conditions when there is the threat of money hanging over their head and good management can ease that concern.

The “scramble” worked, but Eggebretch said, “We could not do it on the next project, or ever again.” Factor 5 has since moved away from that method of production and now has a few acceptable crunches and no drawn out death marches.

### **Finding and Retaining Talent**

“How do you motivate people who have been working on something for five years to keep going? We burn out people really fast in this industry; not many people have made it to 15 years,” said Vogel, with specific reference to some of the SOE teams supporting massively multiplayer online games.

It is critical that people are not treated like commodities. For small *and* large companies alike, there is a wealth of talent waiting to break into the industry and companies can easily take advantage of that. However, in order to build a sustainable company, you need to retain people longer than the two-year average. Every team has a top 20% that go beyond the call of duty, then the midlevel people who do good work but do not go beyond that; managing the midlevel people who do good work is key. Joe condemned the machismo attitude within the industry of bragging about crunch: trying to outdo each other with tales of the number of marriages broken and the extent of the crunch period. This attitude sends a signal to upper management that the team can indeed complete the game in that amount of time.

### **Growing and Developing People**

Vogel lamented that the industry has not done much growing and mentoring of people. [Only about 10% of attendees indicated that they mentor others.] Often, top talent (a respected artist or programmer) is put into a management role to see how they do and then taken back out as soon as they don’t perform well. In order to succeed, they need to be given constructive feedback and

guidance. Several methods for developing managers include identifying people with the right qualities (good communication skills, works well with others) and guiding them. Perry is a big proponent of classes and paying for his employees to learn but he was disappointed that more people did not show interest.

Some companies already have instruments in place. On top of training and coaching, Ubisoft has a selection process that includes a psychological evaluation tying certain traits with potential for success. EA offers very good management training to its employees.

### **Improving Communication**

The panelists stressed that honest postmortems are important as they reveal the bottlenecks in the development process. This is self-adjusting, as companies that do not learn from their mistakes will not remain at the top for very long. Other communication practices from Cyberlore studios and SOE include:

- **Critical stage analyses** for every milestone; each team member is polled
- **Two interim postmortems per project** with publishers to see if changes are necessary
- **Open book management system** so every team member knows what is going on
- **Quality Assurance (QA)** sign-off on every piece of the game
- **Email Lists** for specific groups in the company

### **Empowering Individuals**

One challenging goal is to maintain ownership even as you scale team sizes upwards from 25 to 120 people in a year. Giving ownership to individuals means letting them have a creative say in the game. Perry says of employees, “they want to be useful...if you have people on your project who are just there because they have to be, they will leave. That’s the number one way to kill passionate people.” There is also a need to maintain the tension between ambition and production scope. Perry said the important thing is for production to stand up and not let him come to meetings near the end of a project, as he is the self-proclaimed “Mr. Feature Creep.” Finally, managers need to shield a team from time consuming “Dog and Pony Shows” and other marketing or demo requests. These need to be scheduled in advance with marketing to avoid miscommunication.

### **International Competition**

Attendee, Daniel Greenberg (game design consultant and script writer) asked: “Even if there were a consensus among developers and publishers about improving QoL, what impact do all of the other countries have when they drive down wages and labor requirements - can we fight this? Can one industry take a stand among this massive wave pushing towards bad working conditions?”

The panelists provided two perspectives on this issue. The consensus was that “this is not a sweat shop, [developing games] is very difficult, there are artists, programmers...” They challenged the presumption that QoL a priority meant less efficiency. Many people want to hear the actual information and data before they will start making changes but QoL *will* help companies make better products (See Steve McConnell’s: *The Business Case for Better Production Practices*). Failing to improve QoL will have immediate results on your next project when people choose to leave. Eggebretch said that despite the lower costs elsewhere, “if you can bring something to the

table that other countries cannot, you'll have the money." Perry presented another perspective saying that he was "worried that people think we can sit back and still make awesome games...there are companies in every other country in the world who will eat us alive, they are fighting to get games to the shelves and they aren't concerned about their QoL." He proposed that to be number one in the charts, companies have to go beyond their comfortable limits so they can keep their employees employed and stay competitive.

Kiyoshi Shin, the coordinator of the IGDA Japan Chapter said that Japanese developers face the very same issues: "Marriage problem is serious in Japan. People say they can't marry because [they are] working so hard. It's not normal. We have pressure from China: they are using cheap salaries."

Upcoming console hardware transitions and the need to retool for each generation add to the stress of managing groups and staying competitive. Vogel emphasized that only a handful of publishers and developers can have hit titles each year.

### **Measurable Progress**

An attendee asked how to measure success in improving QoL four years down the road. Vogel replied that the changes have to be made top down from executives and publishers down to developers. Eggebretch said that once retention rates improve across the industry, it will be a sign that they are doing something right. Della Rocca said that the IGDA will be conducting an annual survey to measure "happiness" levels and other QoL qualities in the industry.

### **The Need for Change**

As stated throughout the Summit, the industry needs change. Perry said, "You can't continue killing people forever." Vogel said it's hard to find good people, so we should be careful not to burn them out. Our industry is very reactive. We must proactively find ways to not burn people out.

Eggebretch added a related problem: we have this idea of the expendable grunt. We have to be careful to care about everyone (not just top talent), or we'll reinforce that idea. Allard said management must detect up and coming talent. We all know the top talent and tend to put too much on their backs, but there are others who can take up the slack. Vogel agreed, and also mentioned that we have a pecking order with programmers at the top, then artists and designers. We need to treat everyone equally as managers.

Minton said that not all the power is in the hands of the companies. He advised employees do due diligence when they are looking for a job to make sure QoL priorities match.

### **Shifting Priorities in the Workforce**

As the game industry matures, numerous stories have emerged of hardcore game developers who have grown up, married, had children, and are starting to change their priorities. Allard said, "I'm mature (old). The hardest paradigm to overcome is that this industry is very closed to [shifting priorities]." Attendee Brenda Brathwaite from Cyberlore commented that she has twenty-two years

in the industry. “I have to make games, but my passion has switched to my kids and to other things out of work. My passion for games can only exist if my passion for other things is not stifled.” Perry, who has a six-month-old baby, agreed completely.

Minton and Vogel added that, over time, companies that burn people out won’t survive. Della Rocca said that currently, many large studios use up their employees, let them go, and find someone else. Brathwaite said “you absolutely see it in small companies, too.”

### **Resistance to Change**

Several of the panelists described the game industry as resistant to change. With all of the challenges it faces, this could dramatically slow QoL improvements. Perry warned that publishers will always ask for less cost and less time. Stand your ground or you’ll get killed.

An attendee asked why large publishers would change if the current model is working. Eggebretch replied that late titles will lose money and wake up the publisher. There were some examples last Christmas that didn’t work out. If the company is publicly traded, shareholders will demand change.

Another attendee commented that the industry is currently weeding out people who won’t overwork themselves, and the people who stay are not necessarily the top talent. Perry agreed: “sometimes 4 hours of one person’s time is a week of another person’s time. The talented staff leave other companies because of the circumstances there, and we hire them.” Vogel said sometimes people take a break from the industry when they get burnt out, but then come back. Most don’t come back. There are a handful of very famous game designers from 15 years ago who are not around today.

### **Closing**

As time ran out, the panelists agreed that as the industry grows, it must change the way things are done to keep the best talent in the industry. Perry concluded that everyone wants people who can deliver quality games on time, on budget with an audience. It is not always the people who will work themselves to death who can make these games. The loss for the industry will be driving out these workers just because there is no place for them when their life priorities shift.

## Conclusion

Through the various presentations, both from industry insiders as well as from people external to the industry, the Summit approached the issue of QoL from many different angles. There was a solid case built of the need for better production practices, talent retention, and attracting new workers to the industry. Attendees were shown that a good QoL is achievable through case studies of studios that have made it a priority and succeeded.

The panel discussion brought together well-known developers from the industry for an inside look at the causes and solutions to crunch time and ideas for building a more sustainable industry. It was apparent that QoL is an important issue to many people based on the attendance and attention that the Summit garnered.

Having open discussion among developers, lawyers and human resource personnel brought many individual perspectives out on the floor. It enabled discussion of QoL for the industry and large corporations, for veteran developers who are now married with kids, and for rising talent. As an indicator of whether the Summit will effect the desired change, the QoL committee chairman expressed his hope that there would not be a need for a QoL summit in 2015.

Once again, all of the original slides and materials from each speaker are available online at the IGDA website. The full audio and video proceedings for the Summit are also available.

<http://www.igda.org/qol/events.php>