Games Quality Assurance (QA)

Global Delivery – Benefits Beyond Cost Savings

A Strategic Approach to Transformative Solutions

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Games QA Global Delivery – Benefits Beyond Cost Savings

Overview

Games QA provides quality assurance services on multi-million dollar games for the electronic games publishers, developers and platform manufacturers. The objective of Games QA is to get the games to market faster and less expensively while ensuring the quality of each game on the different consoles or platforms.

Global Games QA delivery is more than just reducing budgets by using offshore sites. It's about meeting business needs with strategic, scalable, innovative and transformative solutions.

This paper uses real world examples to discuss some of major the benefits provided by global delivery. We will also discuss the strategic drivers and hybrid delivery models used to right-shore Games QA services and transform your business.

The definition of Global Games QA delivery includes onshore, nearshore and offshore Centers of Excellence. For the purposes of this discussion, nearshoring is defined as sourcing service activities to a foreign country that is relatively close in distance or time zone (Canada, Mexico). Offshoring is defined as sourcing service activities to a foreign country that is much farther away, and has major time zone differences (India, Europe).

The real life examples portrayed in this document were successfully delivered from the following global delivery Centers of Excellence:

The benefits that will be discussed in this paper include the following:

- Improved productivity, quality and value added services.
- Ability to focus on core business functionalities while off shoring or near shoring non-core products or services.
- Rapid and effective scaling and quicker startup on initiatives and projects.
- Access to scarce, specialized skills and technical expertise.
- Maximized budgets by creating hybrid models with onshore and offshore solutions.
- Being closer to your global customers and public and obtain their point of view on your games.

Games QA Outsourcing Lay of the Land

The global market for games outsourcing is set to grow to $2.5b by 2010 representing 40% of total games development annual spend. Outsourcing is common – it is estimated that 90% of games studios outsource today.

North America was viewed as the hub of video game development, QA and console sales. Most consoles manufacturers had their highest market penetration in the US, to the point where there were significantly more consoles sold in the USA than in the rest of the world. The majority of Games QA was also concentrated in North America.

Today, the growth of the video game industry is transforming into a Global phenomenon. February 2009 statistics indicate that console manufacturers have sold more Wiis, X360, PS3s outside of America. (See Figure 1: % of American Vs the World Consoles.)

Figure 1:
% of America Vs World Consoles

■ America ■ Others

52%   48%
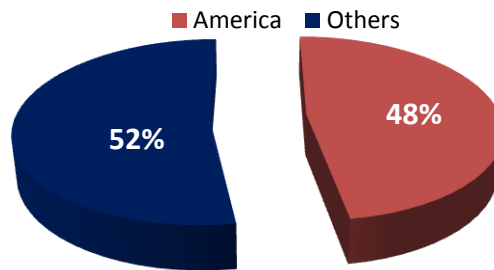
Likewise, there are more video game consoles bought outside of America than within the boarders. (See Figure 2: Consoles Bought To-date.)

Figure 2: Consoles Bought To-date
(in Millions)

■ Others
■ America

	Wii	X360	PS3
Others	25.89	12.44	12.9
America	21.83	16.58	7.98
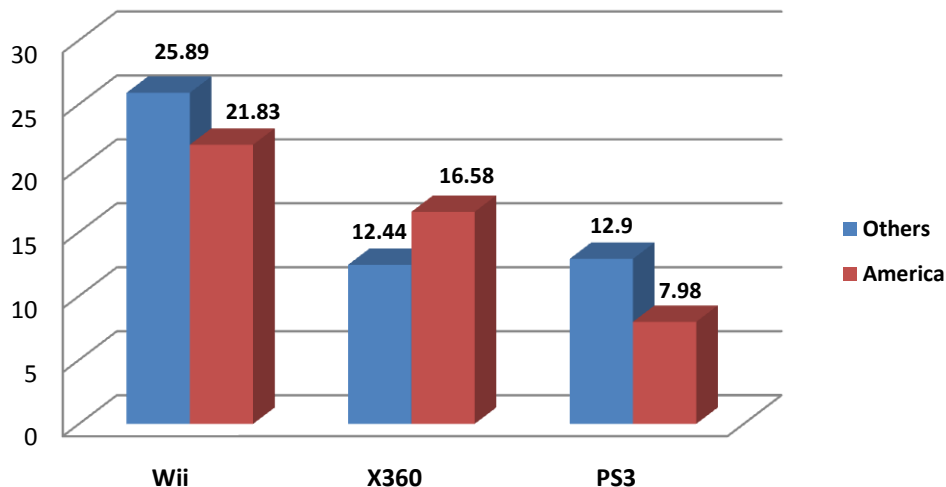
February 2009 statistics reveal that the newer handheld video game equipment, like the PSP and DS, shows an even higher skew towards sales penetration outside of America. (See Figure 3: % of America Vs World Handhelds and Figure 4: Handhelds Bought To-date.)

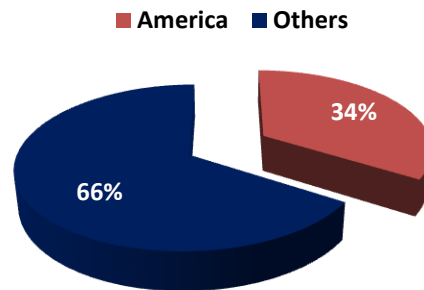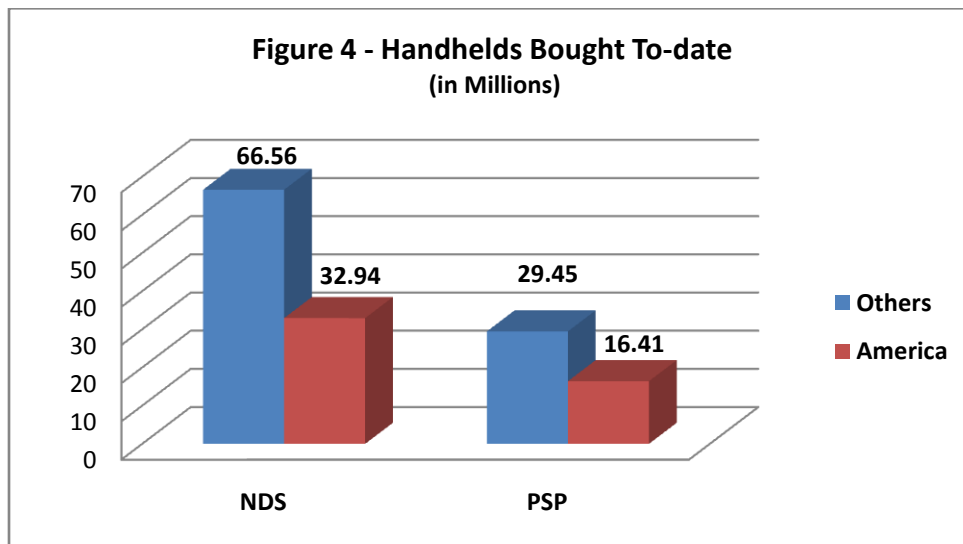**Figure 3:**
% of America Vs World Handhelds

■ America ■ Others

34%

66%

Figure 4 - Handhelds Bought To-date
(in Millions)

66.56

32.94

29.45

16.41

■ Others
■ America

70
60
50
40
30
20
10
0

NDS   PSP

Games QA outsourcing services are also globalizing with a significant variance in their outcomes. Some projects have been highly successful while others have been flops. These flops have led to the following perceptions about offshore QA delivery:

▪ Offshore delivery is sub-par compared to near shore and onshore.
▪ Only countries with typical "gamers" can do Games QA successfully – therefore execution is limited to North America.
▪ Communications with offshore teams are inferior. Therefore publishers and developers must spend more on communications.
▪ Offshoring is done only to reduce costs – but ultimately the total cost of offshoring is more expensive than onshoring.
▪ Only low level testing can be offshore, tasks like test plans and cases need to be kept on shore.

The real life cases discussed in this paper will identify strategies and approaches that dispel these negative perceptions and provide a road map to success.

Strategies for Using Global Delivery for Games QA

Using global delivery for Games QA can improve productivity, quality and value while meeting timelines and reducing risks getting your game to market.

Outsource QA and Testing

By using a trusted Games QA partner, publishers and developers are able to focus on their core business of getting games to market with lower overhead. By identifying an internal program manager to work with the QA partner, publishers and developers can deliver an increased workload without carrying increased overhead for areas which ramp up and down during the development process, like QA and testing.

With a qualified Games QA consulting partner, a tailored program can be developed.
- Business requirements:
  - Stakeholder analysis
  - Critical success factors and measures of success
  - Quality, schedule and financial metrics
- Governance process, including but not limited to:
  - Rules of engagement (short and long term)
  - Scope and deliverables including the minimum acceptable QA processes
  - Communication models and escalation points
  - Constraints and assumptions
  - Acceptance criteria
  - Financial approval process
- Operations:
  - Global delivery model
  - Different test team models (including SWAT model)
  - Forecasting methodology
- Technology and communications
- Risk management process:
  - Risk evaluation and analysis
  - Risk register and mitigation plans

Rapid Start: Fast, Effective Scaling for Initiatives and Projects

By embedding resources at Games QA Centers of Excellence around the world, publishers and developers can ramp up a new QA project within a few working days.

The functionality, hardware and software compatibility and compliance testing are first to ramp into operation, with localization testing following.

Global delivery enables a rapid start by providing a trained, distributed workforce in multiple, existing, secure facilities, with a continuous workflow which follows the sun. Select Centers of Excellence can also provide specialization and availability not easily available with only a single site or locations in a single region. With globally distributed Games QA support, companies can instantly scale with hundreds of resources for a project.

Access Specialized Skills

When selecting a global Games QA partner, highly skilled QA consultants, managers, leads, test automation engineers, testers and support staff can add exceptional value to any program. The right partner should provide specialized skills in many areas.

- Strategic Game QA Consulting
- Business Process Outsourcing (BPO)
- Games QA SWAT recovery programs
- Test plan and case creation and optimization
- Games QA Project Management
- Functionality testing
- Compliance and Pre-certification testing (on all platforms)
- Test automation
- Hardware and Software compatibility testing
- Localization testing
- Game mastering and support

In a global delivery environment, these resources are sourced from multiple Centers of Excellence, utilizing resources which fit the specific needs of a project.

Maximize Value with Hybrid Solutions

Hybrid test team models can be implemented as part of the long-term, overarching strategy. Hybrid teams include team members residing in more than one Center of Excellence for a specific project. These highly trained and experienced resources use consistent, world-class Games QA and program management processes across a project. Publishers and developers benefit from location agnostic methodologies.
- Situate the work in locations where available experts reside
- Provide a very effective quality:cost value proposition
- Benefit from advantageous foreign exchange rates and lower cost markets

Examples of hybrid teams include:

- Localization testing – in London for Nordic languages and Montreal for all other languages
- Functionality testing – in Hyderabad, Montevideo and Montreal
- BPO consulting – Redmond, Loveland, Montreal
- Strategic Games QA consulting – Redmond and Montreal
- Games QA SWAT recovery programs – all Centers of Excellence
- Test plan and case creation and optimization – all Centers of Excellence
- Games QA Project Management – Montreal, Redmond, Hyderabad
- Compliance and Pre-certification testing (on all platforms) – Redmond, Montreal
- Test automation – Redmond, Montreal
- Hardware and Software compatibility testing – Redmond, Montreal and Loveland
- Game mastering and support – Montreal, Hyderabad

As indicated by the above examples, hybrid solutions can deliver important advantages to publishers and developers.

Buying consoles and playing games is moving from an America-centric towards a global model. With 66% of handheld gaming machines being sold outside of America, performing Games QA globally can provide managers and testers who have a viewpoint that better represents the fastest growing markets, as opposed to companies with locations in a single region.

Part of today's testing mandate is to provide an assessment on the playability of games. Some games, and their rules of play, are actually better known to offshore resources than those onshore. Being able to move the work where the experts are allows better results, as well as better value.

Case Study: Accessing Worldwide Scalability

Situation

A large game publisher acquired multiple developers in a very short period of time and had an immediate spike in QA that they could not manage internally. The developers were scattered globally and had very small QA teams. To meet the existing deadlines, the publisher did not want to make immediate process changes within the development companies. However they needed to ensure that the games would meet the publisher's quality requirements and budgets.

Solution

VMC developed both a short term solution and an overarching strategy for a longer term outsourcing program.

The short term solution was to create a SWAT team from members of our global Centers of Excellence to scale QA services in order to manage the spike. The objective of this SWAT team was to:

1. Assess the current state and outstanding needs.
2. Identify immediate solutions and future state requirements.
3. Create a program to meet both the immediate and longer term requirements.
   a. Immediate requirements:
      i. Adjust only the processes that were flawed and that did not meet a minimum acceptable QA level.
      ii. Meet the tight deadlines and obtain first time passes whenever possible.
   b. Longer term requirements:
      i. Create a global delivery solution with improved QA productivity.
         - Test plan and test case improvements.
         - Bug identification, severity, visibility, and frequency metrics.
         - Testing process improvements.
      ii. Continuous program cost effectiveness.

One of the immediate solutions was to embed seasoned test leads within each of the developer's sites. Their role was to:
1. Perform an evaluation of the status of the QA plan, test cases and progress.
2. In cases where the test plan was missing, to create a test plan and test cases.
3. Modify / implement a QA process that fits within the Developers culture while providing the minimum requirements required by the Publisher.
4. Be the publisher's "feet on the street" at the developer, with reporting.
   a. Testing and development progress (Alpha, Beta, etc.)
   b. Interface between the development team and the external outsourcing teams at our different Centers of Excellence.
   c. Monitoring the QA project scope, quality (metrics), schedule and costs.
   d. In some instances, smoke test build prior to their being transmitted.
5. Return to their Center of Excellence once the QA program was well established.

Another immediate solution was to move the functionality, hardware and software compatibility and compliance testing to the Hyderabad and Montreal Centers of Excellence.

The localization testing was split between London for Nordic languages and Montreal for all other languages, thus optimizing the cost-value chain for this type of work.

Game Mastering, Online and Chat Support services were also provided by VMC. This was a new program for the publisher. VMC was able to meet their needs with Centers of Excellence in Hyderabad and Montreal.

Highly experienced test professionals, using the SWAT team approach, were able to assist our client in obtaining the quality, timeliness and within budget games QA services that they required.

Success

The approach provided a strategic and transformative solution. VMC exceeded customer's expectations and the following service level agreements on this program:

- QA metrics were > 10% better than planned
- QA services were delivered within schedule for all testing
- Each project in the program came in on or under budget

Conclusion

Global Games QA delivery provides a strategic and transformative benefit when properly deployed. Publishers and developers are able to successfully complete projects with lower costs, improved productivity and better overall value. The old perceptions of off shoring Games QA no longer apply. Global delivery when using the right strategies, hybrid teams, location agnostic processes and methodologies provides benefits that go far beyond low cost markets.