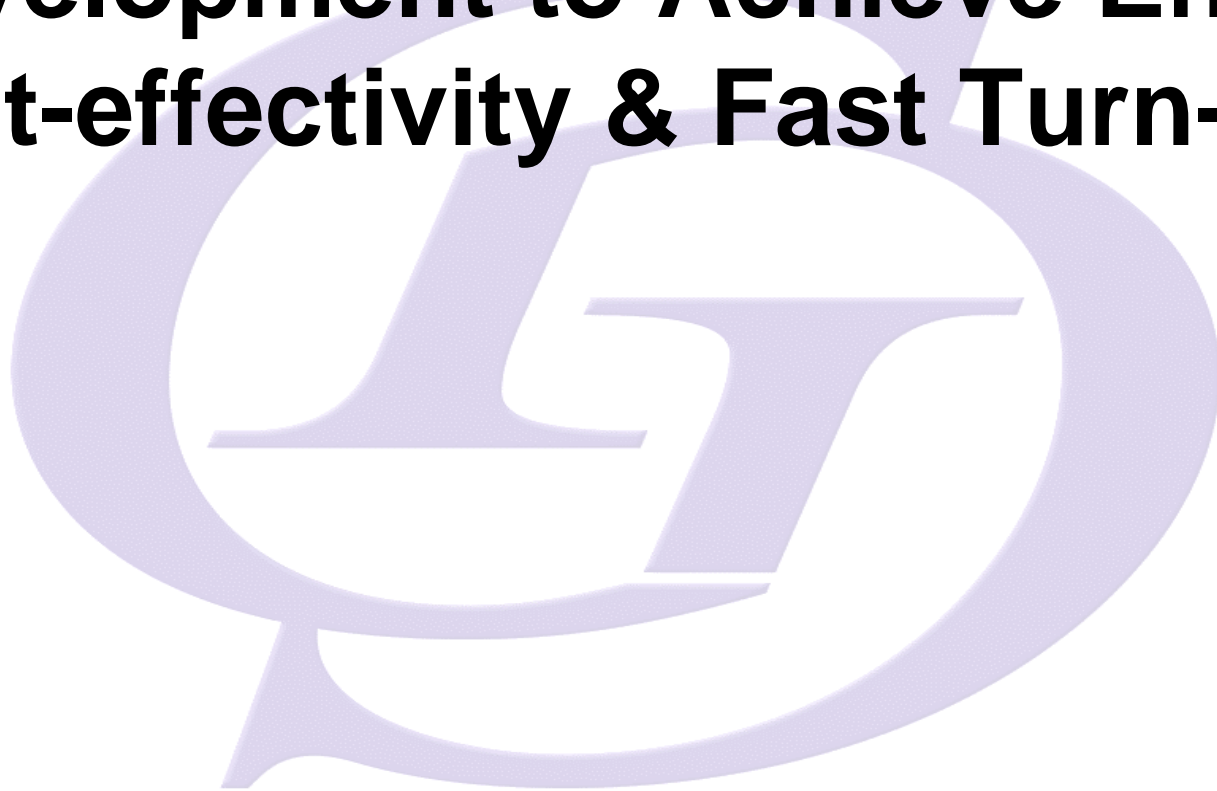




**eDevelopment to Achieve Efficiency,
Cost-effectivity & Fast Turn-around**



G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

What is eDevelopment?

- Doing software development by connecting electronically
- Offshore development outside your domestic base
- Art of acquiring & utilizing best development resources
- Process of minimizing project cost keeping quality & time-to-market unaffected
- Collaborative software development

G&G Technologies, Inc

www.GandGtech.com

info@GandGtech.com



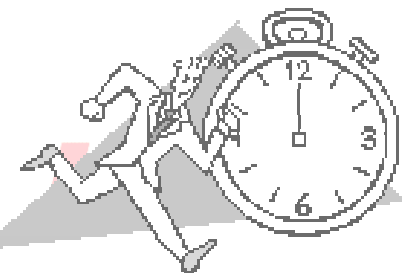
Why eDevelopment?

- Severe shortage of IT professionals
- Explosion in development in coming years
- Finding and retaining right skills cost twice in 7-10 years
- Competitive advantage (at least 50% of large businesses will have offshore operation in 5 years)
- Pricing pressure on software products
- Cost of development offshore marginal due to broadband & high speed access

G&G Technologies,

www.GandGtech.com

info@GandGtech.com



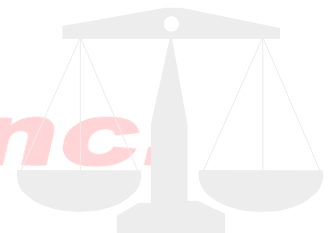
Advantages of Offshore

- Most cost effective (often 40-60% less development cost)
- Access to best talents around the world
- 24-hour production cycle (due to time difference)
- Flexible, deployable team, no permanent overhead
- Focus on your core competency

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com



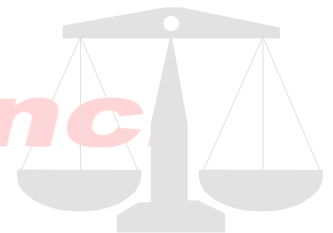
Disadvantages of Offshore

- Cultural differences
- Difficulty in verbal & written communications
- Rapidly changing business process a hurdle for offshore
- Overlap in project management
- Electronic meetings difficult due to time difference
- Political uncertainty

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com



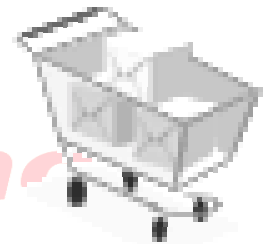
Is your Project a candidate for Offshore Development?

- Size of your project: (1) Budget (2) Number of software developers
- Business process changing or fairly stable?
- Proprietary hardware involved or standard?
- Existing knowledge of systems readily accessible & can be coordinated?
- Is your development environment stable? Can it be replicated easily?
- Is there any shortage of internal resources?

G&G Technologies, Inc

www.GandGtech.com

info@GandGtech.com



Methodologies & Mechanics of Offshore Partnering

- Analyze if your project suited for offshore
- Internal buy in:
 - Economics
 - Logistics
 - Hurdles
 - Risk-benefit analysis

contd....

G&G Technologies, Inc

www.GandGtech.com

info@GandGtech.com



Methodologies & Mechanics of Offshore Partnering

- **Start offshore e-development**
 - Detailed contracting process
 - Project kick-off meeting (face-to-face)
 - Scheduling deliveries & payments
 - Technical meeting (2 weeks to 2 months)
 - If necessary visit offshore lab
 - Assign on-site prime

contd....

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Methodologies & Mechanics of Offshore Partnering

- **Setting up e-development environment & infrastructure**
 - Setting up tools
 - Establish version control process
 - Establish sanity process at deliveries
 - Set up QA process

contd....

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Methodologies & Mechanics of Offshore Partnering

- **On-going problem reporting & tracking**
 - Issues list
 - Bug fixing – prioritize
 - Deviations from features/functionality
 - Performance issues
 - Tracking & follow-up – continuous process

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Initial Setup & Familiarization

- Most critical & important for project success
- Bring a subset of offshore team (if possible)
- Put names with faces
- Technical meetings – 2 weeks to 2 months
- Keep a local manager/coordinator on-site
 - Terminology
 - Time difference
 - Logistical issues of communication
 - Bicultural project leadership
 - Continuous feedback

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Partnering Contracting Agreement

- Do a thorough research on other country's laws
- Consult attorneys, lawyers in partner's country
- Check WTO's terms with other country
- Detailed agreement
- Make sure of confidentiality
 - Offshore partner company
 - Employees
- Get ownership & rights of software assigned
- Strong agreement with local representative company

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Offshore does not mean shipping Code

- Remote access through T-1 & ISDN links
- Development on client systems
- Access in off-peak hours
- Captive system for development
- Strong fire-wall
- Daily code transfer to test systems for sanity
- Cost of broadband, high speed access links very affordable

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Pilot Vs. Full-scale Project

- Depends on your organizational culture
- Critical nature of project
- A good way of testing offshore capabilities
- Pilot can be evolved into a full-scale project
- Can be accomplished without a huge budget
- Easy way of developing relationship

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Productivity Issues

- General productivity of programmers, designers, testers almost same
- Additional project management & coordination
- Higher productivity can be achieved through 24-hour production
- Strong project management methodologies & tools can increase productivity

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

Facts on Countries

- **India**

- Very good education system
- Excellent IT culture
- Substantially less expensive
- Good knowledge in English
- Relatively stable political situation
- Sound judiciary system
- Occasionally poor telecom (now improving)
- Far from North America

contd.....

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com



Facts on Countries

- **Ireland**
 - Skilled programmers
 - Nearness to North America
 - Relatively expensive
- **Singapore**
 - Highly skilled professionals
 - Good working culture
 - Quite expensive

contd.....

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com



Facts on Countries

- Israel
 - High tech culture
 - Experienced programmers
 - Local presence in North America
 - Relatively expensive
- Russia
 - Good education system
 - Less expensive
 - IT infrastructure not proven yet
 - Far to travel

contd.....

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com



Facts on Countries

- China
 - Good programmers
 - Less expensive
 - Problem in communications
 - Far from North America

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com



Economics: H-1B vs. Offsourcing

An average project with duration: 2 years

- On-site option:
 - Number of programmers/designers: 10
 - Average cost/designer: \$70/hr
 - Average cost/designer: \$140,000/yr
 - Cost for design: \$2,800,000 (for 2 years)
 - Misc. project cost (for 2 years):
 - Equipments, software, networks: \$150,000
 - Rents, etc.: 100,000
 - Telecomm charges: 30,000
- Total project cost: \$3,080,000

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

contd.....



Economics: H-1B vs. Offsourcing

An average project with duration: 2 years

- Offshore option:
 - Number of designers offshore: 10 (9+1)
 - Average cost/designer: \$65,000/yr
 - On-site project manager: \$100,000/yr
 - Cost for design: \$1,500,000 (for 2 years)
 - Misc. project cost (for 2 years) :
 - Equipments, software, networks: \$50,000
 - Rents, etc.: 50,000 (on-site)
 - Telecom charges (tel conf, T1): \$100,000
 - Travel: \$50,000
- Total project cost: \$1,750,000

G&G Technologies, Inc. contd....

www.GandGtech.com

info@GandGtech.com



Economics: H-1B vs. Offsourcing

Project duration: 2 years

- Total savings: \$1,330,000
- Savings as a % of domestic cost: 43%
- Savings as a % of offshore cost: 76%

G&G Technologies, Inc.

www.GandGtech.com

info@GandGtech.com

