



White Paper

Why Adopt Nearshore Agile Development?

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Table of Contents

Executive Summary	2
Introduction	2
Nearshoring is the Solution	3
The Answer is Agile	4
Summary	5
References	6

Executive Summary

This white paper presents nearshore Agile development as a relatively new, yet effective Outsourcing 2.0 trend, able to better meet with the challenging requirements of today's high-tech environment compared to traditional offshore waterfall development.

The paper will first provide a brief overview of the most up-to-date statistics of the outsourced projects failure and its major causes. Then it will discuss a transforming nature of current IT outsourcing industry and will argumentatively explain why nearshore IT development is a win-win strategy for small and mid-sized Western European companies who consider outsourcing to save costs, speed up time to market and leverage innovation. In the end the paper will break some major myths about Agile development and will answer the question why adopting a combination of nearshore and Agile development is able to allow Western European companies to more easily and efficiently adapt to the emerging technology as

well as challenging business demands and risks associated with offshore outsourcing.

Introduction

With Outsourcing 2.0* being in full swing, traditional software development methods such as waterfall** start losing value due to their inability to meet with the rapidly changing requirements of this high-tech epoch. Waterfall model is good with stand-alone, batch applications as well as robust enterprise solutions, which require 20+ developers and project execution distributed among multiple locations. But what about Web/Enterprise 2.0 applications, which require up to 20 IT staff members to complete and accelerated time to market to be able to grow into **profitable business solutions** in a small fraction of time? Moreover, these solutions should be free of delays and errors, since any delay in delivery and bug fixing at the post-production stage will cost the client time, money and reputation.

According to the latest CHAOS Report, as of 2009 only 32% of all outsourced software projects succeeded, while 24% failed and 44% were challenged by late delivery, over-budget and poor functionality¹. Another study of 6,700 projects found that 4 out of 5 major factors, contributing to the outsourced project failure, were largely associated with a waterfall

* Outsourcing 2.0 is a next-generation stage of software development/Web 2.0 outsourcing aimed at process simplification (agility) and establishment of long-term and mutually beneficial relationships between the buyer and the service provider

** Waterfall development is referred to as a sequential software development process, in which progress is seen as flowing steadily downwards through the phases of conception, initiation, analysis, design (validation), construction, testing and maintenance

model². As of 2008, 68% companies experienced a waterfall project failure due to³:

- ✓ taking over 180% of target time to deliver,
- ✓ delivering under 70% of the required functionality, and
- ✓ wasting over 41% of the IT development budget remaking the end product as a result of poor requirements gathering at the project initiation and planning stages.

However, the most dramatic legacy of the waterfall model is that it became hardwired into the project planners' mindsets, making the entire software development **process-packaged, plan-driven** and **bureaucratic**. Considering the above, it becomes clear why so many offshore outsourcing deals either fail or are cancelled prior to completion. The cause is seen in the combination of orthodox approaches towards software development and outsourcing to offshore locations, which generally complicates frequent live communication between the buyer and provider. While promising to help cut software development costs, most of offshore outsourcing services providers, who offer their clients pure waterfall development regardless of their business needs and project scope, hide the fact that the clients will have to pay overheads related to fixing the end product's defects and/or malfunctioning (which is a common practice due to inadaptability and inflexibility of the waterfall model), and "helping" the vendor upgrade its infrastructure and processes as required by CMMI and other organization's maturity certifications (which most of old-school vendors are obsessed about).

Additionally, the waterfall model assumes creation of a detailed set of requirements and, based on it, determination of a single project scope, which has neither practical, nor

economic value for companies needing to present their web or software product at the market in a small fraction of time. If something needs to be changed in the middle of the project, the vendor will most likely delay the product delivery, trying to flex the application, and will leave the customer waiting on a bench and watching his competitors "skimming the cream" off their working applications.

The bad news is that typical offshoring to providers with a strong waterfall software development tradition has proven to be illusive and not a panacea for Western European clients, located thousands kilometers away. Today's companies want to feel the pulse of time and are no longer satisfied with **hidden management problems** and **hidden costs** as well as headaches relating to **excessive documentation** and **bulky processes**. The good news is that there is a solution – a good mix of **innovation** and **sustainability**, which is best achieved via **nearshore development**.

Nearshoring is the solution!

A recent joint survey by Duke University's Offshoring Research Network and the global leading consultancy PricewaterhouseCoopers (PwC) finds that the global outsourcing industry is rapidly transforming due to emergence of innovative providers and existing outsourcers' expansion into the new markets⁴. The survey reveals that such traditional outsourcing hubs as India and China are being challenged by Eastern Europe and Latin America. Increased competition is gradually turning the outsourcing landscape into a global race for the market share, driving outsourcers to adopt nearshore software development as an effective business strategy.

Offloading IT development nearshore (to economically slower-achieving neighbors) has proven **very effective** in recent years. Its major benefits include, but are not limited to:

- ✓ Enhanced collaboration between the customer and vendor's development team

Geographical proximity allows better project coordination and management. According to Ventoro Institute, the global sourcing research organization, many offshoring customers try to cut corners by avoiding face-to-face meetings with their vendors and international trips⁵. However, such approach is just a false economy. No secret that only regular "live" **communication** with the vendor's team can **guarantee IT project success**. The customers and vendors can practice **enhanced knowledge sharing** and, thus, become more **proactive** in finding the best solution to this or that problem. Some new-generation companies offer an innovative approach of establishing **interactive IT teams** to enable clients to work directly with nearshore located developers and, thus, to be independent from **classical project management hierarchy** and **complicated procedures**. For a Western European company to set up such a team nearshore (say, in Ukraine) is equal to having its own in-house IT team, but lower Ukrainian taxes, salaries and overall rates help reduce development and operational costs.

- ✓ Working in the same or similar time zone

In traditional offshore locations time difference is a **serious barrier** in the way of successful software development project completion. Due to it, developers have to work in night shifts, which can't help impacting the general quality of the software product. Most bugs and errors occur as a result of occupational stress and burnout. **Nearshore development model** ensures easier bug-fixing, faster solutions and

optimum time-to-market schedules both for early-stage and established global companies.

- ✓ Higher employee retention and lower turnover rates

As was noted at the 7th Annual Conference on Information Science, Technology & Management, the turnover rate among the Indian developers working for offshore industry is very high and reaches 30-40% annually⁶. In Eastern European countries, especially non-EU members, the employee turnover rates are much lower than in India, Western Europe and the United States⁷, meaning that each outsourcing services provider can invest in **nurturing his own talent pool** with little risk of losing people.

Direct work with clients encourages developers to be more responsible and responsive. Understanding that their pay progression and other benefits depend directly on client's satisfaction (and not on corporate team leaders, project managers, IT directors etc like with traditional outsourcing services providers), software developers provenly become **more productive** and **efficient** in the workplace.

Now that the key benefits are known, the question remains - **how to achieve the best software development via Nearshoring?**

The answer is ... Agile!

Agile development^{***} has made its way into the application development mainstream in the past few years and has already gained momentum among smart outsourcers willing to speed up delivery schedules, to quickly adapt to changing business demands, to align

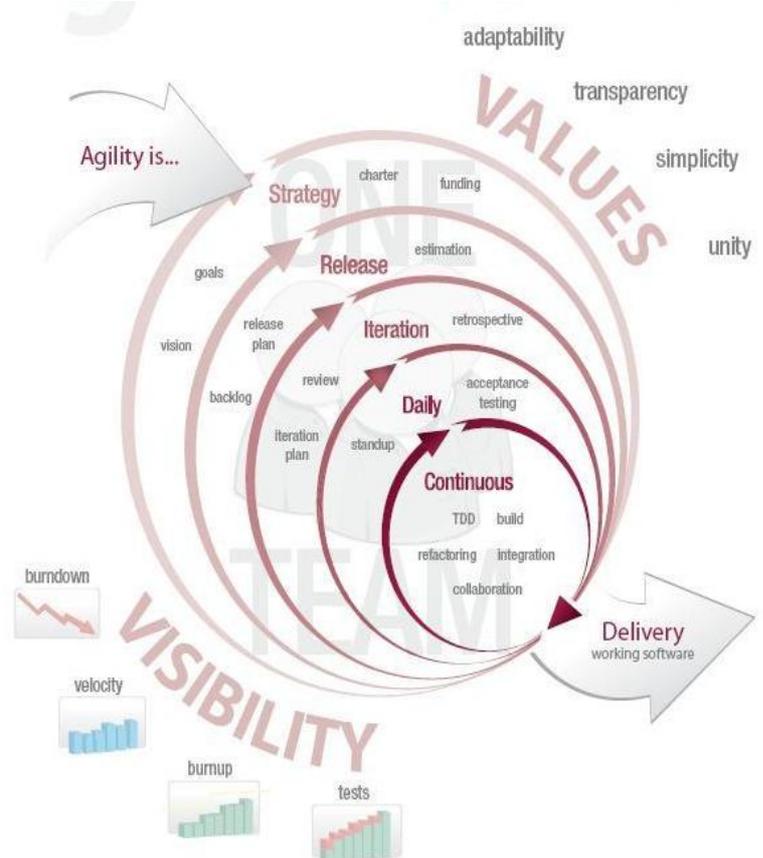
*** In this white paper Agile Development is referred to as a group of software development methodologies based on iterative development, where requirements and solutions evolve through collaboration between self-organizing cross-functional teams

technology and business goals and to gain competitive advantage against the increasing competitive pressures. According to the 2009 State of Agile Development Survey, 28% of companies use Agile on outsourced projects, while 13% plan to offload their Agile projects nearshore⁸. These figures highlight the growing popularity of Agile development over traditional waterfall methods. Listing the greatest concerns of Agile adoption, the above Survey points among all to the **lack of upfront planning** and **lack of predictability**. However, these are just two misconceptions generally relating to the lack of understanding of an incremental planning approach.

In fact, most Agile teams spend as much time planning their project as waterfall-model teams. The only difference is that in Agile the planning efforts are **distributed throughout an entire project** and are not just compressed to the project beginning stage, like in waterfall. Unlike upfront planning, the incremental approach gives venues to both high-level initial planning and lower-level iterative planning, which is more effective, as more knowledge is gained with each new iteration.

Unlike traditional detailed and task-based project planning, Agile continuous planning provides teams with the necessary process-based frameworks to more easily and efficiently adapt to the new technology, requirements, business demands, risks and issues.

Regarding the lack of predictability, in software development what is often believed to be **“predictability”** is, in fact, only **“the perception of predictability”**. In traditional models predictions are made based on activity plans, progress evaluation, and analysis of deviations from plan etc. But decades of experience show well how dismal such predictions prove to be. This happens, because traditional models lack



a simple mechanism of integrating new information into the plans. In Agile predictability is more precise, as the incremental planning and re-planning are refreshed with new actual data emerging throughout the development process.

According to the State of Agile Development Survey, 90% of respondents say that implementing Agile either improved or significantly improved their ability to manage rapidly changing environments. Additionally, 83% of respondents report achieving better project visibility with the use of Agile methods.

Summary

Agile is no panacea either. All it offers is simply **process, engineering** and **managerial practices** packaged together to allow **higher degree of discipline** and **sustainability** in every single area



of software development, from test-driven to continuous integration to daily stand-ups.

While large outsourcers can afford to leverage their technologic expertise by locating their IT function offshore or distributing it among multiple locations, a combination of Nearshoring and Agile development appears to be a perfect option for small and mid-sized Western European companies due to enhanced ability to manage changing priorities, improved alignment between business objectives and IT, faster time to market and simplified development process.

References

¹ The Standish Group, “2009 CHAOS Report,” 2010

² Cited in C. Larman, *Agile and iterative development: a manager’s guide*, Addison-Wesley Professional, 2003

³ IAG Consulting, “Business Analysis Benchmark Study,” 2009

⁴ PricewaterhouseCoopers, Inc., “Global Offshoring Research,” 2009

⁵ Ventoro, “Offshore 2005 Research,” 2005

⁶ ‘Proceedings of the 7th Annual Conference on Information Science, Technology & Management,’ 2009

⁷ Gartner, 2008

⁸ VersionOne, “State of Agile Development Survey,” 2009

Waterfall vs. Agile		
	Waterfall	Agile
Philosophy	Software development is a construction process	Software development is a creative process
Workflow	Serial	Iterative
Requirements	Thorough documentation	Concise documentation
Knowledge transfer	Focus on written documentation and a final release	Focus on frequent verbal communication and regular working releases
Team size	Large	Small
Planning	Gantt Chart	Task/feature list
Monitoring	Progress	Progress and quality
Change management	Control or minimize change	Make change easier
Process definition	Thoroughly documented	Concise and memorable
Process improvement	Metrics	Brainstorming
Final outcome	Meeting the initial predictions of cost and schedule	Delivering business value



About Ciklum

Ciklum is an innovative Danish IT outsourcing company specializing in nearshore software development in Ukraine, and in addition having a set-up in Pakistan. Founded in 2002 by Torben Majgaard, Ciklum has grown into Denmark's largest IT Nearshoring services provider. With **8+ years** of using best practice and **800+ developers** working for **100+ customers**, Ciklum focuses on setting up streamlined and productive IT development teams for Western European customers.

Ciklum's core offering is establishing and servicing clients' own development teams that **100% belong to and are managed by clients**. The strategic advantages of **Ciklum Client Team** model compared to classic outsourcing are very significant in terms of Team competences, motivation, consistency in KnowHow, low employee fluctuation, meeting deadlines, flexibility and scalability etc.

Ciklum has four offices in the four largest cities of Ukraine and two offices in Pakistan, as well as offices in Denmark, Sweden, United Kingdom, Switzerland, Germany and the Netherlands. Ciklum is a winner of the Red Herring 100 Europe 2009, an award given to the Top 100 private technology companies based in the EMEA (Europe, Middle East and Africa) region each year. Ciklum is a member of the Ukrainian Hi-Tech Initiative.

For more information please go to www.ciklum.net