

Offshore Development Culture and User Experience

Jhumkee Iyengar
Principal Consultant, User In Design, Pune, India

Abstract: Offshore development has matured and is adopted widely today. But the user experiences of products developed offshore are complex and challenging to design and often less than desirable because offshore and user experience cultures are at odds. People-process guidelines aligned towards an increasingly consumer focused global world are outlined here.

Keywords: offshore, culture, global, user experience

1 Introduction to Offshore Development Industry and Culture

Offshore software development has been one of the most significant recent trends with software work being sent to locations offering lower development costs. The client and end user are often western and offshore organizations often eastern. Though the process has matured, the engagement model framed by the business environment has evolved a largely 'factory' oriented culture of sending material in and getting widgets out. The common practice is to extract the project or a part of the project from its overall user context and outsource it offshore. A considerable period of its lifecycle is in the hands of developers alone [1], often executed in isolation.

The offshore software industry has had phenomenal success. Revenues of the Indian IT industry for example grew ten fold within a decade. Software service exports increased 130% in the past 3 years. The US at 60 %, and UK at 19 % remain the largest IT-BPO export markets in FY2008 [2].

Concurrently, digital touch points are increasingly pervading everyday consumer life. Their user experience is being considered as critical to overall product success. But offshoring client companies have traditionally considered offshore development as a detached activity of which the user experience is not a part. The resulting work culture creates a backstage setup and mindset, where the offshore team does not participate in the iterative process of discussion, challenging assumptions and redesigns during development that are all so crucial to progressive discovery of a quality user experience. Clients expect them and they too expect themselves to execute as a 'back office', delivering to discrete requirements. Additional and stereotypical cultural dichotomies between 'eastern' approaches (not questioning unless asked, not acknowledging problems unless probed and not challenging assumptions) and 'western' approaches (direct and to the face, questioning, challenging and raising alarms if in disagreement) are additional factors not specifically addressed here but add to the complexity.

2 Implications and Challenges for User Experience Design

User Experience (UX) for this context is defined as the outcome of a user's interaction with an interactive product that impacts both the business as well as the end users' relation with the product and brand.

The 'back office' offshore culture described in the previous section have often resulted in post-development rework, releasing a less than desirable end product and overshooting of schedules, budgets etc., because the UX did not meet user expectations. Such quality issues are increasingly apportioned to ineffectiveness of off shoring in general when actually the overall work culture is flawed. Growth of the offshore industry and cost savings for client companies, have been significant enough for both organizations not to question the high price of the resulting UX quality.

In offshore development organizations, the UX discipline has evolved as an outcome of the off shoring boom and this cultural mismatch on UX quality. But they have been unable to integrate UX because the UX approach is inherently at odds with their core offshore work model. Though the agile development model reflects the iterative UX design approach [3], its execution in a multi location setting is yet being shaped.

Here are some of the implications and challenges of this evolving area:

Some flawed assumptions and expectations by offshore development clients [4]:

1. There is no need for a shared starting point to the project with the offshore team
2. Checking for user experience as part of user acceptance testing is adequate
3. UX understanding and assumptions of onsite do not need further specifying for offshore
4. Designing a UX and sending offshore to develop in isolation will preserve the UX
5. User experience should be a cost saving byproduct of development efforts
6. Offshore teams can design based on second hand user information from stakeholders
7. A 'lesser' UX is acceptable for the significantly lower development costs

Corresponding expectations of offshore development organizations:

1. Orders defined by the client must be followed without question
2. The code needs to work; task completion is not the focus and not accounted for
3. User experience is not within the purview of offshore software development
4. There is no benefit nor motivator for trying to address the user experience

Since both organizations do not expect user experience to be integral to offshore development, clients do not look for this competence offshore. When offered it, they are unsure what to expect, how to integrate it and what value to attach to it.

Some challenges of client companies [4] are:

1. A process to manage discovered requirements not yet established for offshore
2. The lost cohesion and user flow are difficult to re-introduce after development
3. Specifying requirements/contracts with the level of detail needed is too demanding
4. Offshore development metrics like cost/code, volume etc. are often diametrically opposite to user experience metrics like ease of use, success and satisfaction
5. Post development rework can significantly reduce cost effectiveness of off-shoring

6. Offshore developers are less participative and experienced in UX than onsite developers
7. Skills like design for accessibility is not as mature amongst offshore developers
8. Offshore UX not yet tried and tested, hence apprehensions and fear of failure exist

Some challenges of offshore software development companies are:

1. Integrating a new approach like UX that may not show short term results
2. Defining the right model to integrate UX with successfully established IT services
3. Convincing clients on the importance of UX partnering and potential of UX failure
4. Convincing clients about credentials of the younger user experience talent base
5. Proving UX design capability despite the business and user culture barriers

3 Guidelines for User Experience in Global Work

A cultural and mindset shift over and above process enhancements is therefore needed to view offshore development as a partnership rather than a back office vendor who executes in isolation. It needs to include ongoing interaction and communication as well as include user experience from requirements until launch. This would justify not just short-term cost savings but long-term quality of the user experience as well. It would also protect the investment made in offshore development. However, this shift needs to originate at the project source in order to effect a mid and downstream process change. The other shift needed is to accept working integrally with developers as fundamental to creating a good user experience [5], regardless of their location or cultural framework. Below are guidelines for client companies based on and evolved over more than 20 projects executed from offshore, many more presentations and discussions with clients, about 18 years of combined experience in Indian and western corporations and teaching mid managers engaged in offshore development and UX.

1. Before you consider offshore development on a project:

1. Determine your rationale for offshore development. There is a big difference between offshore development by choice and by compulsion [6].
2. Find out who is leading the offshore project office, enquire whether and how they plan for user experience and explain why they should consider it
3. Consider including UX requirements into the RFP [Request for Proposal]

2. Identify drivers and inhibitors to including UX in offshore development. Some are:

Drivers

1. Project over 3 months duration
2. Project is at concept stage
3. In-house UX does not exist
4. There is a UX resource crunch
5. Design is complete, going offshore
6. Want cost benefits of offshore
7. Want a sense of the emerging market

Inhibitors

1. Cultural difference barriers insurmountable
2. Belief that UX cannot be off-shored
3. Offshore UX team is an unknown
4. Offshore team has only visual design, no user experience skills
5. Concern about user experience processes, output, quality of offshore team

3. Plan and execute user experience in offshore development projects:

1. Define what, how and with whom to offshore for user experience:
 - a. Set expectations of offshore UX: mature/ standalone/graphic design needs only
 - b. Define and prioritize UX criteria: experiences in similar domain/ have certain technology capability/ have remote test facility/ certain prototyping skills etc.
 - c. Select partner based on match in work cultures. Teamwork has only grown more important today – we live in a complex world that requires multiple competencies and hard work to succeed [7]. Match UX methodology and processes, approach to quality, communications processes, ROI tracking ability, research orientation and reference client feedback. Do not expect the same expertise as yours.
2. Define onsite offshore work model, partnership, people and processes:
 - a. Example work models: Cognizant’s “End- to-End UI Process”, HFI’s “Schaffer-Weinschenk Method™” and Persistent’s “Overlap Usability” [8]. Lack of a clear model here will lead to chaos and crisis. An adhoc model will be at the mercy of compatible and mature interface pairs across the globe [6].
 - b. Define partnership parameters: determine skills, identify complementary skills and capability gaps. Define user experience activities to offshore, ramp up plan, handover responsibilities and identify staff with accountability for UX
 - c. Define whether and in what training to invest. Plan for cultural differences
 - d. Define processes: communication protocols, offshore work requests, time tracking, project management, work flow processes etc. Allow time and patience initially but do not underestimate the need for setting up processes.
3. Set up workaround processes to address limitations of the setup [4]:
 - a. User Research: gather user data from target location and disseminate, include offshore UX staff in data gathering, do remote data gathering, include user representatives in meetings, research end user forums, find matching target users offshore, train engineering management to talk to users, create user personas, tell user stories to developers, follow international design standards
 - b. Communication: Share past user studies, videos, best practices, standards. It is impossible to over communicate in a global software development setup [6].
 - c. Process: Plan more iterations, remote tests, test at both locations, opt for usage centered rather than user centered design, detail and test design before development, reuse existing elements, provide design patterns, plan for UX accountability in final test, define developer incentives. Flag risks and adapt test strategy [8].
4. Plan and setup for long term success, quality and sustenance:
 - a. Include UX requirements in all RFPs and evaluate offshore partner on UX
 - b. Include UX expertise representation as part of offshore project management
 - c. Define and communicate UX guidelines, standards, artifacts in requirements
 - d. Plan process for ongoing user knowledge flow between UX professionals of both teams
 - e. Define long term communication, synch and backup criteria with check point

Plan for partner evaluation and selection over a year. Plan process consolidation over a year.

In general, ensure an ongoing spirit of collaboration, share discovered user information and accept work with cultural differences. You cannot have one-sidedness as a global company because you're beginning to expand your boundaries and relate to people from different cultures [9]. Some offshore client companies are setting up captive centers, leveraging the creativity of their most brilliant scientists and technologists wherever they can assemble them [10]. Invest in partnering for the long term and allow time and patience to build trust and change mindsets.

4 Conclusions

Successfully managing the design of a user experience with part of the work off shored is new, evolving and a complex undertaking. It goes beyond logistics, infrastructure and procedural issues and into the broader realms of culture, employment policies and human sentiments. There is little research available and guidelines provided are empirical at this point, requiring validation over many offshore projects. Though a global workplace is challenging, it is a part of the future [11]. It is also an inevitable byproduct of uncertainties of the present business realities. Cost advantages of developing in other countries will continue to attract work there [8] and continue to impact the user experience. This topic therefore needs to be recognized, discussed and addressed by the global user experience community. In this paper, an attempt has been made to elicit this need and suggest some preliminary guidelines to address the gaps of this setting. Further and detailed study by both onsite and offshore industries is required to understand and evolve this area further. Organizations that successfully embrace a global work culture and also protect the interests of an increasingly consumer oriented industry will prevail.

References

1. Iyengar, J.: Usability Issues in Offshore Development: an Indian Perspective. In: Proceedings of Usability Professionals Association Conference [2007]
2. Indian IT-BPO Industry 2009: NASSCOM Analysis. <http://www.nasscom.in> [2009]
3. Patton, J.: Twelve emerging best practices for adding UX work to Agile development. http://agileproductdesign.com/blog/emerging_best_agile_ux_practice.html [2008]
4. Tutorial on Offshore Usability: A Necessary Outcome of Offshore Development. Nielsen Norman Group. Participant feedback comp. by J. Iyengar. Chicago and Amsterdam [2008]
5. Nelson, S.: No Designer is an Island. In: Adaptive Path Newsletter <http://www.adaptivepath.com/ideas/newsletter/archives/022509/index.php> [2009]
6. Clarice Technologies White paper: Seven pillars of wisdom on Product Development in a Global Setup. <http://www.claricetechnologies.com/index.php?/gsd.html>
7. Murthy, NRN. A Better India: A Better World, PP 24, Penguin Group publishing, 2009.
8. Christie, J.: What happens to usability when development goes offshore? Testing Experience magazine. <http://www.clarotesting.com/page12.htm> , March 2009
9. Cohen, B. Innovate at Any Rate, Economic Times, 4 September, 2009
10. Popkin, J and Iyengar, P. IT and the East: How China and India are altering the future of technology and innovation. Harvard business school press, PP 107, 2006
11. Bradley, G.: Social and Community Informatics. PP76 Routledge, London and New York [2006]