

Project Proposal: *Outsource-Africa*
A Zambian case study

November 15, 2005

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Executive Summary

“Outsource-Africa” is an MIT student-led, faculty-supervised initiative to test the feasibility and provide an implementation framework for a potential software outsourcing model from the U.S. to Africa, specifically Zambia.

The project will be carried out in three phases, each of which are timed as follows:

1. *Phase I*: October 15 - December 31 2005
2. *Phase II*: January 6 - February 1 2005.
3. *Phase III (depends on results of phase II)*: February 15th – June 15th 2006.

Phase I of the project will be executed in the US and mainly entails gathering information on outsourcing. This information will be compiled to form a cohesive case study on the feasibility of outsourcing to the Zambian IT markets. The study will illustrate the factors that U.S. corporations take into consideration when deciding to outsource: cost, skill-level, communication and turn-over logistics. It will explore into these factors in light of the Zambian IT markets, and thereby, form a hypothesis on whether IT outsourcing to Zambia is feasible.

Phase II of the project will involve testing this hypothesis. In order to do this, the team will travel to Zambia and conduct a hands-on analysis of seven pre-identified Software companies in Zambia. The team will assess whether these Zambian companies are a match to the American outsourcing market; they will do this by a well-established quantitative and qualitative criterion described later.

Phase III will begin on February 15th 2005. Since the team would have traveled to Zambia and conducted a skill-level and cost assessment of the seven Zambian IT companies, it will be in a position to lobby American companies to outsource to Zambia. Phase III will mostly involve contacting large American companies and writing proposals in order to initiate software-development contracts with Zambian outsourcing companies.

The project is budgeted to meet the travel and transportation costs for team members traveling to Zambia. It will also contain miscellaneous expenditures required for ground-level analysis within Zambia.

The team members of the project have diverse backgrounds and bring unique skill sets. The team sees Outsource-Africa as the first step for further ICT-outsourcing work to Africa-

Outcome and Project Plan

In this section, we outline our expectations of each of the three phases of the project. We also point out the deliverables and the expected outcomes.

PHASE I: US-Based Work

1. **Case-study Development** – This phase will involve extensive background research into the current trends of outsourcing to foreign countries. An enormous amount of information will be gathered on outsourcing in general, and will be compiled to form a cohesive study that will explore into the feasibility of outsourcing to Zambia. The focus of our information-gathering will be in three major areas:
 - a. **US Outsourcing Companies.** In order to assess Zambia’s capability in the outsourcing market, we will need to be able to determine the driving factors behind US Outsourcing. This would mean quantitatively assessing the costs to US companies in practicing outsourcing, and analyzing their expectations of foreign partners firms.
 - b. **Zambian IT Market.** This will also explore into the Zambian IT market and remotely analyzing the skill levels available and the costs at which these skills are acquired.
 - c. **Other offshore outsourcing markets.** India, China and Bangladesh are partners in a very large outsourcing market. This phase of the project will explore into the special qualities that they bring into the market. Why is it that companies choose to outsource to these markets? Any special considerations with respect to their software skill levels will be looked at.The case study will also present quantitative and qualitative data of specific companies that have become successful outsourcing partners. Through this analysis, it will point out whether Zambian IT companies can also benefit from this growing global market.
2. **Finding Zambian outsourcing partners** –Small IT companies ~~who~~ that ~~might~~ be interested in outsourcing will be located through the MIT-Alumni network, and approached with the OursourceAfrica idea. Seven of these companies have already been identified and contacted. They will be interviewed about their requirements for outsourcing. Aspects to be addressed include the kind of skills companies look for in outsourcing, and the pay scales at which they like to outsource. The needs that are peculiar to each company ~~would~~ will be looked at, as well as the level of precision required, which will be compared to the level of quality control that is possible with work done in Zambia. Extensive research will go into the level of investment that the company is capable of making in Zambia and the kinds of projects the company will be able and willing to outsource, for example, web development, data base management, and research. In addition, the kinds of skill sets that match these kinds of outsourced projects will be looked at. Other needs of the company to be assessed include the hardware investments such

as a centre, computers and the telecommunications and internet infrastructure that will be necessary for work.

The results gathered from this research will be used as a guideline for phase two of the project.

PHASE II: Zambia-Based Work

Phase II of the project will be feasibility testing within Zambia. Using the case study from Phase I as background, project members will travel to Zambia to analyze the feasibility of outsourcing to five pre-selected IT companies. These companies' IT skill levels will be thoroughly analyzed using the International Standards Organizations' IT-assessment criterion¹. They will also be able to put estimates on the prices at which outsourcing would be feasible within Zambia. Based on this work, the project members will be able to conclude on whether outsourcing is feasible or not.”

A second objective of this phase is to construct detailed profiles of these IT companies. These profiles will illustrate the skill levels offered in each company and have detailed biographies of each of the IT workers. It will also contain a detailed price sheet and policies and conditions of each firm. Additionally, it will describe the Republic of Zambia's policies on export and import regulations. This will enable the team to lobby for outsourcing contracts from U.S. Corporations upon their return.

The results of this section will be used to conduct post-Zambia work, where local companies in Zambia will be connected with US Corporations to enable the development of at least one strong IT-outsourcing contract.

PHASE III: Post-Zambia Work

The post-Zambia work largely depends on the fieldwork findings and research done in Zambia. If the hypothesis of adequate skill level in Zambia is true, the first task is to present portfolios of Zambian IT companies to US Corporations. Once a company is interested we will work with both the interested US company and the local Zambian partner to develop a mutual agreement between the two parties in the setup of the working relationship. Our specific expertise in doing lie in our common understanding of the way corporations work both in Zambia and in the U.S. This will enable us to help the two companies draw our policies on work, turn-over, copyright etc. This setup will be based on the framework we developed earlier but can be tailored due to each party's inputs and preferences.

¹ The exact label for this criterion is ISO 8159.

Timeline

November – Week 1	<input type="checkbox"/> Contact funding sources <input type="checkbox"/> Contact Sapient & New Sector Alliance <input type="checkbox"/> Collect literature on outsourcing	
November – Week 2	<input type="checkbox"/> Contact MIT resources (e.g. professors, etc) <input type="checkbox"/> Read literature on outsourcing <input type="checkbox"/> Funding sources sorted <input type="checkbox"/> Continue securing funding	
November – Week 3	<input type="checkbox"/> List companies (ones that do and do not outsource) to interview <input type="checkbox"/> “sales-pitch” to get companies to agree for an interview for background reserach <input type="checkbox"/> Continue securing funding <input type="checkbox"/> Update timeline	
November – Week 4	<input type="checkbox"/> Email & call companies to setup appointments <input type="checkbox"/> Read outsourcing literature <input type="checkbox"/> Continue securing funding	
December – Week 1	<input type="checkbox"/> Interview companies <input type="checkbox"/> Read outsourcing literature <input type="checkbox"/> Continue securing funding <input type="checkbox"/> Update timeline	
December – Week 2	<input type="checkbox"/> Interview companies <input type="checkbox"/> Read outsourcing literature <input type="checkbox"/> Secured funding – done	
December – Week 3	<input type="checkbox"/> Final Case Study on outsourcing literature and interviews with companies	
December – Week 4	<input type="checkbox"/> Prepare for Zambia <input type="checkbox"/> Update timeline	
January – Week 1 (Zambia / US)	<input type="checkbox"/> Contact potential local outsourcing partners (Zambia) <input type="checkbox"/> Identify companies to research <input type="checkbox"/> Visit Computer Science Department of UNZA <input type="checkbox"/> Touch base with EU funder <input type="checkbox"/> Setup appointments with IT-related governmental sectors <input type="checkbox"/> Visit computer centers	<input type="checkbox"/> Interview companies <input type="checkbox"/> Literature on outsourcing <input type="checkbox"/> Update funders
January – Week 2 (Zambia / US)	<input type="checkbox"/> Visit companies <input type="checkbox"/> Assess potential local outsourcing partners <input type="checkbox"/> Interview UNZA CS students & professors <input type="checkbox"/> Meeting w/ US team (via	<input type="checkbox"/> Start business proposal <input type="checkbox"/> Meeting w/ Zambian team

	telecommunications) <input type="checkbox"/> Visit IT-related gov't (foreign & domestic) sectors	
January – Week 3 (Zambia / US)	<input type="checkbox"/> Update timeline <input type="checkbox"/> Visit companies <input type="checkbox"/> Identify local outsourcing partners & work with them to setup framework <input type="checkbox"/> Meeting w/ US team <input type="checkbox"/> Visit companies	<input type="checkbox"/> Contact US companies <input type="checkbox"/> Update timeline <input type="checkbox"/> Meeting w/ Zambian team
January – Week 4 (Zambia / US)	<input type="checkbox"/> Complete analysis of IT Skill level in Zambia	<input type="checkbox"/> Contact US companies <input type="checkbox"/> Continue business proposal <input type="checkbox"/> Update funders
February – Week 1	<input type="checkbox"/> Business proposal final draft – proof read by various people	
February – Week 2	<input type="checkbox"/> Final Proposal	
February – Week 3	<input type="checkbox"/> Send proposal to companies	

Budget

The budget is drawn up in two stages: U.S.-based budget (Phase I) and Zambia-based Budget (Phase II).

Phase I Budget

Item	Projected Cost
Transportation, consulting with companies, photocopies, etc.	\$ 80
Consulting	\$ 20
Photocopies	\$ 15
Literature Support costs	\$ 85
Total for Phase I	\$ 200

Phase II Budget

Item	Projected Cost
Travel for 4 People	\$ 6,000
Local Accommodation	\$ 1,000
Implementation Expenditure – expenditure on equipment, brochures for companies, project biographies, profile assessment cards etc.	\$ 1,000
Total for Phase II	\$ 8,000

Total Budget: \$ 8,200.00

Project Team

Raja H.R. Bobbili

MIT B.S. '07 Computer Science & Electrical Engineering, Economics

Having initiated this project, Raja has spent his time and energy developing the vision and goals for Outsource-Africa. Raja's double major in economics and computer science provides a competent skill set for leading this project.

The passion Raja has for his work is apparent in the projects he has previously worked on: an InventTeam project which researched potential programs that promote science and technology, and working with politicians to draw up policies to reduce HIV/AIDS in Zambia. Raised in Zambia, Raja's first step as an MIT student was to look for an international development program that would enable him to work on projects concerning the economic and social sectors of his country. Having worked with Zambian politicians in the past, Raja is familiar with the political landscape and is a good source for first-hand information regarding Zambia.

Tiffany Yang

MIT B.S. '06 Mechanical Engineering

As a fourth year mechanical engineer at MIT, Tiffany has the technical background to understand any ICT related aspects of this project. From her biomedical engineering internship and current research project, Tiffany has also been able to apply her problem solving skills to develop creative solutions to real-world problems. Additionally, she has practical experience and familiarity with the local culture, having worked extensively on a similar project in Zambia. From all her projects, Tiffany's well-developed interpersonal skills result from many team projects and equip her for working with professionals in industry.

Irina Azu

MIT B.S. '08 Mechanical Engineering

Irina brings to this project her enthusiasm, interest, passion to research into a subject, outsourcing, that personally interests her. She is an African, born in Ghana, thus her personal experience with the nuances of African culture while living in Ghana will be a real plus as she works with this team. Also her experience working with a team in Ghana on the Africa Internet Technology Initiative would be valuable on this project as well. Further, she gained research experience while assisting a Professor and fellow at Pembroke College, Cambridge University and director of the African Studies Department there, who was doing research on globalization in Ghana. She has good inter-personal skills and is capable of approaching companies and talking with them about this project idea.

Her first hand experience living in a developing country has made her very passionate about international development. She has a full understanding of the educational, economic and social impact that an introduction of technology can have on individuals in the country. Furthermore, her research and educational experience have exposed her to societies where technology has played a huge role in economic advancement and she has had this keenness to bring this to the African continent.

Jiho Lee

MIT B.S. '08 Chemistry

As an international student from South Korea, Jiho believes that one of the first things to be accomplished in the world is to bridge the digital divide internationally. His firm belief is thus accompanied with great enthusiasm for the project. He has gained analytical skills as a chemistry student, and so has prudence and effectiveness when performing a task.

Jiho has taken a class named Solving Complex Problems in MIT that made him gain experience with working in a team as well as equipped him with problem solving skills. Jiho and 20 other students conducted research, had discussions and compiled a report with possible solutions to the current environmental issues in the Galapagos archipelago. They presented their report with a preservation solution to sustain human activity in the archipelago, to experts on Galapagos including the president of the Charles Darwin Foundation. The skills that he acquired from the class would be valuable while working on this project.

Conclusion

The Outsource-Africa project will produce outcomes that will lay the founding steps for outsourcing to Zambia. These are:

1. **Case-study.** A strong and illustrative case-study will point out the prices and skills at which the U.S corporations are outsourcing. It will thus compare them to the skills and possible prices in Zambia and draw upon a hypothesis which will state whether outsourcing to Zambia is feasibly or not.
2. **Field Research.** This hypothesis is not left unverified; the team travels to Zambia and works with seven pre-identified IT companies in assessing their skill level. Do they have the required skills? If they do, will they be able to offer their services at competent prices? IT skill level assessment is done using the comprehensive International Standards Organization IT Criteria 8159.
3. **Deliverable.** While this is a research project, all the field research is wrapped-up to produce a strong deliverable: an IT-outsourcing contract between a U.S. Corporation and a Zambian IT company. The team, upon their return from Zambia, will have a wealth of information on these IT companies, allowing them to effectively lobby for US corporations to outsource to Zambia.

The main motivation for this project is to create a platform where at least one developing country in Sub-Saharan Africa can have sustainable economic progress from Outsourcing and make the same gains in technological advancement that other countries in South-East Asia have made. The hope is that a success in this effort will cause a rippling effect to other countries in Africa. The student-led out-source Africa team is very motivated and well-equipped with the analytical skills, and experience that is required for this project. The team is competent and can definitely achieve the project goals on time and on budget.