

A MULTI-CHANNEL APPROACH FOR MONITORING OFF-SHORE OUTSOURCING PROJECTS FOR DISTANCE LEARNING MATERIAL DEVELOPMENT

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ABSTRACT

In the world of "borderless education", off-shore outsourcing of learning resources becomes the norm practised by universities worldwide, especially for a newly start-up institution such as the Wawasan Open University (WOU). For the past 3 years of experience in learning resources development, the WOU has encountered various issues such as managing of writers in distant locations, meeting deadlines, training of writers in distant locations, keeping the cost down, copyright issues, quality control, and cultural differences/localisation of context. In overcoming some of these issues, the WOU has adopted an effective monitoring mechanism to enable the success of this key activity in the university. Since its inception in year 2006 until early 2008, the institution has successfully outsourced about fifty course materials off-shore and locally. This paper first introduces the outsourcing process in WOU followed by some of the issues faced by the university while working with the offshore writers and the adaptation of course materials. Subsequently, details of the monitoring mechanism used in the outsourcing process will be explained. Lastly, this paper also presents WOU's future direction in this perspective.

Keywords: Program and Material Development in DE, Learning Resources in DE,_DE and Industry Partnerships.

INTRODUCTION

The Wawasan Open University (WOU) is Malaysia's first charity-backed, private, not-for-profit open university. It started to recruit students in year 2007 with teaching and learning methodology that combines limited face-to-face instruction and computer-assisted instruction to maximise student learning process. A self-contained learning resource in printed format will be distributed to every student who enrolls in a course at the beginning of the semester. At the moment, the WOU has more than 2,000 active students. In order to cope with the needs of business efficiency within a university for global competition, the WOU narrowed down their field of business to the so-called 'core-business'.

This is done by turning over activities performed internally in the university to an external party. The external party is paid to provide its services within a specific period of time. The term used to describe this service is *outsourcing*. At the WOU, there are two ways of off-shore outsourcing projects for learning resources development: working with academic members from foreign institutions to develop new courses and purchase of adaptation rights for existing course materials from other institutions.

Two major reasons that promote off-shore outsourcing are to gain access to world-class capabilities and to access resources that are not easily found internally. The decision for outsourcing is planned carefully by the respective schools in the WOU. The WOU requires developers for various study materials used by distance learners. With a limited number of faculty members and time constraint, one of the ways to develop the study materials is by outsourcing off-shore and locally. Since its inception in 2006 until early 2008, the institution has successfully developed 48 course materials; twenty-one outsourced off-shore and twenty-seven outsourced locally. This paper first introduces the outsourcing process in WOU. Then, it continues with an explanation of the monitoring mechanism used for this development project followed by presentation of some difficulties and issues faced by the university while working with the off-shore developers and the adaptation of study materials. Lastly, this paper also projects the future direction of the WOU in this perspective.

THE OFF-SHORE OUTSOURCING PROCESS

Currently, the university has three schools which are responsible for the design and development of individual programmes. In the WOU, a programme is a group courses that are put together to obtain a particular qualification. Meanwhile, a course refers to a defined area of study for learners in a programme. For instance, the School of Science and Technology has designed a Bachelor of Technology in E-Commerce (BTEC) programme.

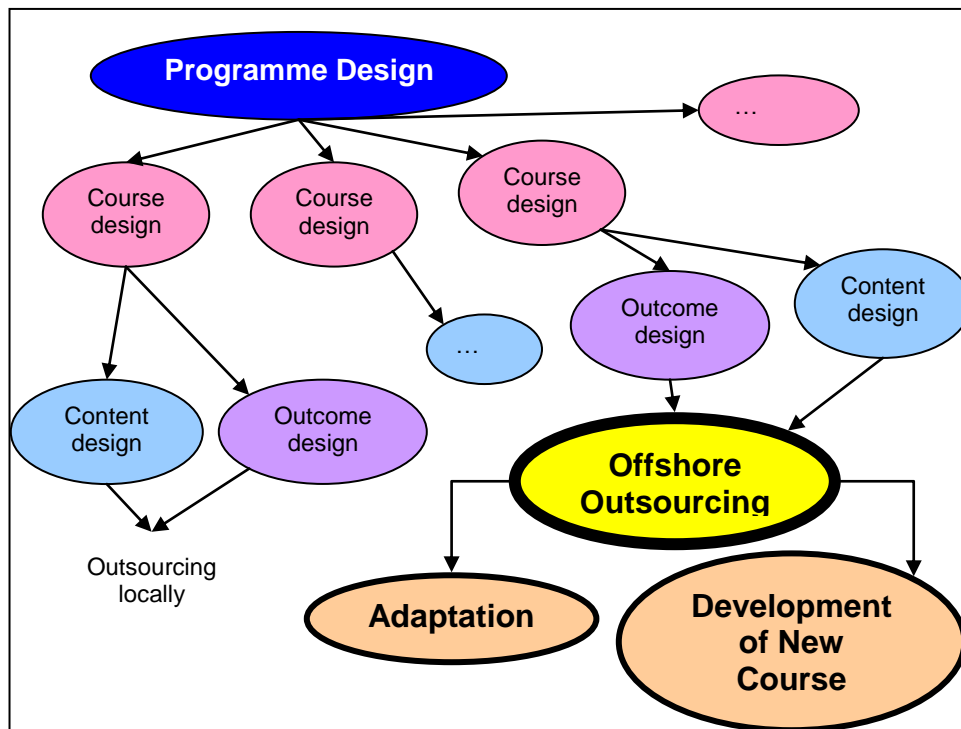


Figure: 1
General planning of outsourcing

As illustrated in Figure 1, in the detailed design of the BTEC programme, a list of courses was designed and developed based on their specific content or syllabus.

Learners are required to learn those specific areas of knowledge in the syllabus based on the definition of their respective learning outcomes. Learning outcomes are the specific intentions of a programme or course, which are written in specific terms.

They describe what a learner should know, understand or be able to do at the end of that programme or course.

In each course, a self-contained study material or sometimes referred as course material comprises units to be covered in a course. Thus, a unit is a portion of the study material and they are broken into sub-topics or sections.

In each course, a credit value will be assigned with a numerical symbol representing the number of hours a learner spends on a course during a semester. In the WOU, one course credit is equivalent to 40 hours of learning.

The WOU's course material comprises a course guide and printed material (divided into 5 units and sections) with self-tests (which could be delivered via learning management system and limited face-to-face tutorial sessions).

After the content and learning outcomes have been designed in the schools, the consideration to outsource will take place. Referring to the bold circle in Figure 1, the two ways of off-shore outsourcing include working with academic members from foreign institutions to develop new courses (development of a new course) and the purchase of adaptation rights for existing course materials from other institutions (adaptation).

After the WOU has signed an agreement with the off-shore partner, a standard workflow will be constructed as shown in Figure 2. In the development of a new course, one or a team of course developers will be appointed in the development of a particular course.

A common pattern of this cooperation is to go through a middle man or an organisation that will be responsible to find a team of experts to produce the course material. Another possible mode of cooperation is to interact directly with the course developer.

In the process of developing a new course, course developers are required to produce a course blueprint based on the syllabus provided by WOU. In the course blueprint, the design or structure of a course will be fixed with the preliminary template or guidelines. A textbook and other source of references will be identified.

In the revision of the course blueprint, the WOU course team, led by a course team leader or sometimes called the Course Coordinator (CC) will contribute their expert knowledge wherever necessary.

After the course blueprint has been finalised, the course developers will start writing the units. Units of the study material will be revised several times based on the exchange of content knowledge between the content experts from the WOU's internal party and course developers.

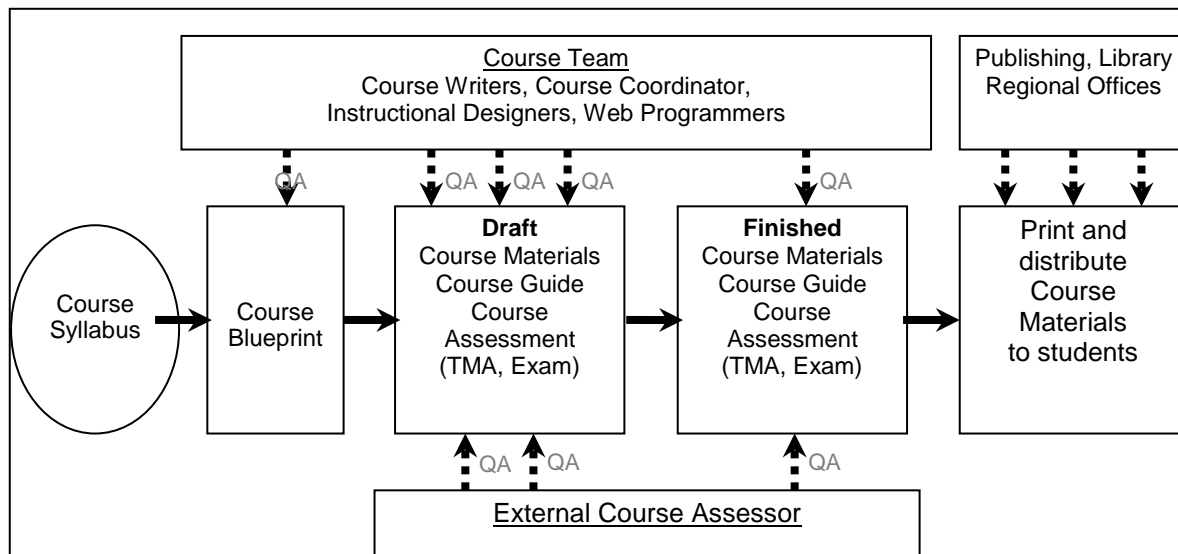


Figure: 2
Workflow of the development of a new course

Besides that, the instructional designers from the WOU will ensure that the course material is developed based on the WOU's house style.

In addition, an external input through a named external course assessor (ECA) is also incorporated into the mechanism to ensure quality control in the overall development of the course. In the case of a course adaptation, before the outsourcing process commences, the WOU and the offshore partner have to negotiate and sign a license agreement where all terms and conditions including the royalty payment are agreed upon. With this agreement, the CC is given access to request and review course materials before the purchase of adaptation rights. The CC plays an important role in reviewing and assessing the suitability of the course material identified for adaptation. If a course material is appropriate and adheres to WOU syllabus, the Publishing Unit will purchase the rights from the offshore partner.

Following the purchase, the CC will source for a writer to adapt and localised the course material contents to learners' requirements. The whole process of adaptation might take up to 6 months. The writer's job scope includes providing new case studies, local examples, assignments, examination questions, course guide, etc. The subsequent process of course development is similar to the work-flow depicted in : except that the ECA report is provided by the outsourced institution. For both purchasing of adaptation rights and development of new courses by foreign academic members, a license agreement needs to be drawn between two working parties.

- **Agreement between WOU and the offshore partner for adaptation**
As mentioned above, before the purchase of adaptation rights, WOU and the outsourced institution have to sign an agreement which describes the grant of reproduction and modification rights, royalty payment (amount and frequency), termination clause and intellectual property rights of the owner.

Adherence to the agreement is an important aspect of the success of the collaboration. Mutual trust and frequent communications are also important as the two parties have to work with each other.

- Agreement between WOU and local writer or foreign institution for development of new course

Agreement between local writer and foreign institution also includes the usual terms and conditions listed in (a). However, the essential elements that determine the accomplishment of the project are the timeline of course development, job specifications and copyright issues that need to be identified clearly.

The writer will be provided with a schedule or timeline to assist him/her to meet the deadline. An example of a course development timeline is presented in Table 1. The schedule assists the Course Coordinator in monitoring the progress of course developments. This enables the Course Coordinator to mediate and assist the writer if he/she has difficulty in fulfilling his/her commitment.

Categories of works are also listed clearly in the Annexure of the contract which specifies the work relevant to the development of the course.

Table: 1
Sample Course development timeline

Category of Work	Estimated Pages	Commencement Date	First Draft Submission*	Final Draft Submission*
Convert Course Contents to Blueprint Develop Unit One (3 lessons)	Approx. 5-10 pages Approx. 60-80 pages	July 1, 2006 July 15, 2006	July 10, 2006 Aug. 15, 2006	July 15, 2006 Oct. 1, 2006
Develop Unit Two (3 lessons) Develop Unit Three (5 lessons)	Approx. 60-80 pages Approx. 60-80 pages	Aug. 15, 2006 Sep. 15, 2006	Sep. 15, 2006 Oct. 14, 2006	Nov. 1, 2006 Dec. 1, 2006
Develop Unit Four (3 lessons) Develop Unit Five (3 lessons)	Approx. 60-80 pages Approx. 60-80 pages	Oct. 14, 2006 Nov. 15, 2006	Nov. 15, 2006 Dec. 15, 2006	Dec. 31, 2006 Feb. 1, 2007
Course Guide, Specimen Examination Paper, Answer Key and Marking Scheme, Assignment Files, PowerPoint Slides for each unit etc.	Approx. 50-100 pages	Dec. 15, 2006	Jan. 15, 2007	Mar. 1, 2007

WOU respects and observes the Intellectual Property Rights of all individuals. As such, copyright is strictly observed in the university.

The course developer is responsible and liable to identify and obtain all items that require copyright clearance. If the course developer is unable to obtain the copyright clearance, the university shall endeavour to seek clearances for such items identified. If copyright is unobtainable, these materials have to be omitted and replaced with others by the course developer.

MONITORING MECHANISM

The monitoring mechanism used in the learning resources development is a crucial component in the success of the outsourcing project. From the start of the project, the WOU ensures that the developers have been trained with the WOU house style (definition) as a one of the crucial preparatory activities.

Besides that, an ECA will be identified so that he/she as an expert will grant the initial design of the course. The initial design of the course will be stated in the course blueprint.

Progress Report		Date: <u>05-Sep-07</u>						
Course code and Title: _____								
Course Coordinator/Course Team Leader: _____								
Academic member and Instruction Designers: _____								
Preparatory activities								
<input checked="" type="checkbox"/>	Identify writers	<u>Course writers:</u> _____						
<input checked="" type="checkbox"/>	Writer Training	_____						
<input type="checkbox"/>	Appoint ECA	<u>Name of ECA:</u> _____						
Development process		Blueprint	Writing				CTR	ECA
	Deadline	1st draft	2nd draft	3rd draft	> 3 drafts			
<input checked="" type="checkbox"/>	Blueprint	02.03.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	Unit 1	17.04.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	Unit 2	17.05.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	Unit 3	15.06.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	Unit 4	18.07.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	Unit 5	17.08.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	Course Guide/Tutor Guide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Submission due date to Publishing: _____								
<input type="checkbox"/>	Final ECA report							
<input type="checkbox"/>	Course Development Report							

Figure: 3
Sample progress report for individual course development

In the course blueprint, the course team leader and the course developer will have to determine a set of deadlines on every unit. Every unit will have to go through several revision processes among the WOU course team members.

The submission of each unit will be tracked in terms of by individual course as depicted in the progress report in Figure 3.

Usually, a developer will spend about one month to develop a unit and the revision will take longer time as the course team needs to discuss several issues such as the accuracy of the content, design of instruction in use, presentation of the academic content in compliance with the WOU's house style etc.

The course team will hold rigorous meetings in order to ensure the units have gone through a maximum internal quality assurance process. The information related to the improvement of the unit will be recorded in specific report, named as Course Team Report (CTR). After that, every single unit will be assessed by the ECA in terms of its organisation, flow and accuracy of the content. A set of checklist will be provided to the ECA besides his/her interim report in relation to the compatibility of the course materials to the course objectives and their suitability with regards to the target students, assessment questions and activities suggested. The ECA will identify major strengths and weaknesses about the course materials. He/She will have to ensure whether the course materials are relevant in terms of its contents, style and presentation of materials, functionality of its case studies, activities, references etc the courses represent. More importantly, the ECA must also compare and evaluate the course materials with similar course taught in ODL and/or traditional modes. In some cases, the ECA will also provide possible changes in revisions to the course.

Course Development and Presentation Summary																									
Year	Courses		Course development and presentation schedule										STATUS												
			2007		2008		2009		2010		2011		CBP	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	CG	TG					
TITLE	CODE	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2														
2009																									
S1	BASIC	Computer Organisation	TCC 201																						
	CORE	Electronic Materials and Devices 1	TEL348																						
	BASIC	Solid State Physics	TEE 232																						
	BASIC	Computer Network	TCC 351																						
	BASIC	Database 1	TCC 231																						
ELEC	Engineering Mathematics	TMA 227																							
S2	BASIC	Analog Circuit 1	TEE 241																						
	BASIC	Digital Design	TEE 246																						
	BASIC	Electronics Principles	TEE 245																						
	BASIC	Operating Systems	TCC 202																						
	BASIC	Database 2	TCC 232																						
	BASIC	Network programming	TSN 212																						
	CORE	Information Systems & Electronic Commerce Strategy 2	TEC 202																						
	CORE	Human Computer Interaction	TAI 331																						





Legend	Abbreviation	Status explanation
 Under development	S1 Semester 1	1 Yet to begin
 Yet to develop	S2 Semester 2	2 Writing in progress
 Fast-track presentation	CBP Course Blueprint	3 Draft sent to ECA
 Original scheduled presentation (LAN)	CG Course Guide	4 Final approval by course team
	TC Tutor Guide	5 Submitted to Publishing
	ECA External Course Assessment	6 Sent for printing

Figure: 4
Sample monitoring chart for a list of courses in year 2009
under the School of Science and Technology

After the units have been completed, the course developers will need to develop a course guide for students and tutor guide for tutors who would help facilitate the course in a limited face-to-face tutorial sessions. These documents will be sent to the ECA for quality assurance.

A final report from the ECA will indicate the completion of the development process and the completed material will be sent to the in-house publishing department for editing and layout designing process. Before the learning materials are published, the course team leader will need to proof read the documents to ensure that the content of the documents remains accurate.

As the WOU is a new university, the development process is very active and the school will need to keep track of the development status of all courses. As a result, the course development and presentation summary is the key reference to ensure that the development is ongoing smoothly and the material for subsequent presentation is ready.

As shown in Figure 4, the status column serves as an alert key for problematic courses which require special attention and a remedial action will be taken into consideration. An example of problematic course development includes developers who are involved in plagiarism or who has not been able to meet the deadlines etc. The alerting system is important to show the number of courses ready for offer.

A number of issues have been identified upon monitoring the learning resource development. Some of these issues were resolved but some were not.

ISSUES RELATED TO OFF-SHORE OUTSOURCING

Similar to the definition used by Backman, Holmberg and Tonny (2007), the success of the off-shore outsourcing project is defined by the benefits from outsourcing gained by the WOU as a result of deploying the outsourcing strategy. This can be measured in terms of how well it reduces cost and the satisfactory level of learners or level of quality measurement. Some of the issues that merge in the process of off-source outsourcing are highlighted as follows:

Copyright

One of the major problems that we have encountered with foreign writers is infringement of Intellectual Property Rights (IPR), either intentionally or unintentionally. Surprisingly some writers assumed that information from websites are copyright free and can be used liberally. There have been incidents where writers copied from textbooks or journals without citing references and giving credits where it is due. It is the WOU's policy to acknowledge and respect IPR. Plagiarism is not allowed and must be avoided at all costs.

Under the Publishing Unit of WOU, there is a copyright page that serves as the gatekeeper to ensure that all course materials published by the university is free from copyright infringement. It is the university practice to write to all copyright owners to request for permission and make any payment to use the material whenever necessary. The materials will not be used if we failed to obtain consent from the owners.

Managing Of Course Developers In Distant Locations

Training of course developers is required especially at the beginning of the outsourcing project. Understanding of the WOU learners is important as it relates to the satisfaction of the target reader of the course material.

As WOU imposes a set of house style onto the course materials, WOU needs to ensure that this style is well delivered to the course developers and adaptors. Characteristics of a good course material has to be defined at the very beginning and must be stated clearly to them to ensure that they are able to match WOU's expectations. The sharing of possible methods used to design an effective course material and its preferred language or assessment types are also important to course developers and adaptors.

Offshoring of university study material should be regarded as a dynamic process that evolves over time (Jesen and Pedersen, 2007). Therefore, bridging the gap between the two parties is extremely important. Universities that embark on an outsourcing strategy would do well to first establish a structured approach to close the gap that often exists between two parties. In the case of WOU, maintaining the relationship between WOU and course developers/adaptors will ensure the success of the collaboration. Nevertheless, the support team must also be keen to provide the feedback that the other parties require.

Communication between the two parties need to be predictable, interactive and proactive (Fuchs, 2007). WOU needs to appoint one or several members of a team for in-house and offshore locations to be responsible for communication exchange and to monitor the development of course materials. There must also be a person who is responsible for supporting and monitoring the knowledge delivery process during the training process.

The person will also be the main contact person for the off-shore team members and general queries will be dealt by this person.

Meeting Deadlines

The average time for course development in WOU is between eight to twelve months. Any delay in submission of manuscript will affect the course presentation scheduled. Meeting the deadline of submission is crucial to the CC as there are still many level of preparations required before the course can be presented to the students.

This includes several revisions from the in-house course team members and the ECA before the work is considered ready for publishing process. As most of the course developers have other work, social and family commitments, they might not be able to meet the manuscript submission deadlines. Among the consequences are delay of course presentation, termination of writers and re-looking into the reserve pool of other writers. As a result, the university is burdened with additional cost and lost of time.

The importance of deadline is highlighted during the training and it is also explained in detail in the agreement. The role of the Course Coordinator as the mediator is significant in monitoring the progress of the course developer. Ample reminder should be given if there is any delay from the very beginning.

Cultural Differences/Localisation of Context

Due to the course developers' backgrounds and cultural differences, the course materials developed require editing and amendments to suit Malaysian needs. The case studies used, examples given and the language style need to be changed and localised. This is more apparent in developing business and management courses when foreign course developers do not understand our business and economic environment and hence, not able to provide examples that students can comprehend.

The course team leader and its team will need to put in extra effort to substitute the facts and even do their own research to compliment the course materials submitted by foreign course developers.

FUTURE DIRECTION

The WOU has a good track record in off-shore outsourcing with a moderate success rate. Off-shore outsourcing assists in fast-tracking the University's course presentation and fills the gap when local expertise is not available. It also makes it possible for the schools to manage the development of a number of courses concurrently. Sharing of information and exchanging of ideas between academics from different background and experience is also a healthy trend in promoting intellectual knowledge.

We believe all the issues mentioned above could be resolved if more training is provided to the appointed course developers and ongoing communication channel is maintained between them and the appointed Course Coordinator. Mutual trust and respect of working ethics between two groups of working community helps during discussions. Both parties need to make an effort to be more tolerant with the request or demand from each other. Off-shore outsourcing is not just a business transaction in a globalised world but it involves inculcating a good relationship between two institutions. The WOU as a new ODL institution will continue to outsource either locally or off-shore in meeting the demand of the fast changing intellectual environment. We will source for collaboration opportunities with different partners in fulfilling our future academic needs.

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REFERENCES

Backman, P, Holmberg, M and Tonnby, D. (2007). 'Key factors for successful offshore outsourcing projects', *School of Business Economics and Law*, Sweden: Goteborg University.

Jesen, P. D. and Pedersen, T. (2007). 'Whether and what to offshore?', *Center for Strategic Managmeent and Globalization*, Denmark: Copenhagen Business School.

Chowdhary, R. (2008). *Offshore Outsourcing Trends* Available:
http://EzineArticles.com/?expert=Rakhee_Chowdhary

Fuchs, G. (2007). *Communication: The Holy Grail of Outsourcing*. Available:
http://www.cio.com/article/137952/Communication_The_Holy_Grail_of_Outsourcing