REFERENCES


Casey, V. 2010. Developing Trust In Virtual Software development Teams, Dundalk Institute of Technology, Department of Computing and Mathematics, val.casey@dkit.ie


Turner, J.R. 2002, Project success criteria, April, pp. 32-3.


**APPENDICES**

Appendix 1: Questionnaire
Appendix 2: Semi Structured Interview Guide
Appendix 3: Operationalization of variables of the study
Appendix 4: Correlation coefficient table of all indicators
APPENDIX 1: QUESTIONNAIRE

Questionnaire on finding out the impact of Decision Making on Project Success in Virtual Software Development Projects in Sri Lanka

Dear Respondent,

I am doing an educational research which is a prerequisite to complete the Master of Business Administration in Management of Technology programme in University of Moratuwa. This questionnaire is designed to study factors which influence on effective decision making in virtual software development projects in Sri Lanka.

If you are a member of virtual team, please spend couple of minutes to fill this questionnaire and please focus on only one project that you are currently working on or a project got immediately completed.

Terminology - Virtual teams:

A group of people, who has same goals and objectives as traditional teams, but operate across time, geographical locations and organizational boundaries linked by communication technologies. These people use Intranet, Intranets, Extranets and other networks to communicate, coordinate and collaborate with each other on their tasks.

This questionnaire includes 2 sections which Section - A is supposed to be collected actual survey feedbacks and Section - B is to collect general and demographical data.

Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate manner without individualizing. This study is entirely for academic purposes and your responses to the questions will only be used for the purpose of this study.

I greatly appreciate your cooperation in this regard.

Thank You!
P.K.K. Shalika  

[Reg. No. 10/9034]  

MBA – MOT 2010/2011,  

University of Moratuwa  

**Section - A**  

Please carefully read each descriptive statement in terms of your opinion about the statements in each section. Please check the relevant check box which **most closely responds** to your thinking of each statement.

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

**1. TEAM AUTONOMY**

1.1 Team competence for setting up own objectives

1.11 All your key personnel in the project stay in the project for its entire duration  

1.12 Do you think that all your high technical personnel possess sufficient decision making qualities

1.13 Do you think that your team member (subordinate) has given independence to select his/her own way to do assigned tasks

1.14 Do you think that your team member has given freedom to decide time frame for his/her assigned work

1.2 Available resources and authority level

1.21 Do you think your project plan always capture the demand for necessary resources

1.22 Can you delay the project until you get the required resources

1.23 Do you think that you can change the project’s scope according available resources

1.3 Training availability

1.31 Organization provides following training needs for the new recruiter
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| - Induction  
- The company standards  
- Domain knowledge |   |   |   |
| 1.32 At the start up phase, does the organization provide all back ground information about the project to its members |   |   |   |
| 1.33 When a new member is appointed to an existing project, all related information are provided to him/her at the same time |   |   |   |
| 2. SOCIO EMOTIONAL FACTORS |   |   |   |
| 2.1 Coordination |   |   |   |
| 2.11 Do you think that your development work are splitting into set of related functionality according to feature content |   |   |   |
| 2.12 Do you think that members understanding of set of related functionality in a feature is high |   |   |   |
| 2.13 Do you think that team members who are working on a set of coherent functionality should sit in the same building |   |   |   |
| 2.14 In your project, members are not distracted by different tasks in other projects |   |   |   |
| 2.2 Trust |   |   |   |
| 2.21 Do all project members (members from other co working organization/countries) meet at Project kick off |   |   |   |
| 2.22 In your projects, the frequency of team gathering (members from other co working organization/countries) within the project duration is high |   |   |   |
| 2.23 Do you think that frequency of sharing information about local context and constraints by members with co working organization is high in your project |   |   |   |
| 2.3 Shared understanding and knowledge transfer |   |   |   |
| 2.31 Do you think that, your organization has a central project Web site to exchange project documents and information through central databases |   |   |   |
| 2.32 Do you think that every team member has access to the project database |   |   |   |
| 2.33 If team member has access, can they manipulate the documents freely |   |   |   |
| 2.4 Relationship building |   |   |   |
| 2.41 Do you think that work of one team member is always dependent of work of another member |   |   |   |
| 2.42 Do you think that team work has impact on the |   |   |   |
effectiveness of the project

2.43 In your project, team members frequently collaborate their efforts with each other

3. EFFECTIVE COMMUNICATION

3.1 Tools of communication

3.11 Select following communication medias used in the project to communicate within the team and with co working organization. (Tick more than one if applicable)

- [ ] Video conferencing
- [ ] Audio conferencing
- [ ] Email
- [ ] Instant messaging (skype)
- [ ] On line meeting
- [ ] Telephone calls
- [ ] Other (Please specify)

3.2 Motivation to communicate

3.21 Do you think that speed of feedback for an inquiry you made to the co working organization within the project work is high

- [ ] Yes
- [ ] No

3.22 Do you think that members’ understanding of messages received from co working organizations are high

- [ ] Yes
- [ ] No

3.3 Level of project communication

3.31 Do you think that your project has a comprehensive communication plan which includes communication methods, meeting schedule, available hours etc.

- [ ] Yes
- [ ] No

3.32 Do you think that informal communication fills details of work, handle exceptions and correct mistakes

- [ ] Yes
- [ ] No

3.33 Do you think that your project has a communication leader, or a team dedicated to communication activities

- [ ] Yes
- [ ] No

3.34 Do you think that project members are free to communicate matters in each level of members in co working organization

- [ ] Yes
- [ ] No

4. EFFECTIVE DECISION MAKING

4.1 Use of systematic decision making process

4.11 Do you think that you have identified potential problems, opportunities and uncertainties when taking project decisions

- [ ] Yes
- [ ] No

4.12 When you take key projects decisions, you often do

- [ ] Yes
- [ ] No
a comprehensive assessment and analysis of the business situation

4.14 Select the steps that you execute when taking a difficult project decision

- Outline your goal and outcome
- Gather data
- Brainstorm to develop alternatives
- List pros and cons of each alternative
- Make the decision
- Once the decision is picked, implement it right away
- Learn from, and reflect on the decision making

4.2 Decision accuracy, stability and speed

4.21 Do you use standardized decision making process for similar kinds of problems to enable consistent decision making over time

4.22 Do you think that the speed of making a decision in your project is up to the satisfactory level

4.23 In your project, accuracy of project decisions are high

4.24 In the short run, do you think that the changing frequency of project final decisions are low

5. Project Success

5.1 Meeting planned goals

5.11 In your projects more frequently, financial limits are clearly stated

5.12 In your project, activities are carried out exactly as planned in terms of schedule time and cost

5.13 In your project, planned end date is clearly defined in the project plan

5.14 Do you think that your involvement in understanding required effort for a project is high

5.2 Impact on the customer

5.21 Do you think that your project follows the clearly defined requirement management process

5.22 Do you think that users of your project deliverables are satisfied with project change management decisions

5.23 Your project is maintaining zero to ten (0% - 10%) defect density rate

5.24 Your project considers quality, on time/ on budget delivery and effective change management when releasing project deliverables
### 5.3 Benefit to the developing organization

<table>
<thead>
<tr>
<th>5.31</th>
<th>Do you think that this project create a new market in the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.32</td>
<td>Do you think that this project outcome will be a new product line in your organization</td>
</tr>
<tr>
<td>5.33</td>
<td>Select the capabilities acquired by team members at the end of the project</td>
</tr>
</tbody>
</table>

- Capabilities for software programming
- Capabilities for testing and high quality assurance
- Capabilities for project management
- Capabilities for software process management
- Capabilities for software design
- Capabilities to develop specialized expertise in a particular domain
- Capabilities to monitor technological development and identify niches for potential developments

### Section - B

These questions are to collect your demographic information and general information. Please check the option that is relevant to you.

1. **How many members in your local team (in numbers)**
   - [ ] Less than 2
   - [ ] 2 - 5
   - [x] 6 - 10
   - [ ] over 10

2. **Number of members in your co working organization/country who work in same project**
   - [ ] Less than 2
   - [ ] 2 - 5
   - [x] 6 - 10
   - [ ] over 10

3. **How do you recognized your role in the project**
   - [ ] Head of Department
   - [ ] Senior Project Manager
   - [ ] Project Manager
   - [ ] Technical leader
   - [ ] Team leader
   - [ ] Other (please specify)

4. **Highest educational qualifications**
   - [ ] Doctorate
   - [ ] Post Graduates/Masters
5. Your experience is in project management field (in years)
   - < 1 year
   - 1-3 years
   - 3-5 years
   - > 5 years
   - Not relevant

6. Total duration of your project (in months)
   - < 6
   - 6 to 12
   - > 12

7. Number of geographical locations that team members are dispersed in a project
   - 2 locations
   - 3 locations
   - more than 3 locations

8. Name of the organization that you are currently employed (Optional)

9. Any comments that you suggest to improve the survey output (optional)

Please save your work
...

End of the survey

Thank you very much for the participation
APPENDIX 2: SEMI STRUCTURE INTERVIEW GUIDE

SEMI-STRUCTURED INTERVIEW GUIDE

The interview / conference call should begin with introductions of each relevant project management representative present on the interview / conference call followed by a short description of the study. Participants will also be reminded that the interview / conference call should last approximately 20 to 30 minutes and no individual identifying data will be used in the study write up.

The interviewer will then move into questions as follows:

1) Opening question (to get participants talking and to help them feel comfortable)
   ✓ Tell me about your experience in working with virtual software development teams

2) Transition questions (to move into the key questions in order to find the determining factors for effective decision making and their importance.)
   ✓ Tell me about your experiences when you make important project decisions
   ✓ What are the key concepts which should have to make effective project decision
   ✓ What are the key variables associated with those concepts and their weightages if any.

3) Key questions (to elicit information about decision making effectiveness and that impact on Project success)
   ✓ Here, key questions will be probed to the main concepts in the questionnaire.

4) Probe or follow-up questions (to elicit more information during the discussion with respondent’s own suggestions and recommendations)
   ✓ Tell me more about that your feelings……
Would you explain further your suggestions……

Collaboration

5) Ending questions (to summarize information and bring closure to the discussion)

- Considering the discussion, please summarize the main factors that would be most helpful in making effective decisions
- Considering the discussion, please summarize the main barriers or challenges for decision making in virtual teams.
### APPENDIX 3: OPERATIONALIZATIONS OF VARIABLES

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Variables</th>
<th>Indicators</th>
<th>Sub indicators</th>
<th>Measurement</th>
<th>Source-from</th>
<th>Level of Measurement</th>
<th>Question Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To identify the determining factors of effective decision making</td>
<td>Team autonomy</td>
<td>Team competence for setting up own objectives (40%)</td>
<td>Awareness</td>
<td>performance to be consistent</td>
<td>Little (1989) and Sprigg, at el, (2000)</td>
<td>Likert</td>
<td>1.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Likert</td>
<td>1.13/1.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decision making skills of team members</td>
<td>N/A</td>
<td>performance to be dependable</td>
<td></td>
<td>Likert</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extend of freedom to make own decisions</td>
<td>N/A</td>
<td>dependable</td>
<td></td>
<td>Likert</td>
<td>1.22/1.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Available resources and authority level (40%)</td>
<td>Involvement to planning</td>
<td>N/A</td>
<td>Daft &amp; Lengel, (1986)</td>
<td>Likert</td>
<td>1.31/1.32/1.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Authority level</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training availability (20%)</td>
<td>Confidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socio emotional factors</td>
<td>Coordination (25%)</td>
<td>Coherence (splitting the work during development)</td>
<td>Ebert &amp; Neve (2001)</td>
<td>Likert</td>
<td>2.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------</td>
<td>--------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>collocation</td>
<td>-do-</td>
<td></td>
<td></td>
<td>2.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>allocation</td>
<td>N/A</td>
<td></td>
<td></td>
<td>2.13/2.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust (20%)</td>
<td>Enhance trust between collaborative parties</td>
<td>N/A</td>
<td>Robey et al., (2000)</td>
<td>Likert</td>
<td>2.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Have a system to follow up the progress of work of geographically separated site</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared understanding and knowledge transfer (30%)</td>
<td>Extend of integration and sharing knowledge/ work product/ Information</td>
<td>N/A</td>
<td>Mockus &amp; Herbsleb, (2001)</td>
<td>Likert</td>
<td>2.31/2.32/2.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Building (25%)</td>
<td>Extend of interaction among team members to complete tasks, reveal the relations of collaborative parties</td>
<td>N/A</td>
<td>Sproull &amp; Keisler, (1986)</td>
<td>Likert</td>
<td>2.41/2.42/2.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To find out the determining factors to build relationships</td>
<td>Effective communication</td>
<td>Tools of communication (30%)</td>
<td>Number of communication tools</td>
<td>N/A</td>
<td>Chidambaram &amp; Jones, (1993); O’Conaill et. al., (1993)</td>
<td>Likert</td>
<td>3.11</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Motivation to communicate (40%)</td>
<td>Two way communication</td>
<td>N/A</td>
<td>Herbsleb et al., (2001)</td>
<td>Likert</td>
<td>3.21/3.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of project communication (30%)</td>
<td>Need for a communication plan and communication leader or a team who dedicated to the communication</td>
<td>N/A</td>
<td>Crampton, (2001); Powell et al., (2004);</td>
<td>Likert</td>
<td>3.31/3.32/3.33/3.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective decision making</td>
<td>Use of systematic decision making process (40%)</td>
<td>Extend of assessment prior to make decisions</td>
<td>N/A</td>
<td>Engleberg, (2007); Brodbeck, et al. (2007);</td>
<td>Likert</td>
<td>4.11/4.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project decision making criteria</td>
<td>N/A</td>
<td>Lipshitz R., (1993)</td>
<td>Likert</td>
<td>4.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision accuracy, stability and speed (60%)</td>
<td>Speed</td>
<td>N/A</td>
<td>Likert</td>
<td>4.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>N/A</td>
<td>-do-</td>
<td>Likert</td>
<td>4.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stability</td>
<td>N/A</td>
<td>-do-</td>
<td>Likert</td>
<td>4.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project success</td>
<td>Meeting planned goals (35%)</td>
<td>Comply with scheduled cost budget</td>
<td>N/A</td>
<td>Shenhar et al. (2001)</td>
<td>Likert</td>
<td>5.11/5.12</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------</td>
<td>-----------------------------------</td>
<td>-----</td>
<td>-----------------------</td>
<td>--------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comply with scheduled time</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td>5.13/5.14</td>
<td></td>
</tr>
<tr>
<td>Impact on the customer (30%)</td>
<td>Extend of customer satisfaction</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td>5.21/5.22/5.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project deliverable criteria</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td>5.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Create new market</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td>5.31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Create new product line</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td>5.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve team capabilities</td>
<td>N/A</td>
<td>-do-</td>
<td></td>
<td>Likert</td>
<td>5.33</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 4: Correlation Coefficient of Indicators

<table>
<thead>
<tr>
<th></th>
<th>Team competence</th>
<th>Resources and authority level</th>
<th>Training availability</th>
<th>Coordinating Trust</th>
<th>Shared understanding of knowledge transfer</th>
<th>Relationship building</th>
<th>Tools of communication</th>
<th>Motivation to communicate</th>
<th>Level of project communication</th>
<th>Effective decision making</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Team competence</strong></td>
<td>Pearson Correlation</td>
<td><strong>1</strong></td>
<td><strong>.671</strong></td>
<td><strong>.626</strong></td>
<td><strong>.598</strong></td>
<td><strong>.398</strong></td>
<td><strong>.670</strong></td>
<td><strong>.478</strong></td>
<td><strong>.352</strong></td>
<td><strong>.522</strong></td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td><strong>Resources and authority level</strong></td>
<td>Pearson Correlation</td>
<td><strong>.671</strong></td>
<td><strong>1</strong></td>
<td><strong>.538</strong></td>
<td><strong>.501</strong></td>
<td><strong>.430</strong></td>
<td><strong>.684</strong></td>
<td><strong>.658</strong></td>
<td><strong>.442</strong></td>
<td><strong>.571</strong></td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td><strong>Training availability</strong></td>
<td>Pearson Correlation</td>
<td><strong>.626</strong></td>
<td><strong>.538</strong></td>
<td><strong>1</strong></td>
<td><strong>.509</strong></td>
<td><strong>.834</strong></td>
<td><strong>.631</strong></td>
<td><strong>.425</strong></td>
<td><strong>.383</strong></td>
<td><strong>.455</strong></td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Coordination</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.598**</td>
<td>.501**</td>
<td>.509**</td>
<td>1</td>
<td>.319**</td>
<td>.621**</td>
<td>.343**</td>
<td>.293**</td>
<td>.259**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Trust</td>
<td>Pearson Correlation</td>
<td>.398**</td>
<td>.430**</td>
<td>.834**</td>
<td>.319**</td>
<td>1</td>
<td>.601**</td>
<td>.456**</td>
<td>.404**</td>
<td>.439**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Shared understanding and knowledge transfer</td>
<td>Pearson Correlation</td>
<td>.684**</td>
<td>.641**</td>
<td>.621**</td>
<td>.604**</td>
<td>1</td>
<td>.609**</td>
<td>.568**</td>
<td>.589**</td>
<td>.274**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Relationship building</td>
<td>Pearson Correlation</td>
<td>.478**</td>
<td>.658**</td>
<td>.425**</td>
<td>.343**</td>
<td>.456**</td>
<td>.609**</td>
<td>1</td>
<td>.473**</td>
<td>.551**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Tools of communication</td>
<td>Pearson Correlation</td>
<td>.352**</td>
<td>.442**</td>
<td>.383**</td>
<td>.293**</td>
<td>.404**</td>
<td>.568**</td>
<td>.473**</td>
<td>.596**</td>
<td>.299**</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Motivation to communicate</td>
<td>Pearson Correlation</td>
<td>.522**</td>
<td>.571**</td>
<td>.455**</td>
<td>.259**</td>
<td>.439**</td>
<td>.589**</td>
<td>.551**</td>
<td>.596**</td>
<td>.497**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Level of project communication</td>
<td>Pearson Correlation</td>
<td>.458**</td>
<td>.504**</td>
<td>.453**</td>
<td>.414**</td>
<td>.274**</td>
<td>.411**</td>
<td>.299**</td>
<td>.497**</td>
<td>.497**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
<tr>
<td>Effective decision making</td>
<td>Pearson Correlation</td>
<td>.631**</td>
<td>.633**</td>
<td>.506**</td>
<td>.595**</td>
<td>.406**</td>
<td>.600**</td>
<td>.517**</td>
<td>.433**</td>
<td>.536**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).