Comparative Study of SPI Success Factors in Global and In-house Environment for Large Scale Software Companies

I am a student of MS Software Engineering at COMSATS University Islamabad and conducting research for my MS thesis. For the large scale software development companies, we have identified common success factors of Software process improvement (SPI)* in case of Global Software development (GSD)** and in-house*** software development from the literature and survey. The success factors are given below along with Likert scale. Please spare some time to rate the SPI success factors according to their importance in two different scenarios. Please do compare the success factor that is more important in GSD or in In-house.

*Software Process Improvement methodology is defined as a sequence of tasks, tools, and techniques to plan and implement improvement activities to achieve specific goals such as increasing development speed, achieving higher product quality or reducing costs.
**When the distribution of the members of a distributed software development team exceeds the frontiers of a country.
***In-house refers to an activity or operation that is performed within a company, instead of relying on outsourcing. The firm uses its own employees and resources to develop a software.

Section-II

SPI Leadership
Teamwork in inhouse:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important

Setting SPI goal:

Setting SPI goal in GSD:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important

Setting SPI goal in inhouse:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important

SPI awareness:

SPI awareness in GSD:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important

SPI awareness in inhouse:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important

Allocation of resources:

Allocation of resources in GSD:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important

Allocation of resources in inhouse:

1 2 3 4 5
less important ○ ○ ○ ○ ○ more important
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<th>Scale</th>
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<td>Staff involvement in inhouse</td>
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<td>Senior management commitment and support</td>
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Training in inhouse

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less important ○ ○ ○ ○ ○ more important

Reward Schemes

Reward Schemes in GSD

1 2 3 4 5

less important ○ ○ ○ ○ ○ more important

Reward Schemes in inhouse

1 2 3 4 5

less important ○ ○ ○ ○ ○ more important

On time delivery

On time delivery in GSD

1 2 3 4 5

less important ○ ○ ○ ○ ○ more important

On time delivery in inhouse

1 2 3 4 5

less important ○ ○ ○ ○ ○ more important

Easy to understand documentation.

Easy to understand documentation in GSD

1 2 3 4 5

less important ○ ○ ○ ○ ○ more important

Easy to understand documentation in inhouse

1 2 3 4 5

less important ○ ○ ○ ○ ○ more important