

Objective

A faint, light blue world map is centered in the background. Overlaid on the map are several thin, light orange lines that connect various points across different continents, suggesting a global network or interconnectedness.

By understanding how cultural differences influence all aspects of development (both technical and social), we want to provide a set of tips and procedures to better manage such heterogeneity and build a healthier work environment for all.

Culture is shared motives, values, beliefs, and interpretations of significant events that result from common experiences of members of collectives that are transmitted across generations.

How to recognize cultural background?

Researchers identified a set of behaviors that depend on an individual's cultural background. By recognizing such behaviors, we are able to identify that there is a cultural influence and difference.

Individuals who prefer democracy

Power Distance

Individuals who prefer rigid hierarchy

Individuals who take risks to seek benefits

Uncertainty Avoidance

Individuals who avoid risk and uncertainty

Individuals who want to work in isolation

Collectivism

Individuals who seek cooperation

Individuals who prefer having deep harmony

Assertiveness

Individuals who are competitive and assertive

Individuals who highly value gender equality

Gender Egalitarianism

Individuals who minimize gender inequality

Performance Orientation

How much individuals value performance achievements

Humane Orientation

How much individuals value and reward being fair and generous

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Cultural Aspects

Power Distance Equitable distribution of power vs. rigid hierarchy

Uncertainty Avoidance Tolerance to risk and uncertainty

Collectivism Working in a group vs. working alone

Assertiveness Being competitive and assertive

Gender Egalitarianism How much individuals value gender equality

Performance Orientation Valuing personal performance achievements

Humane Orientation Valuing being fair and generous

Thinking about your past experiences

1. What is your perception and opinion about the influence of people's culture in software development?
2. Do you recognize some of these behavioral patterns in your team members?
3. Do you remember situations where individuals had **opposite ways of thinking** for one of these dimensions?
4. Can such heterogeneity or homogeneity affect **communication** and **collaboration**? In what ways?
5. Can such heterogeneity or homogeneity influence (perhaps indirectly) **technical aspects of the product**? In what way?
6. Were there ways (perhaps applied by team leaders) to mitigate or reduce the impact of any problems?

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Communication and Collaboration

1. Isolation of one or more team members
2. Misunderstandings about the tasks to be done
3. Omission of information to hide potential risks
4. Separation of the community into several subcommunities that do not communicate or communicate for only a few members
5. People who are reluctant to try new technologies for fear of risks

Technical Aspects

1. Reduces productivity
2. Leads to substantial differences in source code
3. Impacts the quality of the code