

Range of Problem-Solving Attributes

A Complex Computing Problem is a computing problem having some or all the following characteristics:

	Characteristics	Description
1.	Range of conflicting requirements	Involves wide-ranging or conflicting technical, computing, and other issues.
2.	Depth of analysis required	Has no obvious solution, and requires conceptual thinking and innovative analysis to formulate suitable abstract models.
3.	Depth of knowledge required	A solution requires the use of in-depth computing or domain knowledge and an analytical approach that is based on well-founded principles.
4.	Familiarity of issues	Involves infrequently encountered issues.
5.	Level of problem	Is outside problems encompassed by standards and standard practice for professional computing.
6.	Extent of stakeholder involvement and level of conflicting requirements	Involves diverse groups of stakeholders with widely varying needs.
7.	Consequences	Has significant consequences in a range of contexts.
8.	Interdependence	Is a high-level problem possibly including many component parts or sub-problems.
9.	Requirement Identification	Identification of a requirement or the cause of a problem is ill defined or unknown.