

Table. Bad Smells Causes in requirements in Software Development.

No.	Causes	Ref.	%
1	Requirements written in Natural Language.	A1, A2, A3, A5, A7, A14, A20, A21, A22, A25, A27	39.28%
2	Requirements written in Passive Voice.	A3	3.57%
3	Limited or non-existent knowledge in Software Engineering domains.	A5	3.57%
4	Informal Natural Language and Formal Modeling Language in requirements elicitation and analysis.	A13	3.57%
5	Vague and ambiguous requirements.	A14	3.57%
6	Abilities of the person in charge of performing manual quality reviews of requirements.	A16	3.57%
7	Use of conditionals in defining requirements.	A18	3.57%
8	Informal analysis of requirements.	A20	3.57%
9	Problems in detecting ambiguities on the part of reviewers.	A24	3.57%
10	Increased effort in manual reviews of extensive requirements.	A26	3.57%

Abbreviations: Cause Identifier (No.), Studies making the proposal (Ref.), percentage of occurrence with respect to Primary Studies (%).

Table. Bad Smells Effects in requirements in Software Development.

	Effects	Ref.	%
1	Cost and time overruns in the software development life cycle.	A1, A2, A3	10.71%
2	Reprocessing.	A3	3.57%
3	Misunderstandings between creators and readers of requirements documents affecting test cases.	A6	3.57%
4	Problems in processes subsequent to software requirements definition.	A8, A18	7.14%
5	Terminology discrepancies between stakeholders belonging to different technical domains.	A11	3.57%
6	Poorly written user stories.	A15	3.57%
7	Ambiguity, unnecessarily complicated, incomplete, duplicative or inconsistent requirements definition problems.	A20	3.57%
8	Ambiguous requirements can lead to the development of a different software from what the customer needs (Applies to all ambiguity, incompleteness, etc.).	A24	3.57%
9	In Software Development, the later an error is found, the more costly it is to correct it.	A25	3.57%
10	Redundant requirements are more difficult to modify and can lead to repeated development of the same functionality.	A26	3.57%
11	Unnecessary time spent in clarifying requirements that are not clearly defined.	A27	3.57%

Abbreviations: Effect Identifier (No.), Studies making the proposal (Ref.), percentage of occurrence with respect to Primary Studies (%).