

Table 2. Requirements for gamification projects

Requirements	Literature	%	Interviews	%
1. Understand the user needs, motivation and behavior, as well as the characteristics of the context	5; 6; 7; 8; 10; 11; 17; 27; 33; 34; 36; 37; 39	72	I2; I3; I4; I6; I7; I9; I11; I13; I14; I16-I20; I21-I25	76
2. Identify project objectives and define them clearly	5; 6; 10; 11; 17; 22; 24; 27; 33; 34; 37; 39	67	I3; I8; I11; I13; I16; I19; I21; I22; I24; I25	40
3. Test gamification design ideas as early as possible	5; 6; 7; 17; 22; 33; 36; 37; 39	50	I1; I3; I4; I9; I11; I14; I18; I19; I22; I24	40
4. Follow an iterative design process	6; 7; 10; 22; 27; 28; 33; 36; 39	50	I2; I9; I10; I11; I17; I22; I18; I19	32
5. Profound knowledge in game-design and human psychology	16; 18	11	I1-I4; I6; I9-I16; I18; I20-I22; I25	72
6. <u>Assess if gamification is the right choice to achieve the objectives</u>	6; 10; 16; 17; 34; 39	33	I1; I10; I13; I14 I17; I19; I22; I25	32
7. <u>Stakeholders and organizations must understand and support gamification</u>	6; 17	11	I2; I3; I9; I10; I12; I13; I15-I17; I18; I24; I25	48
8. Focus on user needs during the ideation phase	6; 11; 17; 27; 33; 39	33	I6; I11; I16; I18; I22; I25	24
9. Define and use metrics for the evaluation and monitoring of the success of a gamification approach	6; 7; 10; 11; 17; 27; 33; 37; 39	50	-	0
10. Control for cheating / gaming-the-system	6; 10; 17; 25; 27; 34; 37; 39	44	-	0
11. Manage and monitor to continuously optimize the gamification design	6; 7; 17; 27; 33; 34; 36	39	I19	4
12. Consider legal and ethical constraints in the design phase	10; 17; 27; 39	22	-	0
13. Involve users in the ideation and design phase	-	0	I1; I4; I11; I19; I22	20

% relative proportion to the number of considered sources within the literature or the interviews