## NUMBER OF USERS RECOMMENDED FOR OPTIMAL RESEARCH RESULTS

When conducting user research there is an optimal number of users needed based on the type of research, but the knowledge is scattered across the web. NN/group holds much of the information on qualitative and quantitative studies, while SurveyMonkey has an excellent survey sample size calculator. Here is an infographic to make much of this knowledge readily available in a visual format.

Usability Study  5 users will uncover 85% of the issues within the tested UI <sup>1</sup>	05					
	10					
Card Sorting  15 users are an optimal number for most site architectures <sup>2</sup>	15					
Quantitative Studies  20 users can provide 90% confident results, but require four times more users than usability studies <sup>3</sup>	20					
	25					
Grand Card Sorting 30 users provide an optimal number for grander site or intranet architectures <sup>2</sup>	30					
	35					
Eyetracking for Heatmaps 39 users give the needed heatmap details for this quantitative technique with a minimum of 30 users per page tested 4	40					
	45					
Focus Groups  3 to 6 focus groups with 8 to 10 users can identify 90% of all themes within a data set 5	50					
	55					
	60			F	F	
	65	F	F	F	F	
	70				T S	
	75					
Small Survey 80 users provide a 5% margin of error and 95% confidence level with a population size of 100 6	80					

- Nielsen, Jakob, and Landauer, Thomas K.: "A mathematical model of the finding of usability problems," Proceedings of ACM INTERCHI'93 Conference (Amsterdam, The Netherlands, 24-29 April 1993), pp. 206-213.
- 2 Tullis, Tom, and Wood, Larry. (2004) How Many Users Are Enough for a Card-Sorting Study?, Usability Professionals Association (UPA) 2004 Conference, Minneapolis, MN, June 7–11, 2004.
- 3 Nielsen, Jakob. "Quantitative Studies: How Many Users to Test?" Nielsen Norman Group, 26 June 2006, www.nngroup.com/articles/quantitative-studies-how-many-users/.
- 4 Nielsen, Jakob, and Kara Pernice. How to Conduct Eyetracking Studies. Nielsen Norman Group, 2009, How to Conduct Eyetracking Studies, www.nngroup.com/reports/how-to-conduct-eyetracking-studies/.
- Guest, Greg, et al. "How Many Focus Groups Are Enough? Building an Evidence Base for Nonprobability Sample Sizes." Sage Journals, vol. 29, no. 1, 28 Apr. 2016, pp. 3–22., doi:http://journals.sagepub.com/doi/10.1177/1525822X16639015.
- 6 "Sample Size Calculator: Understanding Sample Sizes." SurveyMonkey, www.surveymonkey.com/mp/sample-size-calculator.