Factors impacting the success of Product Development (PD) projects are intensified when teams are distributed globally, making it a challenging task for project management to deal with effects on time, cost and quality. It is important for project management to understand when challenges, such as communication difficulties, a lack of common vision between team members or issues related to documentation, may occur during PD projects, enabling them to take the necessary preventative action (Edmondson and Nembhard, 2009). When investigating factors impacting the success of PD, the majority of research in the field of distributed design teams consists of studies involving interviews or observations of short design sessions, typically lasting 1-2 hours (Eris et al., 2014; Scrivener et al., 2003; Hansen and Ahmed-Kristensen, 2011). There are few cases reported in literature of longitudinal observational studies of globally distributed design teams in PD projects. This paper aims to contribute to the further understanding of the factors impacting the success of PD projects when teams are distributed globally. With the results from a longitudinal observational study over 8 months, the factors impacting the success of a globally distributed PD project are mapped across the phases of PD, beginning from the early planning phase and development through to the final testing and refinement. Furthermore, the relationship between the impact factors (IF’s) and key parameters for performance is described.