The design of HRD Infrastructures in organizations remains largely understudied. This paper used the existing theoretical literature to provide empirical evidence on the design of HRD Infrastructures among universities in Kenya. The study relied on the nature of the knowledge intensive organizations and the philosophy of Human Resource Development (HRD) to propose a conceptual model for the design of HRD Infrastructures for organizations in this sector. The study sampled 130 respondents from various functional units of 16 universities in Kenya to test the relationship among four components of an HRD Infrastructure for the knowledge intensive organizations. Four hypotheses were tested. The findings of the study reveal a significant correlation between Organizational Development (O.D) Needs and HRD Values and that existing between HRD Values and Organizational Learning Orientation. The findings provide an important insight into the situational positioning of HRD in Kenya and a major step towards understanding HRD Infrastructures for the knowledge intensive industries.