The paper examines the influence of Internet Banking Service Quality (IBSQ) on Customer Satisfaction (CS) in the Ghanaian banking industry. The study was a cross-sectional survey that employed the use self-administered questionnaire to collect data from a sample of 200 respondents through personal contact. Through Structural Equation Modelling approach, the findings indicatethat, of the five IBSQ dimensions, web designfactors have significantly positive influence on CS, explaining about 79.6% of CS with IBSQ. In spite of the limitations of the study, the findings offer important theoretical and managerial implications. The paper contributes to the literature in area of e-Service quality and customer satisfaction in electronic banking. Index Terms—banking industry, Customer satisfaction, Ghana, e-service quality, internet banking, internet banking quality, service quality.