

KENYA COMMUNITY DEVELOPMENT FOUNDATION WEBPORTALS REPORT

Shawn Mbuvi

CLOUDPESA EAST AFRICA LTD

Vision Plaza 3rd Floor Mombasa Road

KCDF Project Report

Abstract

This report covers Kenya Community Development Foundation (KCDF) Web portals project, timelines, stipulated completion date, explanation for delays as well as project challenges experienced during development period.

Project Timelines

Development of the web portals started later after Navision development started. The actual development started in mid-Feb 2018. The application development was anticipated to take at most 3 months to end at around late June 2018. But due to many challenges of which are discussed in the following context, development took a little longer to end in August 2018.

Challenges encountered

Since the word go for the KCDF project, it hasn't been easy due to the following challenges

- a) *Inconsistent web portal requirements:* - Since the beginning of development of the project the user's web portal requirements remained

vague and non-uniform. Different users would come up with new requirements which totally differed from the requirement document that I was presented with. This became very hard to co-ordinate design of the applications from my developer side of view because after every test new requirements usually came up and they totally screwed and messed up my initial designs. At such stages I would be forced to re-do or rather redesign user interface which I found totally challenging and unfair too since I was doing both the front-end design as well as back end for the same. This issue of changing user interface designs for the system persisted through out the development period and it really affected my timelines. Even as the portal is live there are still pending design modifications that arose from the final system test hence making it hard to determine if the user requirements were precise and to the point. From the developer's point of view, it's usually hard to keep changing designs by big margin every time there is a user acceptance test.

- b) ***Changing web portal requirements with time:*** -since developing the portal was based on an existing manual form which was not normalized or standard, it became a challenge when an item from a form is either added or removed. As discussed from the above point this also contributed to requirements' inconsistency hence posing a great challenge.

- c) ***Number of portals done as opposed to initial requirements:*** - from the requirements presented, it was unclear how many portals were to be developed. Later during one of the meetings it was said that the portals should be two (Grantee and Scholarship portals). Then suddenly towards the end of the project another portal (Consultancy portal) was proposed, this was unfair because it could have been mentioned earlier and presented with its requirements earlier. This was one of those factors that made development not easy and it further pushed the timelines further which means delays too.
- d) ***Unavailability of KCDF users for portal test and postponement of issues:*** - during stipulated system tests, the users could all over sudden become busy and unavailable and would later postpone the test to a later date only for the same to repeat, therefore it was hard to plan for a system test. It also took time for necessary data to be availed to me. For instance, list of schools, counties etc., I could request for data but I finally ended up googling it myself and organizing it. At some time, the KCDF data officer would act very unsupportive with an impression of dragging down the system or giving the developer hard time, the developer should be developing not organizing data when someone in that docket can do that.
- e) ***Travelling refunds challenge:*** - as from June 2018, the office stopped supporting my travel expenses to and from KCDF simply because the

project was late, I sometimes found it challenging to cover for the travels all through out the month. I could say that there was little motivation towards that project, I could have even requested to work from the office but it wasn't possible.

- f) ***Divided attention to support existing portals:*** - while developing the KCDF project, other support issues came up and I would be requested to attend to them and still leave the ongoing project unattended. This was a very demanding issue which negatively affected the project completion deadlines. This was a very big challenge because I was operating solo until another web portal developer came onboard to ease the pressure.
- g) ***It was a different portal from others that I had previously developed.*** Since Sacco portal templates could not apply, development and design of the web applications interface was started from scratch. As said in another point above, developing both front end and back end of the same was a two-developer job, see also recommendations.
- h) ***Functionality Sign off took long to be signed:*** - it took long enough to get project sign offs probably because of the development and design drawbacks due to added functionalities and redesigning of the interface as per the requests arising from system tests.

Recommendations

For Web applications to come, I'd suggest that clear and consistent user requirements be collected before the development starts which should merely change (ideally static) and also followed to the latter. This will prevent inconveniences and development nightmares too. This will also ensure timelines are not affected much.

For complex web applications like the KCDF, CODF, ICDC and any other to come, I'd recommend a team of at least two web developers, one for front end designs and the other for backend integrations, this could shorten development time by nearly half, I insist on teamwork and pool of ideas. This will also improve quality of work. It's a nice idea if adopted and put into action for the upcoming projects.

Conclusion

The KCDF project was a learning curve and a good experience. It has also acted as a reference for mistakes that should not be repeated with other upcoming projects. For instance, following the requirements vagueness, CloudPesa has since adopted strict requirements collection and documentation to avoid unnecessary inconveniences by inconsistent requirements.