

Using Interactive Mobile Apps In Accessing Documents Of The Local Development Plan

By Hafiza Atha Ahmad

Globalisation has led to prioritising a quality service in any organisation and country making them more competitive. The need to deliver excellent services for the public while creating a quality lifestyle has always been a pledge of any public servant. In addition to that, it is much believed that the service provided by any organisation should promote environmental friendliness as well as bring other goodness as a whole to all parties.

The Selangor Town and Country Planning Department (JPBD), was established on 1 September in 1960 under the purview of the Federal Department of Town and Country Planning Peninsular Malaysia of Ministry of Urban Wellbeing, Housing and Local Government (KPKT). This department aims to create a quality environment and provide a sustainable living in line with vision 2020. It was established with the objectives to strengthen, regulate, implement and consult the urban and rural planning of State Government and Local Authority.

JPBD has always continued to enhance the quality of services through a sustainable plan to make the department as a 'Center of Reference' for the coordination of spatial plans and state-level planning information. As one of the initiatives towards strengthening the quality management culture in the department, an Innovative Creative Circle (ICC) team which consists of 9 members from 3 major divisions was established. The 3 major divisions were planning control, development and corporate planning and the team was known as INFYNYTY.



Delivering Services To The Public: Difficulty In Retrieving The Local Development Document For Users

In February 2013, a brainstorming session was conducted by the team for the purpose of identifying problems that hinders efficiency in delivering services. The team considered 14 issues however, 3 issues were confirmed using the Force Ranking method. The issues were then measured using the Matrix Data analysis. Difficulty in retrieving documents of local development plan recorded the highest score among the issues that recorded a critical attention. Local plan is an essential document in the development project of certain areas. It is a more structured form that depicts the physical and strategic planning in words. A good local development plan usually takes into account the requirements of different levels in related parties. It is usually prepared by the local planning authority and approved by the State Planning Committee and agreed by the State Authority.

It was a well known fact that if this issue was not resolved, it will affect the service delivery of respective departments to the public. It is also a fact that the department needs the public support in determining a strategic quality life at national, state and local levels. Therefore, the ability to solve this issue will benefit multi-level customers namely researchers, public, land owners, investors and developers who are customers of the local development plan.

The next phase upon the problem identification was to identify the root causes. INFYNYTY used several tools including the Fishbone analysis, the Matrix Probable Factor analysis, 5W+1H, data collection and data analysis. Following that, they came to conclusion that there were five causes which they then categorised according to procedure, environment and material factors.

It was further deduced that in terms of procedure, the process of purchasing the local plan document and public objection form submission was pretty much complicated. The two causes that were grouped in the environment category were high logistic cost borne by the users as the documents and the forms were only available at JPBD and PBT offices and it can only be purchased within office hours. Consequently, there were also insufficient places to store the documents. This led to the lack of access to the documents for the public. In terms of material,


it came onto surface that the price of the local plan document was expensive. This resulted from a high printing and sales costs. Subsequently the document was thick and used a lot of papers for printing purposes. All these issues contributed to difficulty for users in retrieving documents of local development plan problem.

Innovation Ideas Using Mobile Apps

In this era of modernisation, innovation drives productivity and performance of an organisation. It promotes opportunities not only on new products and services development, but also enhances efficiency in work process.

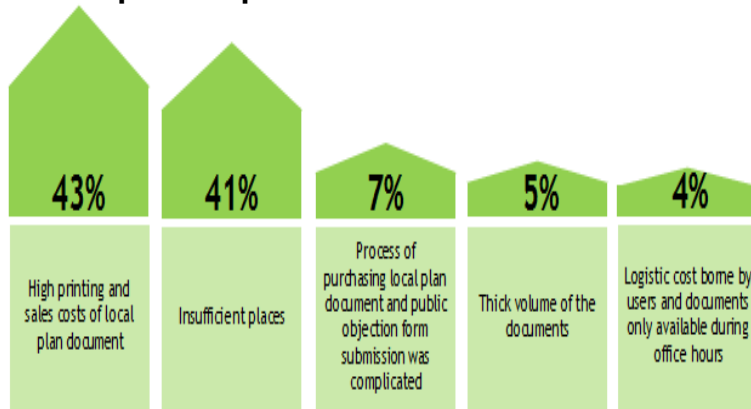
One of the most important elements for innovation in such organisations is definitely done through ICC. ICC tools and techniques are able to bring the team to challenge themselves in generating new ideas and solutions working towards betterment. This was what INFYNYTY believed in.

Having that driving them, INFYNYTY came up with a mobile apps solution to overcome all obstacles in planning and documentation issues. The Tree diagram and Pro versus Contra method guided them further to select the best solutions within their capabilities. The table below shows the root causes, proposed solutions and actions taken in relation to this issue:

Root Cause	Proposed Solution	Action Taken
The process of purchasing local plan document and public objection form submission was complicated	<ul style="list-style-type: none"> • Able to reduce printing cost • User-friendly interface application • High accessibility 	<ol style="list-style-type: none"> 1. A mobile apps was developed for installation in smartphones <ul style="list-style-type: none"> • The team designed the application by considering the needs of consumers towards a user friendly interface • These mobile applications were known as Draf Rancangan Tempatan Majlis Daerah Sabak Bernam (DRTMDSB) & Draf Rancangan Tempatan Majlis Daerah Kuala Selangor (DRTMDKS) • The District Council of Kuala Selangor (MDKS) and District Council of Sabak Bernam (MDSB) local plan documents were selected as a pilot project because both local plans required renewal and updates. • DRTMDSB and DRTMDKS Unique Features:- <ul style="list-style-type: none"> ◆ Easy installation in the mobile phone ◆ An easier retrieval process of documents related to local development plans ◆ Ease the submission of public objection form to the respective JPBD officers ◆ Enables prompt response by JPBD Officers regarding submission of objection forms
Lack of accessibility : logistic cost borne by users and documents only available during office hours		
Insufficient places		
High printing and sales costs of local plan document		
Thick volume of the documents		

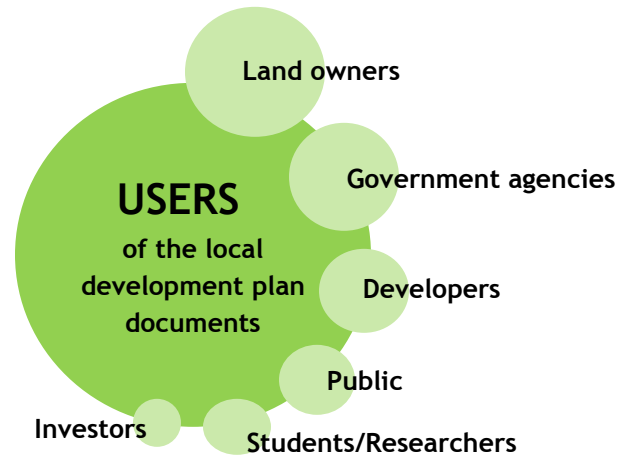
ACCESSING LOCAL DEVELOPMENT PLAN THROUGH MOBILE APPS

Difficulty in retrieving documents of local development plan:



Five root causes were identified from a survey conducted by INFYNTY which contributed to the difficulty in retrieving documents of local development plan

Users of local development plan documents:



Innovative and Creative Circle Improvement:



Unique features of this mobile apps:

- ◆ Easy installation in the mobile phone;
- ◆ An easier retrieval process of documents related to local development plans;
- ◆ Ease the submission of public objection form to the respective JPBD officers; and
- ◆ Enables prompt response by JPBD Officers regarding submission of objection forms.



The mobile application was targeted to facilitate users who are of all levels, namely working or non-working to benefit the Government services. This application has not only succeeded in providing a user- friendly service but also promoting paperless service thus contributing to a more environmental friendly scenario.

Analysis Of ICC Project At JPBD

The implementation of this innovative solution has managed to overcome the cost, distance, storage, time and weight that have initially contributed to the cause of expensive selling price and insufficient storage. The improvement managed to eliminate the cost of printing by the Government and users can now download the application which is free of charge.

The only cost involved is a one-off payment during the development of the application. In addition, the user does not bear any logistic cost to review the proposed development site planning as the application allows users to source the information at anytime and anywhere. Other than that, the department would not need any special space for document storage and for display purposes as now it only requires gadget and smart phone. The application has eliminated the heavy load of documents.

With the execution of the DRTMBSB and DRTMDKS application, the team is now able to achieve a 95 percent reduction rate on the issues. The improvement exceeds by 11 percent from the initial set up of 84 percent. With only three easy steps on downloading

the applications, the users will be able to access the report, proposed land use zone, publicity notice, bookmark related page, fill in the public objection form and receive delivery feedback from the secretariats. In addition to this, the submission of public objection form has sped up to 15 minutes from 47 minutes. The purchasing time also has reduced to 10 minutes as compared to 38 minutes previously. JPBD is now able to save a total cost of RM62,819 after the implementation of this ICC project. Only RM12,000 was needed as the one-off payment for the system development. The customer satisfaction rate has also increased to 72 percent which shows a tremendous positive impact from this investment by JPBD.

This application also allows monitoring of users who download the application at any time. Through this application, the user can rate the level of satisfaction with the number of stars. Also, a special column is provided for users to jot down their feedback or comments. This allows the organisation to embark on initiatives leading to improvement which is derived from customers' feedbacks. In conclusion, ICC has not only brought benefits to many parties but also encourages innovation among team members for the betterment of all aspects.

COMPARISON BEFORE AND AFTER ICC IMPLEMENTATION

<p>Selling price - local plan: Before : RM50/set After : 0</p>	<p>Publication cost - for 2 local plan (objection form, executive summary and proposed development draft report) Before : RM74,818.50 After : RM12,000</p>	<p>Submission of public objection form: Before : 47 minutes After : 15 minutes</p>
<p>Logistic cost: Before : RM0.70/km After : 0</p>	<p>Cost saving: Before : 0 After : RM62,818.50</p>	<p>Purchasing time: Before : 38 minutes After : 10 minutes</p>
<p>Storage size area: Before : 24kp After : 0</p>		<p>Customer satisfaction rate: Before : 0 After : 72%</p>