Ferhan Jamal

Problem Statement #1

"Kainu" is trying to make a news app which can filter out the news basis on the location you are in and the news content should be driven from its users or sources but the basic problem of "Kainu" that we are trying to solve is -

- How they can provide geo-located news over the phone? What kind of sources they can use for streaming the news over the phone? What are the technologies they can use which will help them to provide the news specific to a particular location where users are on a particular phone?

Solution

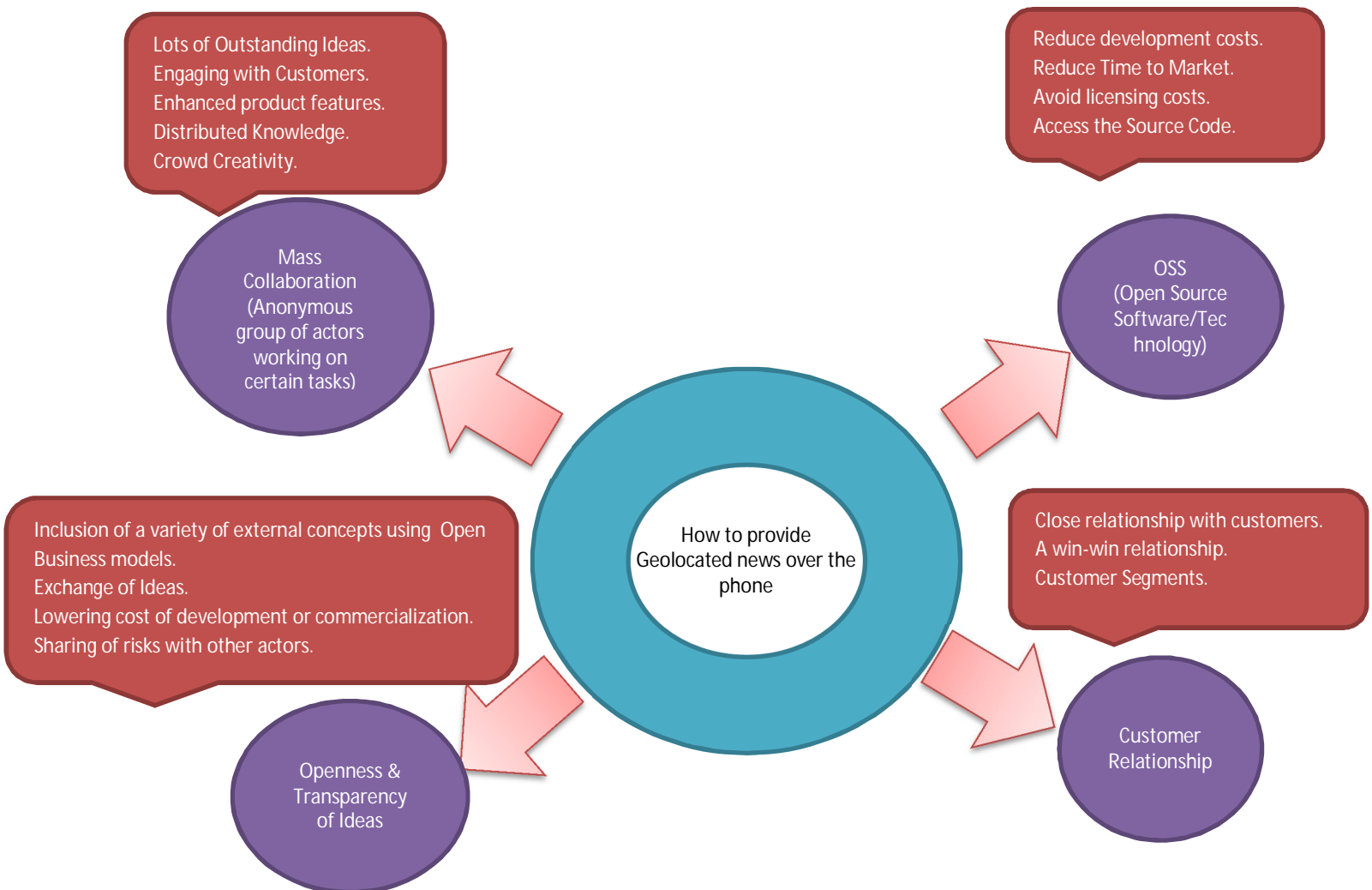There are various ways of solving above "Kainu" problem but the most efficient way of solving this problem is using crowdsourcing as one of the open innovation technique by which we will be able to present a problem definition and other people can propose solutions on it along with making the business models open source which will enable an organization to be more effective in creating as well as capturing value of the product. Open business models will help create value by leveraging many more ideas because of their inclusion of a variety of external concepts and with the Open Business Models we can share the risk with other actors and learn from expert. Also, we have lot of OSS (Open Source Software) available which we can leverage to solve "Kainu" problem. We have freedom of downloading free open source software and look into open source code and tune as per our needs.

Framework Explanation

1. <u>Crowdsourcing:</u> Crowdsourcing occurs when an organization outsources projects to the public. An organization decides to tap into the knowledge of a wider crowd and input is sourced from a large and undefined group of people. In this context, opening up a business model to external ideas can capture greater value using key assets or resources, not only in the company's own business but also in relation to other partners such as customers. In case of "Kainu" problem we can leverage the mass collaboration in which several other actors will work on particular task and engage with customers to get the ideas on the project and then we can choose which ideas are best for "Kainu" business initiative and implement on those ideas. We need to work with smart people and a smart person doesn't always work in the same company so collaborating with different peoples will improve the products a lot (Souad & Isabelle, 2012).

2. <u>Opening the Business Models:</u> Open business models enable an organization to be more effective in creating as well as capturing value. If we open up the business models, then we can lower the development costs along with speeding up the development since different companies has different sort of skills and if we can leverage those skills then the business for "Kainu" will be successful. If "Kainu" opens up the business models then the idea will travel from invention to commercialization through at least at two different companies with various people from different companies working on different set of innovations and this will definitely be a key to success to "Kainu" business (Chesbrough, 2007).

3. <u>OSS (Open Source Software):</u> These days, everyone is going open source, trying to leverage the benefits of open source technologies which will help us in avoiding the

licensing cost, development cost, and many other things. Also, we have lot of options to customize open source software according to our needs so if we can leverage the technologies which are open source for "Kainu" problem we can save lot of money in terms of licensing cost and development cost as well. As of now, there is lot of open source stuff which we can use in "Kainu" for geolocation stuff such as Open Street Map, Maxmind API's. Apart from this, successful open source projects have dramatically reduced shipment to market and enhanced the breadth of innovation (Perr, Appleyard, & Sullivan, 2010).

4. Customer Relationship: Customer Relationship is very important for any products to be successful since it determines what they need from a product in general and if we try to involve customers in our product design phase, then we can try to eliminate any design issues very early. Similarly, for "Kainu" business initiative, if we can leverage the power of customers then we can make the business of "Kainu" very successful and it will also help in deciding easily which mobile audience we need to target first (Kozinets, Hemetsberger, & Schau, 2008).

Lots of Outstanding Ideas.
Engaging with Customers.
Enhanced product features.
Distributed Knowledge.
Crowd Creativity.

Reduce development costs.
Reduce Time to Market.
Avoid licensing costs.
Access the Source Code.

Mass Collaboration (Anonymous group of actors working on certain tasks)

OSS (Open Source Software/Technology)

Inclusion of a variety of external concepts using Open Business models.
Exchange of Ideas.
Lowering cost of development or commercialization.
Sharing of risks with other actors.

How to provide Geolocated news over the phone

Close relationship with customers.
A win-win relationship.
Customer Segments.

Openness & Transparency of Ideas

Customer Relationship

Framework Diagram #1

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Problem Statement #2

The city government has decided to introduce "Rouen" as a smart city by 2015. It will not be an easy task for the government as it will require a lot of work from the government and from the local population as well. The things which are very essential and need to kept in mind while building any city a smart city are as follows:-

1. As stated in the question, the environmental and population problem are major issues in every city including "Rouen" too and that's the first thing we need to keep in mind while building any city as a smart city. In the 21st century, every city population is increasing by a good fraction. The rise in population in every city creates a lot of problems and one of the major problems created by it is the transportation. The transportation problem should be tackle in a good way so that the locals feel comfortable whenever they come outside.
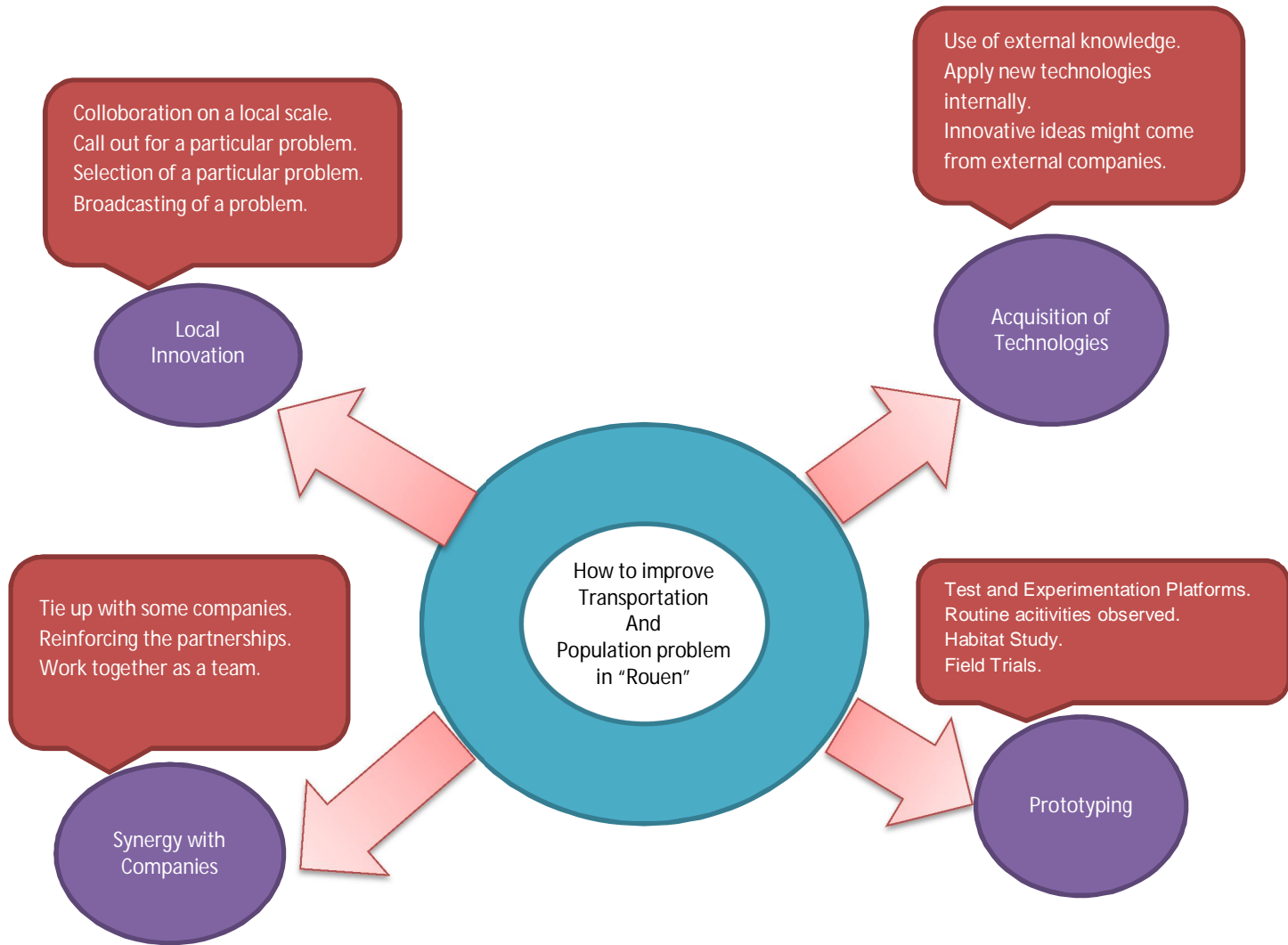
Framework Explanation

As stated in the question that the quality of life in the smart city is very high with the facility of trouble-free mobility to avoid transportation problems, an electric power with a low environmental load, and an active participation of the citizens indulging in fruitful work etc. The city government can use open and user innovation as stated in the question to solve most of the problems faced when making any city a smart city. The first thing that a city can use is that they can leverage inbound open-innovation technique meaning acquiring the external technologies which can help us making the city a "smart city". (Bigliardi & Dormio, 2012)

We can also leverage the power of bidirectional open user innovation in which we can create a synergy with other companies to reinforce the partnerships and to select the best dynamic for gaining the success. "Rouen" city can merge or can involve in the partnership with the cities that

are already made smart cities which in-turn will help "Rouen" to gain some benefits, ideas and techniques from them and it will help "Rouen" a lot for becoming as a smart city in terms of transportation and population problem. (Bigliardi & Dormio, 2012)

"Rouen" can also establish their own research centers and can hire some of the engineers to come up with the ideas and innovation while building or making any city as a smart city. The engineers can do some research on how we can build a good environment, trouble-free mobility so that there is no transportation problem, a good governance, and how we can encourage local citizens of "Rouen" to actively participate in solving problems related to "Rouen" city. Researches are not limited to only those issues as explained above. It can be something more which is required to make any city a smart city.

"Rouen" can try using local open innovation technique (Deutsch, 2013) as well to come up with the various techniques regarding how to make Rouen as a smart city. The local open innovation means how you can use the open innovation locally. For example: In building a "Rouen" as a smart city, the research centers employees can interact with the locals of the "Rouen" to know the various problems related to the "Rouen" city and can also ask the suggestions from the locals of the "Rouen" what solutions should be consider in solving all the problem related to the "Rouen" city. Also, we can leverage living-lab approach to do some experiments where the routine activities and interactions of everyday home life can be observed, recorded for later analysis, and experimentally manipulated on a particular prototype to solve transportation and population problem. We can use this approach in making "Rouen" a smart city since "Rouen" is a big city so we cannot just implement all our ideas without doing any experiments on a small prototype (Schuurman, Moor, & Evens, 2009).

Colloboration on a local scale.
Call out for a particular problem.
Selection of a particular problem.
Broadcasting of a problem.

Use of external knowledge.
Apply new technologies internally.
Innovative ideas might come from external companies.

Local Innovation

Acquisition of Technologies

How to improve Transportation And Population problem in "Rouen"

Tie up with some companies.
Reinforcing the partnerships.
Work together as a team.

Test and Experimentation Platforms.
Routine acitivities observed.
Habitat Study.
Field Trials.

Synergy with Companies

Prototyping

Framework Diagram #2

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