

5. Full Description of invention/ Representation of Design (excluding trademark). Provide drawings and other materials that help illustrate the description, if any

The Conceptual Model of Land Administration Domain Model for Malaysian Customary Rights is a new conceptual model for establishing a domain model for Malaysia Customary Rights. In the proposed Malaysian Country Profile by NurAmalina Zulkifli et al. (2015), MY_Customary is made as an individual class and connected to MY_Spatial Unit. The MY_Customary is being connected to MY_Boundary Face String. This is to show that the customary lands are being surveyed as stated in both Melaka and Sarawak Land laws. Customary land is considered as a certified land parcel. This is the spatial part of the customary rights. The non-spatial part of the customary rights is involving the rights, restriction, responsibility and mortgage. Party is also involved as it is to show that there are some agencies, land owners or government who are involved in the land ownership of the customary lands. The MY_RRR is connected to the MY_Customary to show that there are rights, restrictions and responsibilities involving the customary lands. MY_RRR is also connected to the MY_Administrative Source to indicate that both of them are interrelated.

As shown in Figure attached which is the detailed non-spatial and spatial domain model, the MY_Customary is being connected together with both spatial and non-spatial domain model. The spatial domain model is more towards to survey field of the customary rights such as MY_Point, MY_Spatial Source and MY_Boundary Face String whereas the non-spatial domain model is more towards to the non-survey field of the customary rights that is more towards to the legislation part of the customary rights. The comparisons proved that customary rights involved both spatial and non-spatial part. It is very clear that from this model that the supports both non-spatial and spatial part of the customary rights.

By referring to the attached, MY_Customary consists of type of customary. This is vital as customary rights that are being practiced in both Melaka and Sarawak are different. Therefore, it is important to take into account the type of customary that is being referred to. From the comparisons, Melaka is using Melaka Customary Land and Malacca Customary Land Register is used for the customary land register title. As for Sarawak, the Native Customary Land is used to refer to the customary lands in Sarawak. This proves that the interpretations of each state are different.

In the MY_Customary, there is the need to include the land owner of the customary land who has the rights over the land and has registered in the registration. The land owner of the land is represented by the attribute of ID of the customary. Melaka is using the certified persons or Malays to refer the land owner of the customary land while Sarawak is using natives as the person who has the right over the native land. Therefore, the ID of the customary is important as different interpretations are being used.

The surveyed area attribute is needed to be included in the MY_Customary package as the land law that is being enforced in both of the states stated that there is a need to final certain boundaries for customary land. According to section 98 of the National Land Code (Penang & Malacca Titles) 1963 (Act 518), there is a provision for the finality of certain boundaries for customary land and the boundary of any holding is deemed to have been finally ascertained under the Ordinance. For Sarawak, where the native has occupied and used any area of un-alienated state land in accordance with rights acquired by customary tenure amounting to ownership of the land for residential/ agricultural purposes, a grant is issued to the native in perpetuity of that area of land free of premium rent and other charges as stated in Section 18 of the Sarawak Land Code 1958.

The next attributes are the begin data time and end date time. This is important and needed to be stated in the attribute as there is some period of time for the ownership of the customary land. As shown in figure 1, it shows the connection between the spatial and non-spatial aspects being connected to the MY_Customary. As for the multiplicity for MY_Boundary Face Setting and MY_Customary is 0..* as the customary land maybe has boundaries or no boundaries. 0 represents null or nothing and * represents infinite number.

The non-spatial aspects are being generalized to MY_Customary as the MY_Customary involved the RRR which are Rights, Responsibilities and Restrictions. The administrative part of the customary is also included in the non-spatial part of the domain model. The RRR and administrative part are generalized to the MY_Customary which means the MY_Customary inherited the attributes of the non-spatial aspects. MY_Customary should inherit all the administration, right, restriction and responsibility regarding the customary rights.

6. Date, place of invention/ design and by whom invented/ designed

Date : 01/07/2015
Place : Universiti Teknologi Malaysia
Name(s) :
1. TAN LIAT CHOON
2. RICHARD NYARU ANAK JAWA

7. Prior Art/ Prior Design/ Trademark Search

a) Is there any earlier work of the same kind of which you know (Prior Art/Prior Designs/Trademark Search). If yes, please include details of and/or attach copies of relevant publications or search report.
No
Describe briefly the similarities (if any) and differences between the disclosed invention and closet known technology (excluding trademark application).

8. State the problem that your disclosed invention is solving

1. Problem : No detail of customary rights in Malaysian Land Administration Domain Model country profile.
Solution : The Malaysian customary rights in Malaysian land administration system and domain model is important in order to create a better improvement of the quality of Malaysian customary rights.

9. Past Disclosure/ Publication

Has the invention / design been disclosed or published?
If 'yes', please give details, indicate date of disclosure / publication and attach a copy of the publication.

Date :
Title :
Description :

If 'yes', was a confidential or Non-Disclosure Agreement in place?

Date :
Title :
Description :

10. Intended Disclosure / Publication

Is it intended to disclose details of the invention / design?

If 'yes', please give details and indicate date of intended disclosure / publication.

Date :
Title :
Description :

11. Potential Commercialization (Please complete an InnoComm Evaluate Form at main tab).

List the key commercial benefits of the invention.

Any other relevant information e.g. potential route for commercialization, companies that may be interested, alternative markets that the invention may be used in. etc.

12. Internal / External Funding.

Please give details of All internal or external funding, which has been used in connection with this project, including grants, contracts, studentships, etc.

13. External Collaboration.

Has any of this work been carried out elsewhere?

If 'yes' please tick as appropriate.

Other academic institution

Previous Employment

Industrial Collaborator

Others

Please give details and attach a copy of any agreement signed.

14. Other relevant information (if any).

The information which is provided on this form will be user by the University to access the ownership of the intellectual property rights, potential third party claims to those rights and obligations to external sponsors. Incorrect or incomplete detail could lead, the reduction or loss of commercialization revenues, or the invalidation of paten applications.

I declare that the information which I have provided in this form is, to the best of my knowledge and belief, correct and complete and that the contributors named are all the original creators of this invention/design. I also agree to cooperate in seeking or other legel protection in the name of Universiti/Institution and in the commercialization of this invention/design. I also confirm that I have notified the University/Institution of any conflict of interest which may exist in relation to the invention.

Signature _____
Name of Inventor/ Originator TAN LIAT CHOON
Category Main Inventor / Main Originator
Approximate % Contribution 60.0%
Date 25-Jan-2016

Signature _____
Name of Inventor/ Originator RICHARD NYARU ANAK JAWA
Category Co-Inventor / Co-Originator
Approximate % Contribution 40.0%
Date 25-Jan-2016

Witnessed by :	
Signature of the Director of Research Alliance/ School/ Research Institute/ Center :	
Name	
Date	



Innovation and Commercialization Centre
Universiti Teknologi Malaysia

InnoCom Evaluation Systems
(Researcher)

a) Project Details

- i. Project Title : Conceptual Model of Land Administration Domain Model for Malaysian Custory Rights
- ii. Name of Researcher : TAN LIAT CHOON
- iii. Faculty/ Research Alliance : FAKULTI GEOINFORMASI DAN HARTA TANAH

b) Evaluation Systems

Please evaluate and give a score to each of these elements for the technology/ product given. Each technology or product should be scored from 0 (very poor) to 5 (excellent) for each dimension.

1. Patent Protection (strenght of patent)

- A broad scope, family of patents, granted worldwide, which covers several interlinked aspects of the technology 5
- A broad scope, single patent, granted worldwide, which covers the fundamentals of the technology, or for a very major suite of softwares that would take many years to duplicate 4
- A broad scope, strong patent application, or an incremental technology or significant new development of existing technology 3
- A narrow scope of patent, less significant development of the existing technology, or extensive know-how 2
- An interesting research result which might be protectable 1
- A bare idea, with no evident uniqueness or protectability 0

2. Readiness of the technology

- The technolog is well proven and a process for volume manufacture has already be proven by manufacture of significant quantities (or is trivial, as for example, with software duplication) 5
- The technology has a prototype, successfully completed on field testing with real customers and a small-scale manufacturing proess has been demonstrated. 4
- The technology a prototypes stage, works well in the laboratory, but has not yet been tested by customers. Manufacture seems to be relatively straightforward in theory. 3
- The technology has proof of concepts stage, can be made to work sometimes in the laboratory, though this is still considerable black art in doing it repeatedly. Not much thought has yet been given to larger scale manufacture. 2
- Closely related technologies have been made to work in this lab, and there seems to be no theoretical reason why this one shouldn-t work too (need further research and testings). 1
- The technology should work in theory, but hasn-t yet been tried (ideation stage). 0

3. Value of the Market

- The worldwide market for this product and its direct competitors is likely to be in excess of RM1 billion p.a 5
- The worldwide market is likely to be in excess RM100 million p.a 4
- The worldwide market is likely to be in excess RM30 million p.a 3
- The worldwide market is likely to be in excess RM10 million p.a 2
- The worldwide market is likely to be in excess RM3 million p.a 1
- The worldwide market is likely to be less than RM3 million p.a 0

4. Anticipated profit margins (if considering a license, score on the anticipated royalty rate)

- The gross profit margin per sale is likely to be over 70% (royalty >7%) 5
- The gross profit margin per sale is likely to be over 50% (royalty >5%) 4
- The gross profit margin per sale is likely to be over 30% (royalty >3%) 3
- The gross profit margin per sale is likely to be over 20% (royalty >2%) 2
- The gross profit margin per sale is likely to be over 15% (royalty >1%) 1
- The gross profit margin per sale is likely to be under 15% (royalty <1%) 0

5. Intensity of Competition in the Market

- This is a brand new market, and there are currently no actual or potential competitors. 5
- The market is relatively new, and the competitors are very small firms which have no current technological or marketing lead. 4
- The market is relatively new, and the competitors are still relatively small, though some may have a small lead in some areas, or have access to significant venture funding. 3
- The market is becoming established, and competitors have grown to medium size (RM5m plus sales p.a.) and gained a reputation as market leaders. 2
- The market is well established, and the competitors are already substantial companies with the ability to quickly adopt or duplicate new technologies. 1
- The market is mature, and is dominated by a few multinational companies with major research capabilities, marketing reach and financial muscle. 0

6. Competitive Edge of your product or service/unique selling point

- The product service is several times as good as the competition in one or more customer-critical areas, and is not worse in any other areas. 5
- The product or service is significantly better than the competition in at least one customer-critical area, and is not worse in other areas. 4
- The product or service is marginally better (e.g. 25% better in at least one customer-critical area), and is not worse in other areas, or is significantly better in one area, but has minor disadvantages in other less critical areas. 3
- The product or service is marginally better (e.g. 25% better) compared to the competition in at least one customer-critical area, but has disadvantages in other less critical-areas. 2
- The product or service has advantages over the competition in one or more areas, but they do not appear to be areas that are critical to the customer. 1
- The product or service has no evident advantages over the competition. 0

7. Ease of access to the Market

- The potential customers worldwide have already been listed (or can very easily be listed) and sales contacts can be initiated as soon as the product is completed, or well-established worldwide distributors are enthusiastic. 5
- The potential customers or enthusiastic distributors can be easily listed in some territories, and it appears that with enough work, other territories can be brought up to the same level. 4
- The potential customers and distributors can be described in general, and there are no evident barriers to accessing them, though generating the lists would be significant work. 3
- It is fairly unclear what the profile of the potential customers is, or the profile is clear but there are some significant barriers (e.g. regulatory approval) to reaching them. 2
- Some potential customers can be described, but there are substantial barriers (e.g. regulatory approval, comply with applicable standards) preventing short-term access to them. 1
- Some potential customers can be described, but the barriers to reaching them are very substantial. 0

8. Commitment and motivation of the team

- The inventors and other members of the team are willing to take risks to leave their current jobs, invest life savings in order to see the commercial opportunity realized (i.e. they form a spin-off company using their own savings at the beginning, to show confidence in their technologies). 5
- The inventors and other members of the team are willing to take full-time leave of absence from their current jobs, and invest meaningful sums (e.g. 25% or more of their annual salary) (i.e. the business model is to form a spin-off company while looking for more funding). 4
- The inventors and other members of the team are willing to spend up to 50% or more of their time on the commercial opportunity, on an agreed split with their current jobs, and to invest modest sums (e.g. 10% or more of their annual salary) (i.e. the business model is to form a joint venture company). 3
- The inventors and other members of the team are willing to spend a small portion of their time (up to 20%) on the commercial opportunity, but are not willing to make even a modest investment. (i.e. the business model is to license the technology to the existing company). 2
- The inventors and other members of the team are willing only to act as consultants, in addition to their normal jobs, providing they are paid consultancy fees, but are not willing to make even a modest investment (i.e. as consultants to the companies that license their technologies). 1
- The investors and other members of the team believe that their research is now finished, and are unwilling to spend any further time on the technologies (assume they have nothing to do with the technologies anymore). 0

9. Business Management and Industry Experience

- The investors and other members of the team had a previous, very successful experience in the management of business(s) in new technology and have broad industry contacts. 5
- The investors and other member of the team had previous, not very successful, experience in the management of business of a new technology, but have strong industry link and feel that they have learnt to do it better next time. 4
- The investors and other members of the team had experience in management of business(s), but the role was relatively narrow (e.g. managing a department, rather than general management) and do not have strong industry contact. 3
- The investors and other members of the team had very little experience in management of the business, (i.e. as an employee) and limited industry contact. 2
- The investors and other members of the team had limited business experience and industry contact. 1
- The investors and other members of the team had no business management experience and industry contact at all. 0

c) **Summary**

No.		Score
1.	Patent Protection (strenght of patent)	0
2.	Readiness of the technology	0
3.	Value of the Market	0
4.	Anticipated profit margins (if considering a license, score on the anticipated royalty rate)	0
5.	Intensity of Competition in the Market	0
6.	Competitive Edge of your product or service/unique selling point	0
7.	Ease of access to the Market	0
8.	Commitment and motivation of the team	0
9.	Business Management and Industry Experience	0
	Total	0
	Total Min	0.0 %



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NABC SCHEME

<u>Opening</u>	<u>What's The Opening?</u>
<u>N</u>	<u>What's the important, quantitative customer and market Need?</u>
<u>A</u>	<u>What's the specific, quantitative Approach to satisfying that need?</u>
<u>B</u>	<u>What are the Benefits per cost from that approach?</u>
<u>C</u>	<u>Who is the Competitor and what are the alternatives now and in future, and why are your benefits per cost superior?</u>
<u>Closing</u>	<u>Closing</u>