Business Models at NMCAs – An introduction

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Items

Business model definitions

Types of business models

Business canvas

Propositions

What is a Business Model?

Definition of Business Model

'Abstract representation of an organization (e.g. a NMCA), be it conceptual, textual, and/or graphical, of all core interrelated architectural, cooperational, and financial arrangements designed and developed by an organization presently and in the future, as well as all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives' (*Al-Debei, M. M., El-Haddadeh, R., and Avison, D., 2008*)

A Business Model

"A business model describes the rationale of how an organization creates, delivers, and captures value"
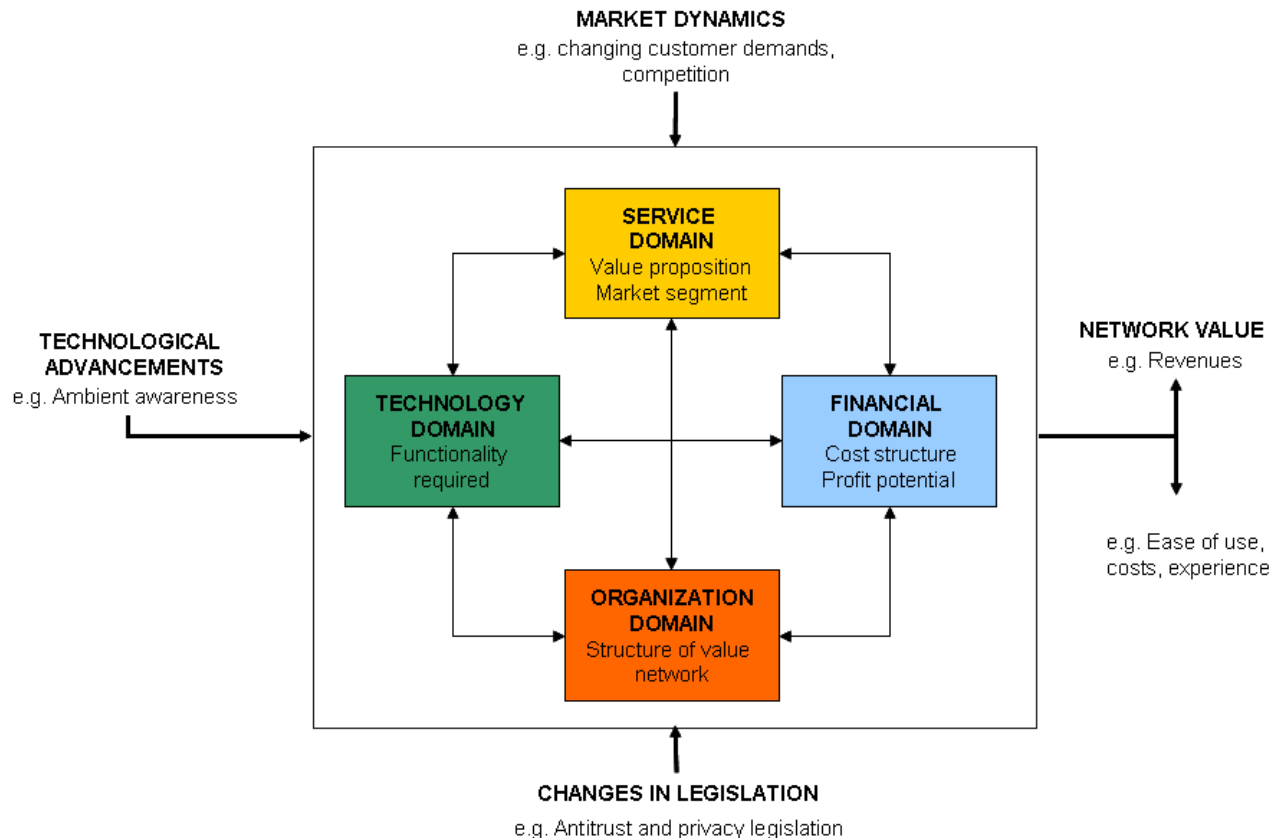(Al-Debei, M. M., El-Haddadeh, R., and Avison, D., 2008)

Business Models

The way how an organization balances income and expenditure

NMCA needs a sustainable business model in the same manner as a commercial organization

-> needs a rather recurring positive cash flow to conduct its essential geospatial activities

Business Models

de Reuver, M., H. Bouwman and T. Haaker (2008*). Capturing value from mobile business models: Design issues that matter*. 21st Bled eConference eCollaboration: Overcoming boundaries through multi-channel-interaction, Bled, Slovenia.

Financial Model

- The financial component describes the financial resources required to develop and deliver a service (cost model) and in which way revenue is generated (revenue model).

What types of Business Models exist?

Business Models - Types

Relevant types of business models:

- Freemium model

- Licensing model

- Open-source model

- Platform model

- Subscription model

- Advertising model

- Ecosystem services model

- Others: Product selling, State budget

Business Models - Freemium

Freemium model:

A basic product is provided for free but you are charged for additional services or features

Example is Ordnance Survey which makes some data available, free data under its Open Data Plan as well as having paid for Premium Service

Business Models - Licensing

Licensing model:

Technology or innovations are monetized by selling user licenses, subscriptions or transaction credits to use software or services

Example Esri. The more you use the more you pay.

Applied by NMCAs?

Business Models – Open source

Open Source

Product is free and is largely created by crowd sourcing either data (as in Open Street Map) or software (as in Quantum GIS)

Partner organizations generate revenue by selling services to customize the data or software

Business Models – Platform

Platform model

Uber's business model at its simplest connects drivers who are offering rides (supply) to passengers (demand) and charge a commission for providing the service. They do not own the assets (or vehicles)
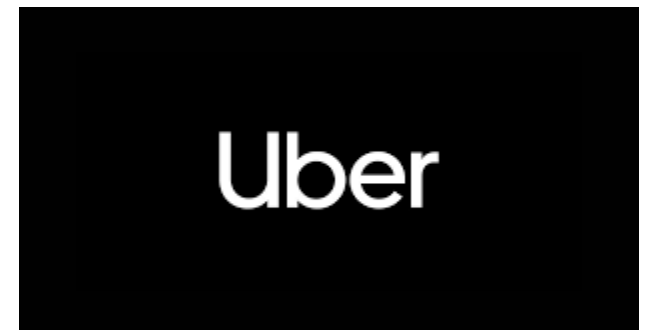
Applicable for NMCAs?

Business Models - Subscription

Subscription

Customers pay a recurring fee to access your product or service

Example Netflix

Applicable for NMCAs?

Business Models - Advertising

Advertising model

Google's advertising led business model

Searching is free, in other words the user does not pay, rather companies pay to get themselves to the top of the search listings

Business Models – Ecosystem services

Ecosystem Services model

Extension of the concept of the platform model to answer simple natural language questions fusing multiple information sources with market knowledge

ChatGPT is early example

Business Models – Others?

Product selling

State budget

Others?

Business Model canvas

How do you determine what value your organization delivers? Business models are used to develop a business strategy by identifying key attributes of the business and how it creates, delivers and generates value

Business model canvas
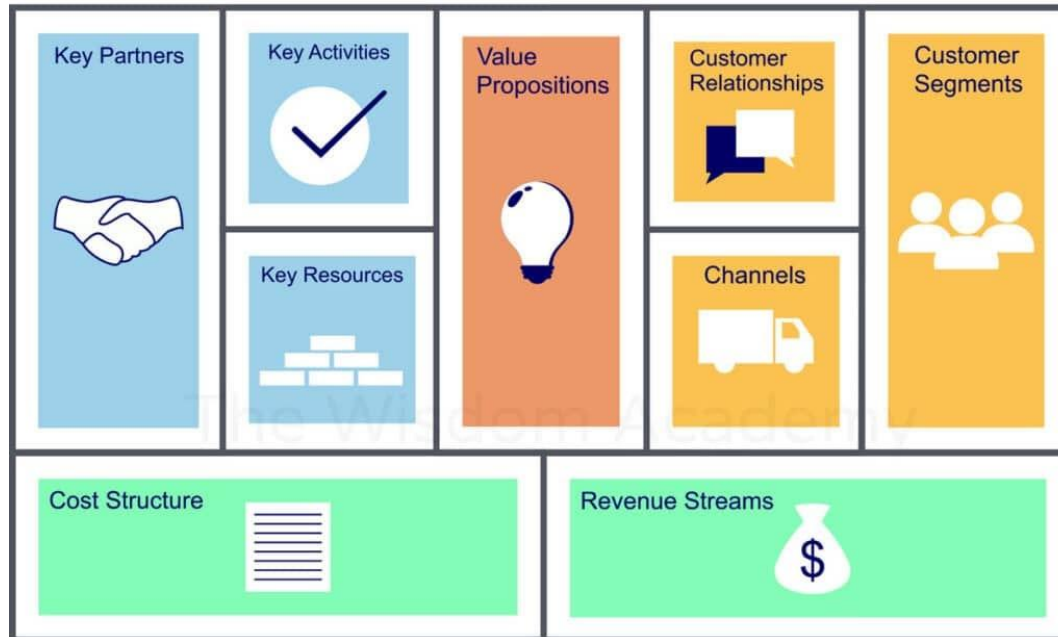
A tool for understanding your current and target business model.

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Business model canvas - NMCAs

Key partners	Key activities	Value Propositions	Customer relationships	Customer segments
- Government - Cities & municipalities - Local self-governments - Academia - NGOs - Private sector companies - Citizens - International partners	- Producing geospatial information - Managing geospatial information - Distributing geospatial information - Add value to geospatial data and services - Leading geospatial information in a country	- Providing and managing authoritative geospatial data of a country	- Customer facilitation - Customer awareness - Customer acquisition - Customer retention - Customer loyalty - Customer satisfaction - On-demand support - Cooperation/Partnerships - Automated services - Self-service - Co-creation	- Data acquisition - Modelling, integration and processing - Information usage - Visualisation (cartography) - Business - Knowledge transfer
	Key resources - Human resources - Organizational resources - Technological resources - Data resources - Communication resources		**Channels** - Data value chain - Communication channels - Sales channels - Research & Development	

Cost structure	Revenue streams
- Organizational costs - Operational costs - Investment costs	- State budget - Financial loans/grants and donations - Service (SLA)/licensing fees - Intellectual property revenues (royalties, patents) - Membership fees - Crowdfunding - Others (sales, subscriptions, marketing, taxation

Can we develop a generic Business model canvas for NMCAs?
What are the commonalities? What are the differences?

Business model canvas – Key partners

Identified entities, or groups of entities, without which the NMCA Business Model cannot operate at fullest potential and quality

- Government
- Cities & municipalities
- Local self-governments
- Academia
- NGOs
- Private sector companies
- Citizens
- International partners

Missing key partners?
Other suggestions?

Business model canvas – Key activities

Key activities which are necessary in delivering the value propositions, facilitating the customer segments and maintaining the business plan

- Producing geospatial information
- Managing geospatial information
- Distributing geospatial information
- Add value to geospatial data and services
- Leading geospatial information management of a country

Missing key activities?
Other suggestions

Business model canvas – Key resources

Key resources which are necessary in delivering the value propositions, facilitating the customer segments and maintaining the business plan

- Human resources
- Organizational resources
- Technological resources
- Data resources
- Communication resources

Missing key resources?
Other suggestions

Business model canvas – Value propositions

Answers what are the job, products and services to meet and facilitate the needs of the customers. This element is directed internally and externally

- Providing and managing authoritative geospatial data of a country

Missing Value proposition?
Other suggestions

Business model canvas – Customer relationships

Indicates what type of customer relationships should be established and how are they maintained

- Customer facilitation
- Customer awareness
- Customer acquisition
- Customer retention
- Customer loyalty
- Customer satisfaction
- On-demand support
- Cooperation/Partnerships
- Automated services
- Self-service   + Co-creation

Missing customer-relationships?
Other suggestions

Business model canvas – Channels

Internal and external channels of communications with the customers and partners for delivering the value proposition

- Data value chain
- Communication channels
- Sales channels
- Research & Development

Missing channels?
Other suggestions

Business model canvas – Customer segments

This element lists the top segments which the NMCA needs to facilitate and meet the needs of each segments

- Data acquisition
- Data Modelling, integration and processing
- Information usage
- Visualisation (cartography)
- Business
- Knowledge transfer

Missing customer segments?
Other suggestions

Business model canvas – Cost structure

Costs which are necessary in order to conduct key activities, deliver the value propositions, facilitate the customer segments and maintain the customer relationships and channels

- Organizational costs
- Operational costs
- Investment costs
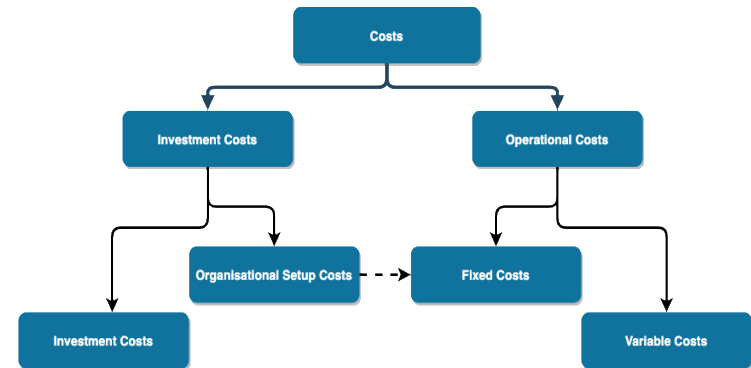
Missing cost structure?
Other suggestions

Business model canvas – Revenue streams

Indicate sources of funding and revenue streams which are to be closely developed and identified within the financial model

- State budget
- Product sales
- Financial loans/grants and donations
- Service (SLA)/licensing fees
- Intellectual property revenues (royalties, patents)
- Membership fees
- Crowdfunding
- Others (subscriptions, marketing, taxation)

Missing revenue streams?
Other suggestions

Business model canvas - NMCAs

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Which elements of the Business canvas are rather generic for Europe?

Which elements of the Business canvas are rather diverse for Europe?

Propositions

Proposition 1

THE PERFORMANCE OF YOUR NMCA BUSINESS
  MODEL IS:

1. VERY STRONG

2. STRONG

3. MODERATE

4. WEAK

5. VERY WEAK

Proposition 2

IN ORDER TO IMPLEMENT STRONG BUSINESS MODELS AT NMCA'S, THERE IS A STRONG NEED FOR:

1. CLEAR RULES AND WORKING STRUCTURES
2. COMPETITION AND MARKET
3. PROFOUND COOPERATION

Proposition 3

THE MAIN BENEFICIARY OF A STRONG NMCA-BUSINESS MODEL IS:

1. NMCA - ITSELF
2. PUBLIC SECTOR
3. PRIVATE SECTOR
4. CITIZENS
5. SOCIETY

Proposition 4

THE SECOND IMPORTANT BENEFICIARY OF A STRONG NMCA BUSINESS MODEL IS:

1. PUBLIC SECTOR
2. PRIVATE SECTOR
3. ACADEMIA
4. NGO
5. CITIZENS
6. SOCIETY

Proposition 5

THE MAIN BOTTLENECK FOR IMPLEMENTING A STRONG BUSINESS MODEL AT NMCA IS:

1. POLITICAL
2. FINANCIAL
3. LEGAL
4. CULTURAL
5. TECHNOLOGICAL
6. HUMAN COMPETENCES

Proposition 6

THE MAIN BUSINESS MODEL CURRENTLY APPLIED AT NMCA'S IS:

1. Freemium model

2. Licensing model

3. Open-source model

4. Platform model

5. Subscription model

6. Advertising model

7. Ecosystem services model

8. Product selling

9. State budget

Proposition 7

THE MAIN BUSINESS MODEL APPLIED AT NMCAs IN THE FUTURE IS:

1. Freemium model

2. Licensing model

3. Open-source model

4. Platform model

5. Subscription model

6. Advertising model

7. Ecosystem services model

8. Product selling

9. State budget

Proposition 8

THE BUSINESS MODEL OF NMCAs IS IN DANGER:

1. AGREE

2. PARTLY AGREE

3. NOT AGREE

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Thank you for your attention