

## Strategy to speed up largescale adoption of the CNG Car

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## Overview presentation

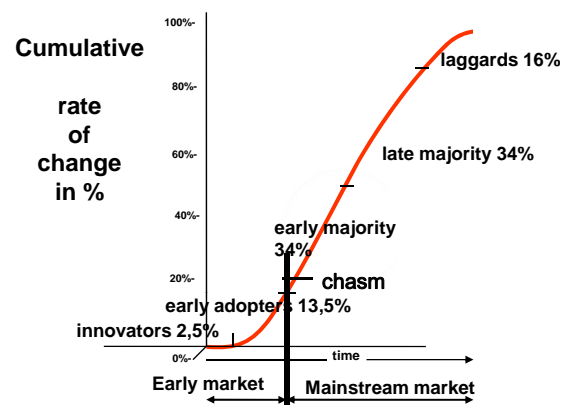
- **Introduction**
- **Some theory**
- **Report on a Case study:**  
**Marketintroduction of theCNG-car, based on a market-analysis of carfleet owners in the Energy Vallye Area in the Netherlands**

## 1. some theory

- Proces of change of target groups forms an S-shaped curve;
- Adoption categories;
- Innovations appeal most to the first adopters;
- There is a chasm between the early market and mainstream
- Differences between them;

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## change process of target groups



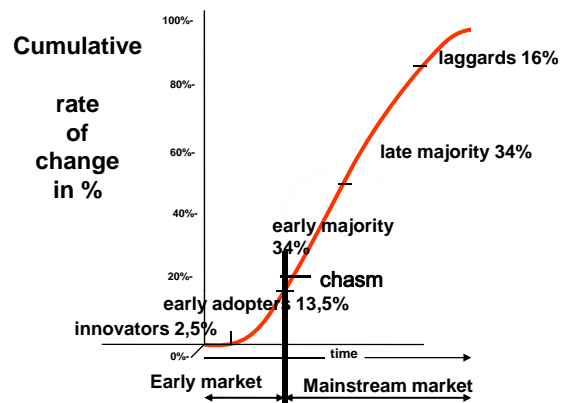
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## Chasm caused by differences between early market mainstream

Early market: visionaries	Mainstream: pragmatists
<ul style="list-style-type: none"> <li>• seeking for revolutionary advances</li> <li>• motivated by future opportunities</li> <li>• self-referencing</li> <li>• avoid the herd</li> <li>• risk-taking</li> <li>• seek best technology, and innovative products</li> </ul>	<ul style="list-style-type: none"> <li>• seeking evolutionary advances</li> <li>• motivated by current problems</li> <li>• reference others perceived as similar</li> <li>• stay with the herd</li> <li>• Risk-averse</li> <li>• will seek the best solution or functionality to buy,</li> </ul>

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## Crossing the chasm: finding niches



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## **strategy to Cross this chasm**

1. Find a niche in the mainstream:  
by surveying the target group, and:
  - a. assessing the adoption category,
  - b. and finding the most pragmatic segment of the mainstream;
2. Make a plan to make the innovation complete;
3. Make the product complete;
4. Start marketing activities

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## **Research questions in case study**

1. Find the different adoption categories
2. And their characteristics
3. Outline marketing approach

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## method

- Survey on (271) fleet owners with analysis
- Workshop with dealers and representatives of the niche segment for outlines of a marketing plan

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## Adoption category three items of the survey

### 1. Is your organization more active in the field of sustainable transport?

(a) more active than most others (score = 4), (b) more active (score = 3), (c) equal active (score = 2), (d) a bit less active (score = 1), (e) less active (score = 0), (f) no (score = 0).

### 2. If you compare the attitude towards innovations in the field of sustainable transport of other fleet owners with your organization.

Do you find: (a) your organization more positive than other fleet owners (score = 4), (b) your organization more negative than other fleet owners (score = 0), c. equal to your own organization (score = 2), (d) don't know (score = 0).

### 3. If you qualify your organization as to the speed with which decisions are made about innovations in the field of sustainable transport is your organization?

(a) a trendsetter (score = 4), (b) a trend-follower (score = 2), (c) a laggard (score = 0), (d) don't know (score = 0).

These three items formed a scale of *adoption rate* having a minimum score of 0 and maximum score of 12 (Cronbach's alpha was 0.61).

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## Adoption rate and segments

Adoptionsegment	Score adoption Rate score	percentage
Early market	9-12	18%
Mainstream market	0-8	82%
Of which:		
early majority	6-8	44%
late majority	4-5	22%
Laggards	0-3	16%

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## Some differences between early market en mainstream

1. Size of the carfleet: 39 vs 21;
2. Investments in sustainable transport:  
More policy, (66% vs 33%);  
Eco driving (62% vs 37%),  
Transport management system (59% vs 26%);
3. Attitude of the eraly market towards CNG as car fuel is more positive;

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## Finding the niche

Part of the early majority and the most pragmatic part of the main stream

By a constructed variable (0-6): (Cronbachs  $\alpha = .51$ )

- (1) Action radius of the CNG car is smaller;
- (2) The availability of filling points is low;
- (3) Uncertainty about price-developments.

score	0	1	2	3	4	5	6	
%	3	5	9	14	26	19	24	

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## members of the niche

- 4 municipalities;
- 5 taxi-companies;
- 3 drivingschools;
- 1 homecare organizations;
- 1 transportcompany;

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**The workshop with niche and dealers concluded;  
the following outline of a marketing approach**

- Concentrate marketing around filling points cooperate with the local authority;
- Set up an account aanpak with dealers;  
direct marketing, provide tailor made solutions;
- Develop a supporting policy from the local authority;
- Free parking and a local subsidy;

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**conclusion**

- Adoptiecategories with different characteristics are found
- A niche in the mainstream was identified.
- the CNG-car was not yet ready to cross the chasm.
- So marketing has to focus on the early adopters

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## The after paper situation

Marketing is focused on the segment of early adopters

The city of Leeuwarden took the initiative:  
formed a local action committee of cardealers, gasstation owners,

The committee promotes driving on CNG: on business fairs,  
At special occasions.

Approaches organisations with a high level of societal entrepreneurship,  
probably visionary early adopters.

Leeuwarden provided free parking and a subsidy of 1000 euro's.  
Until now 25 CNG cars are sold.

The initiative is spreading to the next city

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**Thank you for your attention**

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