Sustainable strategies for long-haul low-cost airlines*

Sveinn Vidar Gudmundsson Professor, Toulouse Business School

Airneth Seminar - The feasibility of long-haul low-cost operations
Ministry of Infrastructure and the Environment
The Hague 9 December 2015

* Updated version





Outline

- What is low-cost?
- What is low-cost long-haul?
- Who are the LCLH airlines?
- Who are the LCLH passengers?
- Problem: Why is it not working?
- Economic principles
- Business model "out-of-the-box"
- Conclusion





The underlying concept is simple but difficult to implement and maintain:

- Make sure that all activities performed and added over time have high fit (with low cost)
- Assure that the right trade-off decisions are made
- Understand what to do and what not to do

(See Porter, 1996)





The Southwest business model was shaped by constraints:

- low start-up capital => keep costs down, grow slow
- no traffic rights beyond Texas => short-haul
- maintenance problem forced the airline to do a four aircraft schedule with three aircraft => fast turnarounds
- eccentric CEO kept the airline in the news => lower advertising expenses





LC airlines seek <u>empty market spaces</u> to generate new traffic (expand the pie):

- avoid the competition and fend off competitors (Ryanair). Why grab customers from existing airlines if you can create new ones?
- serve secondary markets (monopoly routes)
- do not charge monopoly prices on monopoly routes (competition with cars, buses, trains and the TV [do nothing],
- serve markets that no competitor is likely to follow
- sustainable LC airlines seek unique positions





Low cost is about saving little bit in many places Low cost = "bean counting"

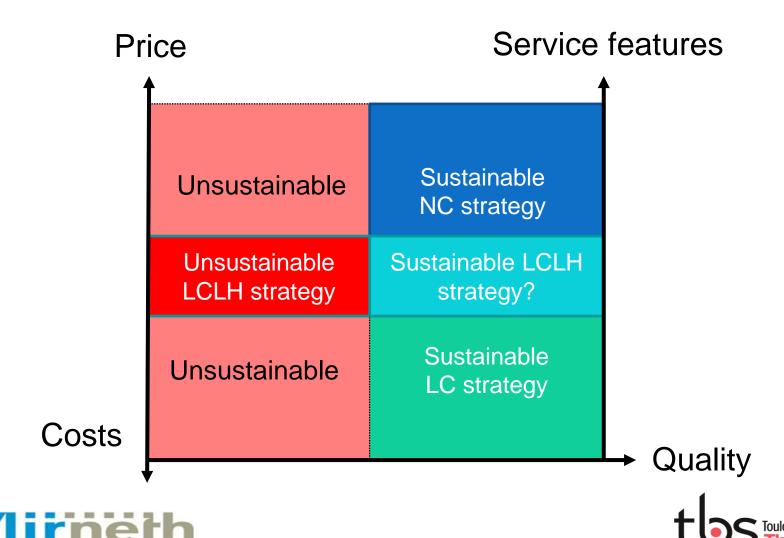
LCSH/LCLH cost advantage/disadvantage	LCSH*	LCLH
Greater seat density/Multiple seat pitch configuration	16	10
Fast turnarounds/Optimized scheduling	3	2
Lower crew costs	3	2
Cheaper airports/Landing fees	6	6
Outsourcing maintenance/Single aircraft type	2	2
Minimal station costs/Outsource handling	10	2
No in-flight catering/Unbundling	6	4
No agent commissions	6	6
Reduced sales/Reservation costs	3	2
Lower overhead costs	2	2
Fuel savings (Low AC age/Optimized stage lengths)	3**	7
Economies (density and scope)	0	-9
Total cost differential compared with legacies	Est. 60	Est. 36

^{*}Low Cost Carriers in the European Aviation Single Market, Report 2002.** Author's estimates.

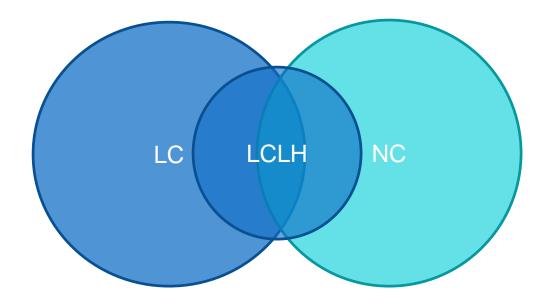




Airline positioning matrix



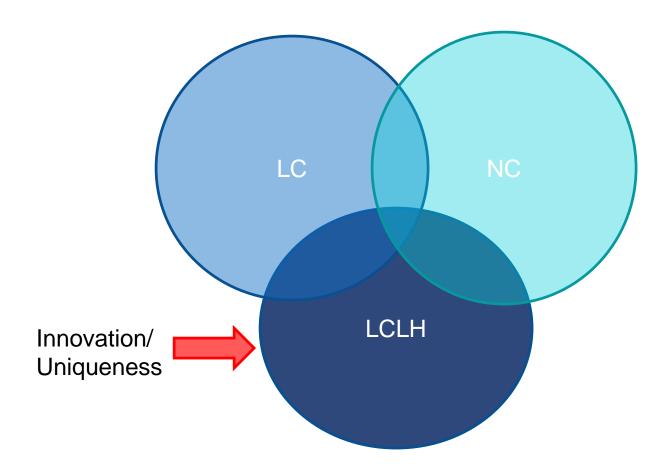
We tend to see LCLH like this!





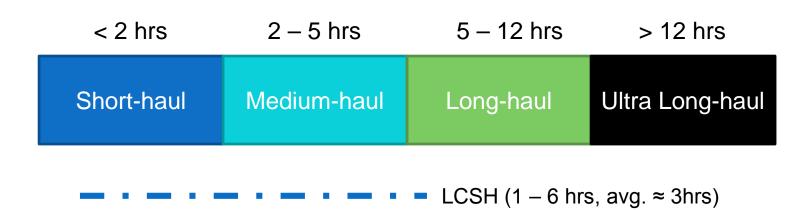


But we should see LCLH like that...!









LCLH $(3 - 10 \text{ hrs, avg.} \approx 7 \text{ hrs})$

NC (1 hrs +, avg. ≈)





Frequencies offered according to flight duration

Airline	< 4hrs	4-6 hrs	6-8hrs	8-10hrs	>10hrs	Туре
Air Asia X	2%	42%	38%	20%	0	LCLH
Thai Air Asia X	0	100%	0	0	0	LCSH
Jetstar Airways	90%	4%	4%	1%	1%	LCSH
Jetstar Asia	83%	17%	0	0	0	LCSH
Tigerair	80%	20%	0	0	0	LCSH
Scoot	40%	35%	15%	10%	0	LCLH?

Source: Based on OAG, 2014





Who are the LCLH airlines?

Historic overview

Loftleidir-Icelandic (1944-1979), the first low cost long haul airline (LCLH) over the North Atlantic, started operations between Europe and the USA, through Iceland, by being outside IATA the carrier was able to undercut the prevailing IATA fares offered by other airlines in the 1960s. – First carrier to use a concept of low-cost to support low fares. First carrier to use a unique "low cost aircraft", 189 seat Canadair CL44, a stretched cargo to passenger conversion. At start of jet age it used the slogan "We're slower, but we're lower".

Laker Airways (1966-1982) "Skytrain" offered low fares on the North Atlantic but soon after the concept took off, jet fuel prices rose, a recession followed, and the value of the British pound declined. In this adverse environment Laker went ahead with fleet enlargement visioning network expansion to other parts of the world (Banks, 1982).

PeoplExpress (1981-1987) had a large US domestic base before starting operations to London in 1983 and later Brussels. Used Newark as a hub for the long-haul flights benefitting from very extensive feeding network to fill the Boeing 747 aircraft. First low cost carrier extending the traditional low cost model to long-haul international routes. Was LC-LHE (see next slide).





Who are the LCLH airlines?

Entrepreneurial LCLH (E-LCLH)

started from scratch by new airline entrepreneurs (Zoom*, L'Avion*, Laker*; EOS*, MaxJet*, Silverjet*, Oasis*);

LC offshoot LCLH (LC-LCLH)

started by existing LC operators as separate unit (Air Asia X; Norwegian LH);

NC offshoot LCLH (NC-LCLH)

started by network carriers (JetStar, Scoot, nokScoot, Transavia France, Open Skies);

LC long-haul extension (LC-LHE)

airlines operating on long-haul routes (Southwest Airlines to 7 countries, longest routes -> Costa Rica, 4hrs, and Aruba; JetBLue to Lima -> 6 hrs).

Two tier charter LCLH (C-LCLH)

started by a charter airline that retains the charter operations (LTU* and TUIFly).



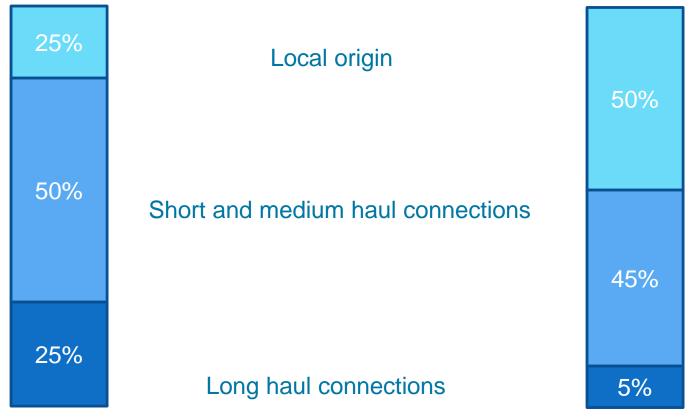


^{*} Defunct or acquired before 2015.

Who are the LCLH passengers?



Hypothetical LCLH flight from LC/secondary airport?

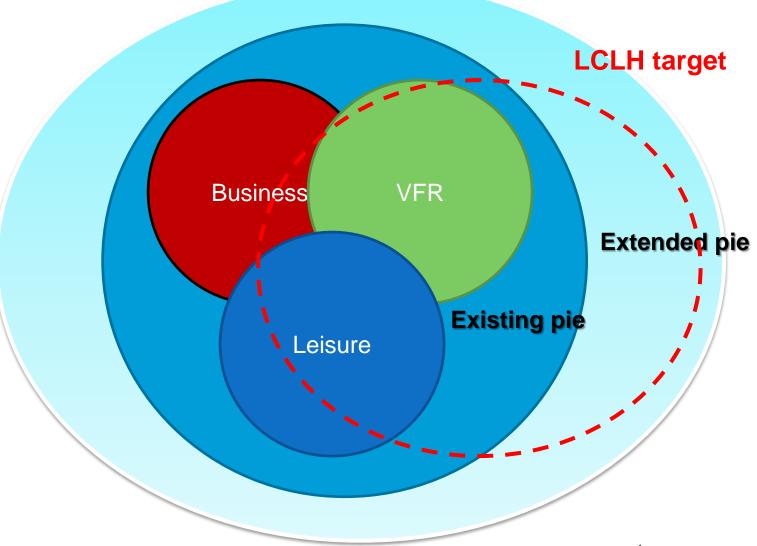


^{*} Based on Denis, 2007.





Who are the LCLH passengers?







The role of technology in LCLH

- NCs operate larger aircraft that cost less per seat to operate. This is a sustainable advantage over LCLH carriers.
- LCLH can use new aircraft that cost less to operate (A350,B787, A320NEO, B737MAX) but this is not sustainable advantage (NCs can buy them too)
- LCLH can limit stage lengths (i.e., tighter range than NCs) and use only one type of aircraft to save costs (all A350s or B787s). This can be a sustainable advantage for LCLH as NCs cannot replicate.
- NCs operate large aircraft with lower seat costs because they benefit from density and scope economies. This is a sustainable advantage over LCLH, that cannot gain same position in existing hubs.
- Since turnaround times increase with the number of AC seats and stage lengths, and total trip costs increase therefore linearly with distance (Swan and Adler, 2006; Swan, 2003), LCLH can gain advantage by operating fuel efficient medium sized AC only and optimize stage lengths for fuel burn (intermediary secondary hubs, i.e. Dubai, Qatar, Abu Dhabi, Keflavik, Istanbul).





Problem: why LCLH is not working?

- Activities performed have poor fit or drift over time
- Activities performed replicate network carriers (not unique)
- Failure to create scale economies (i.e., economies of scope/density)
- Failure to offer sufficiently low fares to generate new demand (instigate "Southwest effect" on long-haul routes to expand the pie)
- Failure to carve out a niche position (be unique in a "Blue Ocean")
- Failure to protect position
- Failure to innovate for lower costs





Problem: power of competitors

The NCs have four (+1) options when responding to LCLH competition:

- reinforce the network model
- start a price war
- start LCLH subsidiary
- do nothing
- ("Dirty Tricks")





Problem: how to protect position

- Monopoly routes (secondary routes NCs will not serve)
- Secondary airports that NCs will not serve
- Business model features that NCs will not copy





Problem: strategic drift?

Innovate to lower costs

Innovate to generate revenue

Innovate to differentiate

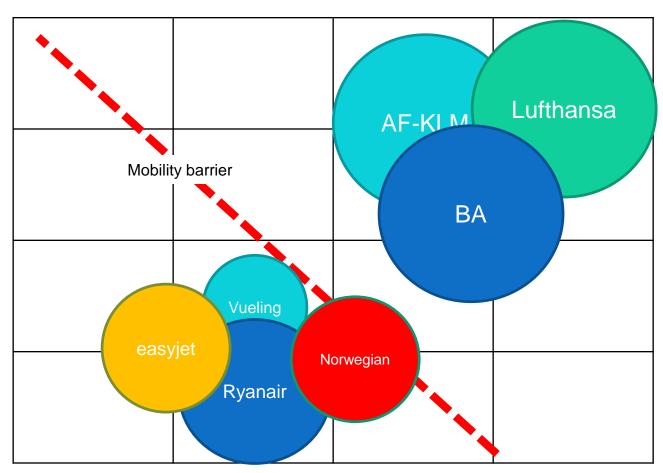
Most LCs move along this path and lose unique cost position





Problem: mobility barriers

Costs



Network geographical scope

Average sector lengths





Economic principles: demand generators to fill planes

- Hubs (network carriers)
 - Economies of aircraft scale = scope and density
- Southwest effect (low cost carriers)
 - Low enough fares to enlarge markets (compete with the car, bus, train and the couch)
- LCLH must instigate both





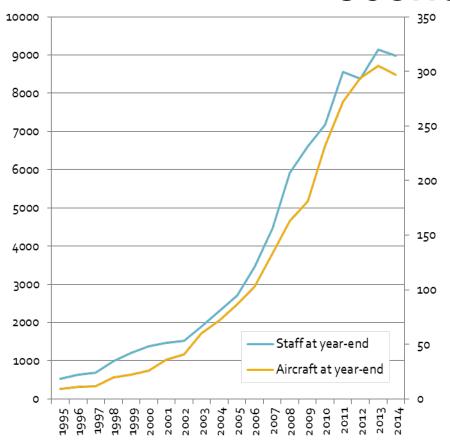
Economic principles: enabling LCLH

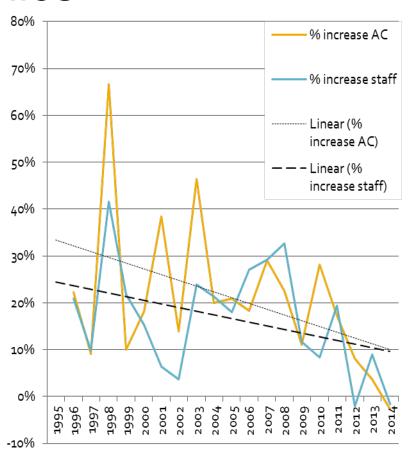
- Economies of scale (aircraft scale economies, i.e., larger AC, enabled by scope and density economies)
- Economies of scope (multiple routes out of each airport served, e.g., Air Asia and Norwegian using multiple country subsidiaries, and Ryanair's airport scope concept in Europe)
- Economies of density (essential for LCLH to support larger AC with lower seat costs to compete with NCs). But LCLH cannot compete effectively in existing major hubs, so secondary hubs need to be developed by LCLH in intermediary locations (i.e., Emirates model)





Economic principles: Ryanair's economics



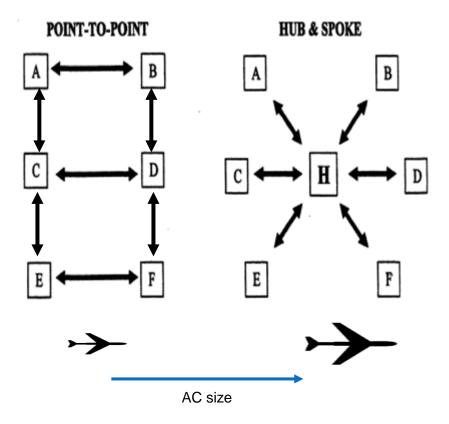






Economic principles: hubs vs. P2P

$$c = n(n-1)$$
 $c = 2(n-1)$







LCLH business model "out-of-the-box"

- Turnarounds (short turnarounds lead to better aircraft utilization, lower crew costs, and fewer aircraft needed to serve the network; on LH flights turnaround time increases linearly with sector length and aircraft size). => Make <u>AC utilization drive</u> schedules (Norwegian).
- Aircraft utilization (the longer the sector distances the lower the direct cost advantage over legacies). => Use flexi-scheduling (Air Asia X).
- Airport charges (LCLH tend to operate into similar airports as the network carriers and incur higher costs because of lower frequencies). => Operate to secondary airports.
- Connections (LCLH is more dependent on feeding to fill larger aircraft at high load factors, especially if operating from secondary airports, so they tend to forge costly alliances). Maximize potential connections without alliances. => Create <u>virtual hubs</u> (airport driven).





LCLH business model "out-of-the-box"

- Seat density (on longer flights passengers are more concerned about leg space causing the LCLH to offer more space without offsetting reduction in revenue, i.e. WOW Air). => Sell seat pitch not classes (change of culture).
- Simplified fleet (long-haul sectors vary much depending on destination making it difficult to operate only one AC type). => Select sector lengths so that airline uses <u>fuel</u> <u>efficient medium sized single type of AC</u>.
- Frequencies (it is easier to offer high frequencies on short haul than long haul because of lower start-up costs and route demand risk, start-up costs and risks associated with long-haul are higher so LCLH will lack comparable frequency as network carriers, attracting less premium traffic that seeks flexibility). => Offer scope rather than high frequencies, use mini hubs to create economies of density and scope.





LCLH business model "out-of-the-box"

- Premium service (LCLH usually seek premium traffic because of difficulties making the LC model work. Offering premium service and large sleeper seats has costs associated that may be proportionally larger than the extra revenue generated compared to the network carriers, causing lower margins for the LCLH). => <u>Sell seat</u> pitch not classes.
- Aircraft (LCLH, lack fuel cost advantage due to large AC sizes of NCs). To rectify eliminate in-seat screens (in-flight entertainment system, install WIFI), choose lighter seats, create disincentives for heavy baggage, carry no merchandize on board, and no inflight magazines. The technology can isolate the LCLH, i.e., have characteristics that NC customers will not accept, but LC customers will. => Aggressive weight reduction and fuel saving policies.





Conclusion

The key areas of uncertainty for LCLH:

- Pure LC versus hybrid strategies
- Primary or secondary airports
- Business model innovations
- How to protect position
- Average stage lengths
- Hubs or point to point
- Intermediary hubs or direct
- The role of technology
- Classes or "pitches" (NC versus LC culture?)



