

# Outsourcing dilemma: a composite approach to the make or buy decision

[Business](#), [Risk Management](#)



## Module 1: Business Decision in Project Management and Corporate

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dilemma: a composite approach to the make or buy decision —case study in

buy or make New Non-Air booking System of Cathay Holidays Limited (CHL)

Written by Group 3: Executive Summary This paper is trying to appraise a

range and complexity of outsourcing decision issues which Cathay Pacific

Holidays (CHL) is now facing for its new booking system development, by

applying the Composite Outsourcing Decision Model (CODF). CODF is used as

a framework to provide composite decision making elements such as

contextual factors, costs, and strategy and structure. The analysis result

shows a high score in favour to outsourcing as I. T. system development is

not a core competency to CHL, and the system integration knowledge of

internal staff is insufficient. Analysis insight, extra outsourcing

considerations, and opportunities under current financial tsunami are also

reviewed. Background of Case Study Cathay Pacific Holidays (CHL) is a

wholly-owned subsidiary of Cathay Pacific Airways. Headquartered in Hong

Kong, it offers a wide range of all-in-one holiday and tailor-made packages

targeted at free & independent travelers market. Its company mission is to

solidify the position of market leader in this market and provides good

quality and value-for-money to premium products & services to its

customers. Market Environment In old days, most of the people prefer to join

group tour in the large travel agents like Wing On Travel & Hong Thai. But

nowadays more and more people will consider buying packages and

planning their own itineraries. It is relatively easy to set up a travel agent

and getting license in Hong Kong. Foreseeing the free & independent

travelers market becomes more popular, many travel agents now enter to share this market and set up a section/ department to penetrate to the market. CHL is facing strong competitions in this fast growing market. Even its brand image from CPA can help to differentiate themselves from competitors, they must develop a competitive edge over rivalries e. g. create cost & product differentiation, increasing bargaining power with suppliers, better services to cope with customer's need.

**CHL Internal Situation** CHL have 2 types of customers, direct customer and travel agents. They receive booking via different sales channels including call by phone, fax, email or website. Most of the bookings or enquiries are handled by call centre. However, monthly loss call rate is around 40-50%. The call time cannot be shortened as booking process is manual. Staff required inputting customer detail to make reservation and provided quotation by manual calculation. CHL also has its own online booking system to collect booking and allow instant booking, but it is not fully automated and has the capability limitation. For examples, it can make simple booking only and there is no handling of amendments/ changes/ cancellations, automated online payment and ticketing. Reservation staff still needs to follow up it at the backend.

**New Vision** CHL leverages on information and internet technology to develop a new system, NABS. It helps to streamline its business process & daily operation and change most of manual works to automation. Staff productivity can be increased. With provision of self service automated online booking system to customers, CHL now can accept and handle more bookings via web without time and manpower limitation. Both direct customers and travel agents can access to the booking system via Business

to Business and Business to customer platform in any time. The existing reservation staff will now focus on provision of services with higher profit or value-added to customer. The company can now provide better service with lower cost. New Mission with NABS Its system facilitates communication between the operation team and its partners and thus reduces the turnaround time in various processes. It will become one of competitive advantages to fight over competitors by increasing its service level and customer satisfaction. High sales volume can help CHL to get better offer from its suppliers and the supplier bargaining power can be reduced. Suppliers are willing to provide exclusive offer if expected sales volume can be proved. It helps to increase both cost and product differentiation. CHL can take the opportunity to accept and work with other online suppliers to capture last minute sales. \*Scope of NABS: [pic] Decision making on outsourcing As the old booking system is to be obsolete in 2011, a new system must be developed and implemented in the near future. CHL senior management is now making a make or buy decision for the new system development of Non-Air Booking System (NABS). CODF Model is used to examine this dilemma. Methods to avoid the problem in outsourcing Ruffo, Tuck and Hague (2007) suggested methods to avoid these problems include: Taking long-term view. - Never outsource core capabilities. - Prudently examine if any critical activities need to be outsourced, though only partially. - If outsourcing is made on a critical function, use two or more suppliers, in order to maintain quality and price competition. However, this will also increase the opportunity of technology diffusion. - Joint ventures. Traditional Factors for Outsourcing decision VS CODF Model Traditionally the principal

factors associated with the decision to outsourcing are the Outsourcing Spectrum, Decision Criteria, and the Drivers for Outsourcing, which mainly focus on economies of scale & scope, cost efficiency, and market forces & technical considerations respectively. However, in many cases, more significant number of factors should be considered such as internal & external conditions of organization, strategic & structural aspects, and all different aspects of costs. CODF Model is utilized to identify all the general aspects of outsourcing decisions mentioned above consisting three major elements for the senior management's consideration. [pic] Outsourcing decision framework, CODF CODF Element 1& 3 - Contextual Factors & Costs

The contextual factors associate with both quantifiable (costs, investments, revenues, etc.) and non-quantifiable contextual factors (strategic interest, confidentiality, manageability & dependence of suppliers, and operation linkage, etc.). The costs associated with two types of costs classified in production costs and coordination costs should be considered by management. Most of the factors which CHL management concerned indicate that CHL has high desirability for outsourcing its system development. These factors are shown as follows and are highlighted within the summary table:

- The IT system development is not a core activity for CHL
- Technical skill sets of internal IT staff are inadequate for the system development
- High risk and uncertainty of external linkages and system complexities should be reduced by shifting to outsourcing providers
- Similar booking systems have been implemented by outsourcing providers
- Coordination costs for outsourcing should be minimal as the providers have been in the market for many years and with strong references
- Outsourcing

will be more cost effective as CHL cannot enjoy the economics of scale for setting up its own IT facilities which require specialized equipment and knowledge \*Contextual & Cost factor on buy or make NABS [pic] Detailed analysis of each factor is summarized as follows. In NABS, it is examined the non-quantifiable factors on skill & technical, strategy interest, confidentiality, dependency/manageability of suppliers, and operation linkage and employment's stability. The latter two factors are in a relatively inapplicable due to the production of NABS is not the core business, therefore in house or outsource takes minor impact. Another insignificant elements is Strategy Interest, as NABS is only the application needs to introduce and enhance the business value but the overall strategy would not be building a high level technical team. For the Confidentiality, generally the information flowing inside the system is not strictly confidential. In external side, there are similar workflow systems available in the market, but the NABS's scope & application is somehow the business strategy and the solely ownership of NABS is critical in driving in house or outsource. About the Skills/Technical factor, primary activity of CHL is definitely not building system thus they are lack of talent in building the complicated and scale system. Externally it is benefit in getting 24(hr) X7(day) service supporting, and long term development or upgrading advice would be sustained. Even outsource drives higher significance in this aspect, the risk aroused is another concern about is the loss of knowledge/skills or poor supplier's performance, bad relationship between CHL and suppliers. In manageability and dependence of supplier, it is also an important weighting factor for CHL. Internally the supplier bargaining power should examine, like that of exclusive services

support and ownership of source code. Also CHL has to review the ability in building the mutual service level agreement. Considering outsourcing, the appropriate service providers is limited in the market but also communication problem, limitation in geographical and time difference is also a barrier. Risk has to encounter about the alignment during changing environment, and loss of control or power shift to supplier, poor selection of partner and a risk of closing down of supplier are also considerable.

Considering the costs, investment and revenue as quantifiable elements, it is estimated that in house inducing the cost of talent (knowledge), investment in introducing the project development team and, corresponding facilities and equipments, production site, testing area, etc. Some of the hardware required in project development stages would not be useful but depreciated after project closing. In outsourcing side, a basic build up cost, coordination and maintenance cost as well as the supplier management cost should invest. In the other point of view, cost in outsource is not clear while total cost for in house is less visible. CODF Element 2 - Strategy and Structure The strategic and structural aspects associated with the outsourcing decision are based on a set of questions proposed by Ewartz in 1991. These nine questions discuss the properties of production processes (e. g. uniqueness, capital needs, and idiosyncrasy), market conditions (e. g. cycles and customer behaviour), as well as supplier capabilities and corporate culture. The answers from these nine guideline questions indicate that outsourcing of system development must be seriously considered by CHL. The questions and answers are summarized as follows. \*Strategy & Structure factors on make or buy NABS [pic] The answers are listed in detail below. How unique

are the production processes? It is a non unique production process thus not strictly requires whether in house or outsource. How severe are the market cycles? And how frequent? Production of NABS would not demand in long term development, but only a certain level of continuous development. It is recommended to outsource in lower the risk in invisible costs. Just how much capital does internal manufacturing require? Production and set up costs for in house production are difficult to estimate, a great effort need to clearly compute the overall cost. Under this subject, outsourcing is more preferable. How does geographic dispersion of customers influence resourcing decisions? It is a web-based product. It is not applicable in determining whether in house or outsource as well. Does the market expect the firm to be a manufacturer? Tourist services provided should rather focus more in core professional function rather that become a system producer. Thus, outsources would be preferable for this question. How long will the process be viable? Estimating product mature in six months but the services supporting & upgrading require five years of time. There is no preference in either in house or outsource but latter would require good contract to cover for maintaining, changing & upgrading. Are these suppliers capable of doing the work, in terms of both technology and capacity? Appealingly outsourcing provides latest technology & specialists. Are there idiosyncrasies in the product, the manufacturing processes, or the market that force a sourcing decision? For the manufacturing process, professional knowledge input required which is excluding in core business but suppliers available in the market. Thus it also drives the market forces towards outsource with the easiness in access to latest technology and infrastructure. Can the corporate



culture be changed? It is irrelevant as system would anyway implement but accepting during the production process by either in house or outsource is no barrier. Therefore in house or outsource is also not applicable in this question. Other Considerations on CHL Management Level There are 4 factors taken into consideration by the project manager including Cost of Ownerships & competitive advantages, continuing improvements, cultural fit and assurance of supply and quality to compare the advantages and disadvantages in in-house production and outsourcing. In-house production Advantages If the system is built by in-house, it can be fully customized and unique strategic features can be self-owned. Moreover, it will be easier to manipulate a new development team to fit existing culture. In-house production Disadvantages However, continuing improvements cannot be sustained as development team will be dismissed after production launch. Current staff is lack of related knowledge and experience in system development, which will lead to high risk of project failure. Outsourcing Advantages Information technology outsourcing has grown in popularity as an efficient, cost-effective, and expert solution designed to meet the demands of systems implementation, maintenance, security, and operations. Access to skilled personnel, advanced technology infrastructures, flexibility, and cost savings are the driving forces behind IT outsourcing. Therefore, summarizing the overall advantages as below: • Similar systems are available in the market • Less development cost incur to perform more strategic functions • Timely system upgrade and new add-on features available • Assured standardized quality with the demo product features available before contract sign • Shorten implementation time (supplier can

provide instant training materials) Outsourcing Disadvantages Certain system customizations are still required due to the complex requirements. The project team will also take time to adjust with the supplier's company culture and certain compromises are needed. Buy or make decision In NABS case, it is dominant by the contextual factor in building the system is not primary activity for the organization. Reminder on IT outsourcing Outsourcing requires establishing and maintaining a partnership in which the vendor is an integral member of the Chief Information Officer's team and the organization. Such relationships build long-term confidence and trust, remain focused on the company's objectives, and create the win-win scenarios necessary to make working relationships more productive. After choose the provider: 1. Consider the outsourcing arrangement as a long term relationship that needs to be managed to be successful. 2. Once the decision to outsource has been made and a provider has been selected, establish with the provider how performance can be objectively measured and modified as needed. Opportunities under Financial Crisis The Financial Tsunami affected the economic growth in the whole world no matter industrial or commercial organization. CHL's top management team needs to fully reconsider this make decision under the present situation of the unstable economy. Since the demand of the market may vary and unpredictable, the risk management is so important and the emergency plan should be developed. Since 2003, CHL have had the past experience of the similar project and production of existing system had been implemented in 2005. It finally failed to operate in their working environment because the system performance was unstable. They were forced to use the old system.

So they cannot accept any failure in this project again. As this project will cater for the future five years business plan, they can take this opportunity to accelerate the project. They can gain benefits from lower production cost and the reduced constraint in manpower. Supplier may now want to secure business and is willing to bid the project at lower price. Internal staff handling daily operation can now spare many manpower to involve in the project. ----- 3rd party / hotel / Land suppliers Business Partners / Outside Parties Abacus (Air-related functions) Customer DB Competitor DB Contract & Supplier Mgt NABS-i CHL Systems FMIS CX Systems PSC (interface to payment gateway) CLS (Customer profile retrieval) PSS (Air-related functions) Land Suppliers B2S Worldwide Online Customers Worldwide Travel Agents CX / CHL Staff / Outports GSA B2C B2B B2E Land Supplier Management System Administration Management Reports Branches / Multi-language Support Yield Management & Accounting Agents Management Booking & Fulfillment Inventory Control Costing & Pricing Management NABS NABS Overall Scope