

Introduction:

This paper will explore the pros and cons of vertical integration (VI) versus outsourcing in the value chain of the information technology (IT) network of Zions Bancorporation. Included will be discussion as to whether the value chain is properly integrated, and will explore the cost inefficiencies in the present state of the corporation's VI. The issues will be addressed by means of a two-column table depicting the characteristics of the vertical relationship and the attendant implications of each particular characteristic, including support for the contentions and inclusion of potential solutions where problems are noted.

Background:

The IT network used to process loan and deposit transactions at Zions Bancorporation is highly outsourced, consisting of over 20 mainframe computer applications, the software for which is purchased or licensed and maintained from a stable of third-party vendors. As well, a number of the loan transaction systems (e.g., leasing, vehicle loans, credit cards, and mortgages) are wholly owned and operated by companies entirely outside the bank's physical control. Many of the IT support functions are also outsourced to independent contractors.

The organizational structure of Zions is also highly fractionated, with eight independently-managed and operated bank charters in ten Western and Southwestern states, each of which maintains its own IT department that processes its own daily transactions, then transmits them to the corporation's Enterprise Data Warehouse (EDW).

By comparison, another commercial bank, J.P. Morgan Chase & Co., maintains a much more vertically-integrated IT network. Chase's president and chief operating

officer, Jamie Dimon, has an apparent aversion to outsourcing, having scrapped a seven-year, \$5 billion services contract with IBM in 2004, stating, that the outsourcing experience "...hadn't worked out," and that the bank needed to "control its own destiny" (McDougall, 2004). In that vein, when Chase purchased Bank One, it acquired a state-of-the-art data center in Wilmington, Del. at a cost of only \$150 million, and also completed a \$500 million initiative to standardize and centralize its IT systems, an effort that's expected to shave \$200 million from its annual operating costs by, among other things, eliminating 600 software applications and reducing 11 loan systems to six. The bank is meticulously planning its transition back to an in-house operation to avoid operational disruptions. For instance, it's documenting all the processes IBM performs on its behalf in areas such as help desk and application support with an eye to replicating the procedures internally (ibid).

Customer service and technology-driven business requirements have also been improved by vertically integrating Chase's IT assets, according to information contained on Morgan's Web site (Morgan, 2005). As examples, during 2003, the bank rolled out a system that converts consumer checks into electronic debits for next-day settlements using high-speed imaging, and the Check 21 initiative that lets banks process checks using graphic images instead of paper. In September 2005, Chase's Treasury Services division announced the launch of a new private-labeled payment integration product, Financial Services Integration (FSI). FSI enables regional banks to integrate their payment systems more effectively with their corporate customers' Enterprise Resource Planning (ERP) systems, resulting in more efficient processing, reduced risk of errors and higher levels of Straight Through Processing (STP). FSI empowers banks to keep up with

their customers' financial integration needs and remain competitive in an increasingly global market.

JPMorgan Chase's vertical integration solutions help them to expand their services while focusing on their core competences and minimizing technology investment. Additional benefits include:

- A seamless interface to a variety of ERP systems
- Security and payment integrity
- Comprehensive Management Information Systems (MIS) reporting
- Integration of the resources that help implement and support the service

Conclusion:

The experience of Chase demonstrates that, from cost, service and security perspectives, there are distinct advantages to vertically integrating the IT functions of a commercial bank (Yannelle, 1997). By contrast, the table below details the characteristics of Zions' more fractionated network of outsourced IT functions, and provides a number of suggestions toward more fully integrating the company's IT resources for the sake of cost savings, as well as to ensure more timely, accurate and secure data transmission.

Characteristics of Zions Bancorporation's Vertical Relationship	Implication(s)
Discussion	
1. How many firms are there in the vertically adjacent activity?	The fewer the number of firms, the greater are the transaction costs and bigger the advantages of VI.
The Zions Bancorporation owns 8 independent banks, and contracts IT services with 20+ different software vendors, and with approximately 50 software designers, architects and development contractors. Much like was done at Chase, Zions would realize both long-term cost savings and service efficiencies by consolidating its IT operations and bringing most, if	

not all, services in-house. Two things are preventing this from happening: The initial costs (estimated to be in excess of \$150 million for new systems, facilities and personnel hires); and, the corporate objective of keeping operations and management local to each bank.	
2. Do transaction-specific investments need to be made by either party?	Transaction-specific investments increase the advantages of VI.
<p>Transaction fees are charged by vendors for several of the data processing arrangements, such as credit card transactions, quarterly updates of customer FICO scores from Experian, processing of new car loans, and sales of mortgage loans. It would not be practical, either from a cost or operations perspective, to vertically integrate such functions into the Zions IT departments, since management and upkeep costs would exceed those of the vendor services.</p> <p>As well, each affiliated bank within the corporate structure is assessed fees on a quarterly basis, based on the number of transactions processed through either the vendor networks, or by the corporation's EDW.</p>	
3. How evenly distributed is information between the vertical stages?	The greater are information asymmetries, the more likely is opportunistic behavior and the greater the advantages of VI.
<p>Central to keeping information uniform and accurate is the Enterprise Data Warehouse, into which is fed the transactional data from each of the affiliate banks, as well as from the outsourced service vendors. The EDW personnel, in conjunction with the Project Management Office (PMO) are responsible for coordinating the IT activities and developmental projects of the corporation and with the vendors. As such, the information asymmetries are not highly consequential, as the EDW serves as a de facto integrator.</p>	
4. Are market transactions in intermediate products subject to taxes or regulations?	Taxes and regulations are a cost of market contracts that can be avoided by VI.
This does not apply.	
5. How uncertain are the circumstances of the transactions over the period of the relationship?	The greater are uncertainties concerning costs, technologies, and demand, the greater the difficulty of writing contracts, and the greater the advantages of VI.
The transaction relationships are very stable, based primarily on long-term contracts, so costs and service levels are predictable.	
6. Are two stages strategically similar (key success factors, resources/capabilities)?	The greater the dissimilarity, the greater the advantages of market contracts as compared with VI.
<p>Nearly all the different IT departments have similar capabilities, and the stages through which the data passes on its journey from initial customer transaction to data processing are fundamentally similar, since they are all driven by the same basic technology. The greatest dissimilarity is in software, where VI would reduce the number of disparate vendors, software versions, contractors and management overhead, thus providing cost-savings.</p>	
7. How great is the need for continual investment in	The greater the need to invest in capability development, the greater the advantages of outsourcing

upgrading and extending capabilities within individual activities?	over VI.
Each of the affiliate banks must continually expend funds and apply resources toward upgrading its IT systems and software, as do the vendors. While no exact figures are available, several of the affiliated controllers have estimated that the added annual overhead for duplicative systems and services may be as high as 6% of the total operating costs of the corporation.	
8. How great is the need for entrepreneurial flexibility and drive in the separate vertical activities?	The greater the need for entrepreneurship and flexibility, the greater the advantages of high-powered incentives provided by market contracts, and the greater the administrative disadvantages of VI.
Each of the independent banks is encouraged to administer its product offerings relative to the market demands within its own geographic area of operations. While vertically integrating the processing of deposit and loan transactions would not deter an affiliate's ability to operate in an entrepreneurial fashion, maintaining independently-operated IT systems creates substantial administrative disadvantages, due to non-conformity of the data elements (fields, tables, schemas) transmitted overnight to the EDW. Mapping of the different elements fed from the individual banks places an enormous cost, time and resource burden on the corporation.	
9. How uncertain is market demand?	The greater the unpredictability of demand, the greater the flexibility of advantages of outsourcing.
As has been seen during recent months, fluctuations in credit availability has had profound effects on all financial institutions. Not only are loan volumes down considerably, but so are deposits. The decrease in data transactions has not lessened the costs of performing IT functions, however, except for those vendor services cited previously that are fee-per-transaction-based. Regardless of transaction volumes, the same system functionality is required, as are the number of personnel needed to operate those systems and develop new software versions. Market fluctuations are not a factor that fundamentally changes the cost of IT operations, so is not a consideration that favors vertical integration.	
10. Does vertical integration compound risk, exposing the entire value chain risks affecting individual stages?	The heavier the investment requirements and the greater the independent risks at each stage, the more risky is VI.
Vertical integration would actually decrease the risks to the most important element in banking, which is the transactional data. The fewer the nodes and systems through which the data must be transmitted, extracted, re-mapped, transformed and provisioned, the more accurate will be the final binary product - which represents the lifeblood of any enterprise: money.	

References:

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