



Where Technology Takes You

ZDNet Make the Case Series:

*IT Business Case Template:
Virtual Private Network (VPN)*

General Introduction

Virtual Private Network (VPN) has attracted the attention of many organizations looking to both expand their networking capabilities and reduce their costs. As companies become more decentralized, they find themselves with employees all over the country and around the world. Increasingly, these workers need the same access to corporate information as those still at headquarters. Enterprises are finding benefits in enabling skilled employees to telecommute. With the increased use of remote access, site-to-site connectivity and extranets, and the interest in extending the enterprise on the upswing, it is clear that VPNs can potentially provide many benefits.

[Include description of selected VPN product(s) or solution(s) here, including features, benefits, etc.]

This business case explores the opportunities and benefits that can be realized in the deployment of VPN product(s) or solution(s), as well as the costs and associated risks involved. However, the template may need customization. Each organization is likely to have unique challenges and opportunities that the business case should address.

I. Need/Opportunity

Radical changes in the business and computing environments have resulted in the need to support:

A. Tangible goals or objectives

- Remote system access by employees working at other branches, home, or on the road
- Linkages with business partners for supply-chain management (business-to-business communication)
- More enterprises have business applications that require sites to share information frequently
- Eliminate long-distance charges for remote or mobile workers

B. Scope

- Impact and benefits from implementing VPN
 - Determine number of mobile workers who will need remote system access
 - Discuss security issues
- Systems affected upon implementation of VPN
 - Determine office branches and telecommuters that will need network access
 - Increase bandwidth allocation
 - Identify risk factors

II. Stakeholders

A. Primary

- Executives who want to reduce cost and have system flexibility and scalability
- Executives and managers who want to increase productivity
- Information technology professionals that supervise the deployment

B. Secondary

- Telecommuters or mobile workers and employees working at other branches or at home who need to have remote system access

III. Alternatives

A. No change

No change may be an option if the size of the company (number of branches) and number of mobile workers are still small or few to deploy a VPN.

a. Cost

While not considering the implementation of VPN, other costs may be incurred, including:

- Lost productivity of telecommuters and other branches of the company
- The demand for connectivity anytime from anywhere for business-to-business communications will be insufficient
- High costs of traditional leased lines and long-distance charges

b. Return on savings

Savings from avoiding costs is weighed against the following:

- Whether or not the VPN deployment will take place, the company still needs wide connectivity for remote workers
- Based on the costs, the potential return on investment for not implementing VPN may be zero or a negative number

c. Risk

- Tangible risks include those mentioned in the cost section
- Performance of telecommuters and remote employees may also become an issue

B. Delay Procurement/Implementation

a. Cost

- Postponing the implementation of VPN will have similar costs as the No Change option
- The growth of company and increase of mobile workers may slow down

b. ROI

- The short-term savings of not implementing VPN are weighed against the costs of waiting and avoiding other costs to determine length of time to break even and see a return on the initial expenses.
 - Analysis of the size of the company and demands for remote workers or telecommuters to determine waiting a shorter or longer period to implement.

c. Risks

- Unproductive business operations across the globe
- Lost communication among telecommuters and remote users to its main office and other branches
- Higher implementation costs in the future

C. Outsourcing

List possible vendors for outsourcing services. Solutions may be layered and come from multiple vendors, or may be a single solution from one vendor. For each vendor, consider:

a. Cost

- Upfront and monthly/annual costs paid directly to the vendor for proposed solutions
- Cost of ongoing maintenance
- Cost related to make existing systems compatible, such as upgrades, replacements and reconfiguration. VPN technologies from different vendors may not work well together due to immature standards
- Cost of additional bandwidth
- Issues with associating cost with operational budget rather than capital budget
- Labor costs incurred during system installation

b. ROI

- Short-term savings of outsourcing over buying

- Weigh the trade off spending operational budget versus capital budget

c. Risk

- Potential weaknesses of each vendor's solution from a security standpoint, and the additional cost that may be incurred
- VPN technologies from different vendors may not work well together due to immature standards

D. Build

a. Cost

- Cost of IT Department to administer the VPN
- Costs cover both employees' salaries time and returns not being realized by other IT projects because resources are diverted. May include the cost of consultants and other IT professionals for VPN
- Cost of additional bandwidth
- Cost of ISP accounts for end-users
- Cost of hardware and software involved in implementing VPN, including tunneling encrypted traffic through the Internet
- Issues with associating costs with capital budget rather than operating budget
- Frequency and cost of upgrades
- Ongoing maintenance costs

b. ROI

The cost of using in-house resources to build and maintain VPN plus initial investments are weighed against the savings found in:

- No Change
- Waiting
- Outsourcing
- Buying

c. Risks

- IT staff size and skill level may not manage or support the new technology
- Competency of the IT department on VPN technology
- Time of implementation may take longer
- Technology obsolescence

E. Buy

Possible vendors if buying an intrusion detection system is considered as an alternative. For each vendor:

a. Cost

- Upfront and monthly/ annual costs paid directly to vendors
- Cost to hire specialized staff to administer the VPN (if needed)
- Cost of current hardware reconfiguration
- Cost of additional bandwidth
- Training cost for staff

b. ROI

- The cost of buying are weighed against the relative savings of:
 - No Change
 - Waiting
 - Outsourcing
 - Building
- Value of amortization

c. Risk

- Weaknesses of vendors' individual systems
- Unforeseen upgrades and maintenance costs will lower ROI

IV. Business values for the alternatives**A. ROI**

Cost/ Savings in terms of:

a. Tangible returns

- Weigh the alternatives to discover which best meets the objectives specified in the alternatives section.

b. Incremental revenue

- The increase of revenue is likely to be seen from each alternative.
- The actual time period for the company to receive the additional revenue stemming from alternatives.

c. Return on capital

- In addition to returns expected from the capital investment, other benefits may be realized as a result of the investment. This will increase productivity thereby yielding more profit for the company.

d. Cost of capital

Short-term costs may include:

- Hardware
- Software
- Additional infrastructure to house new equipment

Long-term costs include

- Depreciation of capital investments
- Cost of maintenance including monthly/annual charges, if any
- Additional infrastructure to house new equipment

B. Customer satisfaction

The criteria for customer satisfaction for the stakeholders include:

- Productivity of remote and mobile workers
- Reduced security risks
- Reduced long-term operational costs
- Accessibility of remote information
- The general feedback of user level employees

C. Resources and roles

- In-house resources involved in each solution, if applicable
- Outsourced resources involved in implementing each solution, if applicable

D. Timetable/Time to market

- The timeline specified in the project implementation to fulfill the solutions in the company

V. Recommendation

Weigh recommendation against the business values of the alternatives based on:

A. ROI

Costs/Savings in terms of:

a. Tangible returns

- Explanation of how the recommended solution meets the objectives specified in section

b. Incremental revenue

- The additional revenue is likely to be seen from each alternative
- The time period in which the organization will see additional revenue from each alternative

c. Return on capital

- In addition to the returns expected from capital investments, other benefits may be realized as a result of the investment

d. Cost of capital

Short-term costs may include:

- Hardware
- Software
- Additional infrastructure to house new equipment

Long-term costs include:

- Depreciation of capital investments
- Cost of maintenance including monthly/annual charges, if any
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B. Customer satisfaction

The criteria for customer satisfaction for the stakeholders include:

- Productivity of remote and mobile workers
- Reduced security risks
- Reduced long-term operational costs
- Accessibility of remote information
- The general feedback of user level employees

C. Resources and roles

- IT Department (in-house) involved in each solution, if applicable
- Outsourced resources involved in each solution, if applicable

D. Timetable/Time to market

- The timeline specified in the project implementation to fulfill the solutions in the company

Glossary

Introductory paragraph

The introduction gives a brief background or overview of the product/service being evaluated.

I. Need/Opportunity

This section explains why the product or service is needed, including productivity and cost issues.

A. Tangible goals or objectives

The purpose or desired end-result. In the business case this section identifies what company needs, problems or issues the proposed product or service can address.

B. Scope

This defines the reach or extent of the topic or idea being discussed. In the business case, this section identifies the potential impact of the proposed product or service on existing systems and staff. Potential benefits and risks associated with project deployment are also identified.

II. Stakeholders

Those individuals who have a share or interest in a particular endeavor or organization. In the business case, this section identifies those individuals and departments within the organization that will be directly and indirectly affected by the product or solution being discussed in the business case.

A. Primary

The stakeholders who directly realize efficiencies, revenues and/or a competitive advantage are considered Primary stakeholders. Those departments or individuals implementing the new systems and services are also Primary stakeholders.

B. Secondary

The Secondary stakeholders are those who depend on, or will be affected by, the actions of the Primary stakeholders.

III. Alternatives

The Alternatives section weighs the various routes to reaching the specified goals and fulfilling the needs of the stakeholders.

A. No Change

This section observes the costs and benefits of not addressing the issue(s) outlined in the Needs/Opportunity section.

1. Cost

The price to be paid or resources to be expended. Measured by identifying and quantifying the price or resource expended (example is time consumed or money spent).

2. Return on Savings

Measure of income the company is able to earn from money not spent or expended. In this particular section, the savings realized by not implementing the product or service is weighed against:

- Whether the issue to be addressed is expected to become a larger or smaller problem
- The length of time it would take to break even or to see a positive return with the No Change alternative.

3. Risks

Expected loss. Risks may include issues detailed in the Cost section as well as intangible risks, such as employee annoyance with current system or morale issues.

B. Delay Procurement/ Implementation

This option explores the costs and benefits of implementing a solution at a future date, rather than as soon as possible.

1. Costs

While there are no direct purchasing costs in the short-term, deferring implementation can potentially create similar issues found in the Cost section for the No Change alternative.

2. ROI

Income earned from company assets. In this section, the short-term savings of not implementing the product or service are weighed against the cost of waiting to determine the break-even point and length of time to see a return on investment.

3. Risks

This section explores the likelihood that serious problems would arise while waiting to implement the new product or service and cost the firm would need to absorb if problems did occur.

C. Outsourcing

Have the work done by an outside service provider or manufacturer usually to cut costs or realize greater efficiencies.

1. Costs

For this section examples would include upfront and monthly/annual costs to be paid to vendors, the cost of making existing systems and/or processes compatible and the cost of the company's implementation time.

2. ROI

To evaluate the ROI for this alternative costs and benefits of the other alternatives must be examined and compared with Outsourcing's costs and benefits.

3. Risk

The potential weaknesses of the service provider/vendor's solution and additional costs that may be incurred because of those weaknesses are examined in this section.

D. Build

Developing the product or service in-house.

1. Costs

The costs in developing include the organization's time to evaluate, design, build and operate the product or service.

2. ROI

The ROI result weighs the cost of using in-house resources to build and maintain the product/service plus the initial capital cost against the savings realized from the other alternatives.

3. Risks

This includes the quantifiable likelihood of loss, the possibility that the project will go unfinished or take extra time because of unforeseen or competing priorities.

E. Buy

To purchase outright and have the company manage the product or service on their own.

1. Cost

The charges in buying a product/service, such as upfront monthly/ annual costs paid to the vendor, the cost of implementation time and others.

2. ROI

The ROI is the cost of buying weighed against the relative savings from other alternatives.

3. Risks

Risks may include the possible losses that may be incurred from the purchased product or service and unforeseen maintenance and upgrade costs.

IV. Business Values for the Alternatives

A. ROI

1. Tangible returns

These are the measurable or quantifiable benefits from each alternative.

2. Incremental revenue

The additional revenue or income that may be earned from each alternative is discussed in this section.

3. Return on Capital

The income that may be earned or savings that may be realized from the investment (in this case the proposed product or service).

4. Cost of Capital

The cost of the funds used to finance the company's investment (such as interest). The goal is to invest in assets that offer a higher return than the cost that may be incurred to finance those assets.

B. Customer Satisfaction

Measure of how the company is able to meet or exceed customer's and/or stakeholders needs and expectations.

C. Resources and Roles

Defines the in-house and/or outsourced resources needed for each alternative.

D. Timetable/Time to market

Based on each alternative, the time line to launch the product or service is planned.

V. Recommendation

A. ROI

This section includes the

- Costs and savings in terms of tangible returns
- Incremental revenue
- Return on Capital
- Short-term costs
- Long-term costs

B. Customer Satisfaction

Criteria to determine customer satisfaction may speak to the needs of Company's internal stakeholders as well as external customers. However, the criteria may be unique to each business case.

C. Resources and Roles

This section designates the in-house and the outsourced resources needed for each alternative, if applicable.

D. Timetable/ Time to market

Based on each alternative, the time line to launch the product or service is outlined.

About ZDNet Make the Case Series

The *Make the Case Series* is a collection of business case tools that covers a broad range of enterprise IT topics. Many of these tools are developed in a vendor-independent fashion. However, for sponsored business cases, IT vendors have the opportunity to present the benefits and advantages of their technology solutions in a specific IT category. For more information about ZDNet's *Make the Case Series*, email us at znetcustomers@cnet.com.