



Where Technology Takes You

ZDNet Make the Case Series:

*IT Business Case Template:
Voice over Internet Protocol (VoIP) Solutions*

General Introduction

Voice over Internet Protocol (VoIP) is one benefit of the convergence between data and telecommunications. Companies today are seeing the value of transporting voice over IP networks to reduce telephone and facsimile costs and to set the stage for advanced multimedia applications and services such as unified messaging, in which voice, fax, and e-mail are all combined.

[Include description of selected VoIP 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 VoIP 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

Key technical and business objectives for VoIP:

A. Tangible goals or objectives

- Lower recurring transmission charges
- Deploy integrated voice-and-data applications
- Reduce operating costs
- Consolidate accounting systems
- Reduce cost of owning two separate networks
- Enable new features, services, and capabilities
- Reduce customer churn
- Reach new customers

B. Scope

- Impact and benefits from deploying VoIP
 - Determine number of employees who send and receive voice and data services
 - Provide expanded set of services with new and higher-value offerings
 - Identify risk factors
- Systems affected upon deployment of VoIP
 - Define project size and market opportunity
 - Manage complexity of technology
 - Increase bandwidth allocation
 - Select proper standards
 - Interoperate with other vendor systems
 - Improve latency

II. Stakeholders

A. Primary

- Executives looking to expand market opportunities
- Managers who want to maintain high level of customer satisfaction and reduce customer churn

B. Secondary

- End-users like employees that communicate with co-workers, business partners, and customers

III. Alternatives

A. No change

No change may be the best option if there is no strong demand for voice and data convergence services.

1. Cost

While the cost for the VoIP service is eschewed, other costs may be incurred:

- Inability to deliver expanded services to customers
- Lost productivity of employees

2. Return on savings

Savings can be derived from the following:

- Based on the costs, the potential return on investment for not implementing VoIP may be zero or a negative number

3. Risk

- Risks include those mentioned in the “cost” section
- Higher cost of phone call charges in the future

B. Delay Procurement/Implementation**1. Cost**

While the cost of VoIP is postponed, other costs may be incurred:

- Costs may be similar to a No Change alternative. However, these costs will decrease once the service is implemented at a latter time

2. ROI

The short-term savings of not implementing VoIP 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.

- Several implementation timelines may be used to show the incremental costs of waiting shorter or longer periods

3. Risks

- Future VoIP services may have higher costs if implemented
- Future VoIP technology may not be compatible with current hardware therefore purchase of hardware will be necessary

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:

1. Costs

- Initial and monthly/ annual costs paid directly to the service provider for proposed solutions
- Cost of ongoing maintenance
- Costs related to make existing hardware or software compatible, such as upgrades, replacements, reconfigurations, and additional telecommunications tools/ facilities
- Labor costs for installing and/or implementing VoIP
- Issues with associating costs with operational budget rather than capital budget
- Cost of additional bandwidth

2. ROI

- Short-term savings of outsourcing over buying
- Short-term savings of not implementing the VoIP service are weighed against the costs of outsourcing to conclude the length of time to break even and to see a return on initial expenses
- Weigh the trade off spending operational budget versus capital budget

3. Risk

- Quality of Service (QoS) may not be reliable
- Less control over the technology
- Interoperability issues with other vendor systems
- Lack of expertise and experience in convergence technologies
- Inability to finish the proposed solution at specified time

D. Build

1. Cost

- Cost of IT Department to evaluate, design and build a VoIP service. Costs cover both employees' salaried times and returns not being recognized by other IT projects because resources are diverted; may also include the cost of consultants and contract programmers.
- Cost of training and education for VoIP technical staff
- Issues with associating costs with capital budget rather than operating budget
- Costs related to make existing hardware or software compatible, such as upgrades, replacements, reconfigurations and additional telecommunications tools/ facilities
- Cost of maintenance
- Cost of additional bandwidth

2. ROI

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

- No Change
- Waiting
- Outsourcing
- Buying

3. Risks

- Lack of expertise and experience in convergence technologies
- Interoperability issues with other vendor systems
- Unforeseen maintenance cost may lower ROI

E. Buy

Possible vendors of VoIP products and solutions:

1. Cost

- Initial and monthly/annual costs paid directly to vendors for proposed solutions
- Costs related to make existing hardware or software compatible, such as upgrades, replacements, reconfigurations and additional telecommunications tools/ facilities
- Cost of additional bandwidth
- Labor cost for implementing the service
- Cost for Technical staff or system administrator
- Time for stakeholders to install or configure new solutions on their desktops

2. ROI

The cost of buying are weighed against the relative savings of:

- No Change
- Waiting
- Outsourcing
- Building

3. Risk

- Inability to deal with system level challenges
- Being pre-maturely “locked-in” to a given vendor’s architecture
- Instability of the VoIP solution
- Quality of Service (QoS) may not be reliable
- Interoperability issues with other vendor systems.
- Structure of corporate technology staff

IV. Business values for the alternatives

A. ROI

Costs/Savings in terms of:

1. Tangible returns

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

2. Incremental revenue

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

3. Return on capital

- Aside from the VoIP returns projected 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

4. Cost of capital

- Short-term costs may include:
 - Hardware (if necessary) and operation systems
 - Training for employees and technical staff
- Long-term costs include
 - Depreciation of capital investments
 - Cost of maintenance including monthly/annual charges, if any

B. Customer satisfaction

The criteria for customer satisfaction for the stakeholders include:

- Overall response of employees within the organization
- Reduced customer churn
- Reduced long-term network ownership costs

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:

1. Tangible returns

- Explanation of how the recommended solution meets the objectives specified in Section I

2. Incremental revenue

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

3. Return on capital

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

4. Cost of capital

- Short-term costs may include:
 - Hardware (if necessary) and operation systems.
 - Training for employees
- Long-term costs include:
 - Maintenance cost
 - Depreciation of capital investment

B. Customer satisfaction

The criteria for customer satisfaction for the stakeholders include:

- Overall response of employees within the organization
- Reduced customer churn
- Reduced long-term network ownership costs

C. Resources and roles

- In-house resources involved in the implementation, if applicable
- Outsourced resources involved in the implementation, if applicable

D. Timetable/Time to market

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

Product Description

[product or system image and specs]

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 zdnetcustomers@cnet.com.