

Service Sales Web-based Training Proposal



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NEC BNS Marketing Department

Table of Contents

OVERVIEW	3
CURRENT ASSESSMENT	4
NEC BNS CURRENT SALES TRAINING METHODS	4
TRAINING MEANS AVAILABLE	4
GOALS	4
SOLUTION	5
PROGRAM	5
PROCESS	5
SYSTEM	5
PROPOSED TRAINING PROGRAM	6
COURSES FOR SERVICE SALES TRAINING	6
CORPORATE-WIDE ADOPTION	6
EPATH LEARNING MANAGEMENT SYSTEM (LMS)	8
LMS STRUCTURE	8
PAGE BUILDING TOOLS	10
USER AND BUILDER MANAGEMENT	10
MANAGEMENT REPORTING	11
WBT COST/BENEFIT ANALYSIS	12
ANNUAL RETURN ON INVESTMENT	12
COURSE DEVELOPMENT COSTS AND RESOURCE REQUIREMENTS	13
INDUSTRY AVERAGE COST COMPARISON	14
REVENUE GENERATING POTENTIAL	14
ALTERNATIVE DEVELOPMENT PROPOSAL	14
EPATH PRICING OPTIONS	16
ASAP SM FIXED	16
PURCHASED LICENSE PRICE	16
ASAP SM PRE-PAID	16
OPTIONAL DEVELOPMENT SERVICE FEES	18

Overview

Need

Develop a superior program for developing, distributing, tracking and measuring training for NEC BNS service offerings to increase company revenue and profit.

Current Assessment

Current means of training and information distribution at NEC BNS are primarily document based, Intranet-delivered collateral and teleconferencing. These methods are voluntary, not as effective as other available methods, and are not tracked and measured as a formal training program.

Available Options

There are many options for training from traditional instructor-led classroom lessons to self-study books. While different topics are best learned via various methods, the overall best solution for NEC BNS leverages technology to disseminate knowledge held by few to the distributed many in a cost effective way.

Solution

- Document a formal service sales certification program mandatory for Account Managers
- Certification is achieved by passing the required number of training courses delivered via web-based training (WBT)
- The training course storage, distribution, and management engine (Learning Management System or LMS) is outsourced
- Service offerings and customer programs are first documented, then polished and published as web-based training courses.
- On-line management reporting tracks usage and test results to administer the sales certification program.

Costs

Since the Learning Management System is outsourced (rented) in an ASP model, the initial expense is minimal. Courses are developed using existing content published by the marketing department. Total annual cost for the program proposed is \$541 per account manager.

Benefits

The benefits include not only an increase in revenue and gross profit dollars through better product knowledge, but also cost savings in both the expense of delivering training and the reduction of sales staff turnover. With a 10% increase in service sales and an accompanying 5% increase in related hardware sales with higher average gross profit margin plus reduction in turnover and training costs, the total benefit to the company is estimated at \$35M incremental revenue and almost \$6M in incremental gross profit dollars.

ROI

The projected return on investment is more than 55 times the cost of implementing and maintaining the program, or 5595%.

Action

Procure usage license for Learning Management System, develop and communicate the service sales certification requirements, publish courses using web-based training.

Current Assessment

NEC BNS Current Sales Training Methods

Current means of training and information distribution at NEC BNS are primarily document based, Intranet-delivered collateral and teleconferencing. These methods are mostly:

- Voluntary
- Non-interactive
- Time dependent (not self-paced)
- Not measurable
- Not trackable
- Not directly reinforced through a formal program

Training Means Available

	ILT	Self Study Paper	CBT	WebEx (Video-Teleconf.)	WBT
Self Paced		✓	✓		✓
Interactive	✓		✓	✓	✓
Independent Repeat		✓	✓		✓
No Travel		✓	✓	✓	✓
Low Distribution Cost		✓		✓	✓
Low Administration				✓	✓
Low Printing Cost				✓	✓
Dynamic Edit Ability					✓
Auto Test, Record, & Report					✓

ILT Instructor-led, classroom training
 CBT Computer based training (CD, diskette)
 WBT Web Based Training

Goals

Develop a superior program for developing, distributing, tracking and measuring training for NEC BNS service offerings to increase company revenue and profit.

Training Goals:

- Adopt formal, required (not voluntary) training program for all Account Managers
- Improve effectiveness of training through interactive, self-paced study
- Reinforce training through testing
- Provide measurable and reportable results
- Decrease costs associated with delivering training
 - Reduce travel, printing, and personnel time and cost
- INCREASE REVENUE AND PROFIT
 - Increase service revenue by 10% and associated hardware revenue 5% through education
 - Increase service and overall gross profit margin percent by 30% selling value-added services (reducing price sensitivity through solution selling)

Solution

Program

Document a formal service sales certification program mandatory for Account Managers. Service sales certification must be obtained within 90 days for all new Account Managers and at least annually at the pace set by the Sales Manager for existing sales personnel. Sales certification is made part of the performance review process, and other recognition can be developed. Certification is achieved by passing the required number of training courses delivered via web-based training (WBT).

WBT courses will be accessed from the current BNSWeb and hyperlink to existing information, tools, and forms (such as Sales Toolkits) and vice versa. The training course storage, distribution, and management engine (Learning Management System or LMS) is outsourced, requiring very little in-house I/T support.

The WBT can also be expanded corporate-wide to leverage the investment in the system and provide the training platform for department-specific knowledge.

Process

Service offerings and customer programs are first documented, then polished and published as a web-based training course. The marketing department will control access to the WBT courses, and approve any additional course development. Teams of distributed individuals can build courses, but publishing rights are centrally controlled to ensure quality.

Learners required to complete the program are pre-registered for courses. The training interface allows learners to progress at their own pace through the program and repeat courses and tests as much as wanted or needed.

The on-line management reporting tracks the progression and test results to administer the sales certification program.

System

Courses are delivered via web-based training (WBT) using the ePath Learning Management System. ePath is a completely browser-based engine for the development, distribution and management of web-based training. ePath can be completely "rented" via the Application Service Provider model whereby NEC BNS controls the content of all training, but does not have responsibility for application system support, hosting, or maintenance.

WBT courses are interactive with imbedded animation, video, audio, and instant feedback interaction to reinforce learning. Management reporting tools provide visibility to the usage of the courses along with automated test results and user (learner) tracking.

Proposed Training Program

Courses for Service Sales Training

NEC BNS University

Service Sales College

Selling Services Curriculum

- Service Offering Overview Course

Assessment and Design Curriculum

- Network Assessments Course
- Security Vulnerability Assessment
- VoIP Readiness Assessment Course
- Wireless LAN Design Course
- Cable Infrastructure Design Course

Integration Service Curriculum

- Network Security Integration Course
- Cisco Call Manager Integration Course
- F-Secure Applications Course
- Data Transport and Telephony Provisioning Course
- Optical Solutions Course

Maintenance and Support Curriculum

- Cisco Maintenance and Support Course
- NEC PBX and Application Maintenance Course

Remote Monitoring and Management Curriculum

- Remote Data Network Monitoring Course
- Managed Security Monitoring Course
- Remote PBX System Monitoring Course

Corporate-wide Adoption

The LMS can be adopted on a company-wide basis with many different colleges (departments) represented. A designated Builder in each department can develop training courses, with publishing rights centrally controlled.

Note: Web-based training should not be used simply to distribute reference material or general information more suitable for other media, but rather only those topics where learner interaction and reinforcement are deemed imperative for understanding and retention. The course content must be suitably organized and presented in an instructional presentation (matching the progression of content with general learning principles). Therefore, a nomination and approval process should be implemented to control the amount and quality of courses available.

The following page shows an example of corporate-wide curricula and sample course catalog.

NEC BNS University

Service Sales College

- Selling Services Curriculum
- Assessment and Design Curriculum
- Integration Service Curriculum
- Maintenance and Support Curriculum
- Remote Monitoring and Management Curriculum

Data Networking Sales College

- Cisco Networking Products Curriculum
- Understanding and Selling Multi-service Network Products

PBX and Voice Applications Sales College

- NEC2400 Family Curriculum
- Unified Messaging Curriculum

HR College

- Employee Benefits Curriculum
 - Understanding Your Medical Benefits Course
 - Interactive Employee Handbook with Quiz
 - Perfecting Sexual Harassment

NEC BNS I/T Systems College

- Using Vantive Curriculum
 - Using Vantive for Sales Course
- Using PeopleSoft Course
 - Using PeopleSoft HR Module Course

Technical College

- Assessment and Design Service Curriculum
 - Delivering Network Assessment Course for Engineers
 - Using Agilent Advisor Course for Engineers
- Network Security Curriculum
 - Implementing F-Secure Course
 - Using Cisco SAFE Architecture Course
 - Integrating Cisco Call Manager Course

ePath Learning Management System (LMS)

A Learning Management System (LMS or AKA Instructional Management System) is the engine for preparing, presenting, and managing on-line training.

ePath Learning ASAP is a web-native, browser-based, e-Learning content engine built in Java and XML residing on Oracle 8i. It has been referred to as the most immediate and easy to use e-Learning development tool available. ePath can be completely hosted - delivered via web from the ePath website, can be completely maintained in-house, or can be "framed-in" the existing NEC BNS Intranet or website.

ePath Learning is a young, minority-owned company headquartered in New London, CT doing business for over two years.

Customers include Metromedia Fiber Network, Philips Lighting, PAC-WEST Telecommunications, LDMI Telecommunications, Edge Connections, Pratt & Whitney, Resource Bridge, Arbor Publishing, SupermarketLearning.com, and Network Specialists to name a few.

Honors: One of only 10 companies nationwide to be chosen as a charter member of Oracle's iHost initiative, June of 2000.

Partners: American Management Association, Exodus Communications, and TvPath.com

LMS Structure

University Organization

The tool is structured with centralized control at the University and College levels, with almost infinite ability for authorized course "Builders" to create additional curricula and courses. Many courses can be developed within one curriculum, for example, Beginning Cisco Sales, Intermediate Cisco Sales, and etc.

University Outline: NEC BNS University

[University Design Details](#) [University Help](#)

Organization Code: NEC4945

Save Outline

- [Service Sales College](#) (college) (details)
- [Maintenance and Support Services](#) (curriculum) (details)
 - [Remote Network Monitoring and Management](#) (course) (details)
 - [Cisco Maintenance and Support Services](#) (course) (details)
 - (new course)
- (new curriculum)
- (new college)

Note: the graphics here show the Builder's view, not the learner interface.

Course Structure

Each course is broken down into topics (see graphic below) with a variety of page types from text only to animated interactive multimedia pages. Quiz questions that can only be answered correctly reinforce the points in each topic. Quiz questions, in turn, combine to form an automatically scored and recorded test at the completion of the course.

Course Outline: Cisco Maintenance and Support Services

[Course Design Details](#)

[Course Outline Help](#)

[Course References Page](#)

[Mark Course for Publishing](#)

[Course Study Group](#)

[Course Glossary](#)

Save Outline

- [Cisco Maintenance](#) (module) (details)
- [Selling Cisco Maintenance and Support](#) (lesson) (details) [\(Add Existing Topics\)](#) (Preview)
 - [Overview](#) (topic) (details) (Preview)
 - **Pages**
 - Add a [New Page](#)
 - [Cisco Maintenance and Support at a Glance](#) (Preview)
 - [Getting the Basics](#) (Preview)
 - [What's in a name?](#) (Preview)
 - **Test Questions**
 - Add a [New Test Question](#)
 - [1 - True or False](#) (Preview)
 - [2 - Multiple Choice](#) (Preview)
 - [Customer Qualification](#) (topic) (details) (Preview)
 - [Service Features](#) (topic) (details) (Preview)
 - [Sales Process](#) (topic) (details) (Preview)
 - [Answering Objections](#) (topic) (details) (Preview)
 - [Pricing and Contract](#) (topic) (details) (Preview)
 - [Sales Support and Resources](#) (topic) (details) (Preview)
 - (new topic)
 - (new lesson)
 - [Add A New Quiz](#)
- [Test - Maintenance and Support](#) (test) (Preview)
- (new module)
- [Add A New Test](#)
























Page Building Tools

A variety of page templates including imbedded graphics, animation, video, and audio make the courses interactive and interesting to learners. Graphics and animation can be used from the on-line library, or custom created and uploaded.

Different page and global appearance templates can be utilized with custom graphics to retain consistency with corporate branding and image.

Add a New Page: Overview

Please select a template for your new page by clicking an icon below.

 Content Only	 Graphic Only	 Animation Only	 Video Only
 Graphic Top, Content Bottom	 Content Left, Graphic Right	 Graphic Left, Content Right	 Content Top, Graphic Bottom
 Animation Top, Content Bottom	 Content Left, Animation Right	 Animation Left, Content Right	 Content Top, Animation Bottom
 Video Top, Content Bottom	 Content Left, Video Right	 Video Left, Content Right	 Content Top, Video Bottom
 Embedded Interaction: Multiple Choice	 Embedded Interaction: Graphic Top, Multiple Choice Bottom	 Embedded Interaction: Multiple Answer	 Embedded Interaction: True/False
 Embedded Interaction: Matching	 Embedded Interaction: Fill in the Blank	 Embedded Interaction: Graphic Touch	

User and Builder Management

Builder rights can be centrally controlled and assigned at the University (global), College, Curriculum, or Course levels, thereby allowing distributed course development and collaboration. Builders mark a course ready for publishing, allowing centralized quality control review.

Learners are registered for each course, with passwords assigned. Learners can be assigned job type (job title) and cost center (branch number) to track usage and distribute costs. Batch files of learners can be imported to avoid duplicate entry for multiple courses.

Management Reporting

All University, course and learner usage is recorded. Among other details, reports can query the following:

- University usage
- Course usage
- Course roster
 - Learners
 - Job Types
 - Average Time Spent
- Test results
 - By course
 - By job type
 - By cost code
 - By individual learner

On-line reporting eliminates manual record keeping, grading tests, and gives quick view to training program effectiveness.

WBT Cost/Benefit Analysis

Annual Return on Investment

This cost/benefit analysis assumes a total of twelve service offering courses delivered to 200 Account Managers. (See ePath Cost Benefit worksheet for details)

Through better training it is a conservative estimate that service sales can increase 10%, and related hardware sales increase 5%. Further, average gross profit margin percent should also increase as customer price sensitivity decreases by selling value-added service solutions (average service gross profit margin increases from 20% to 23%).

Cost/Benefit Analysis of Web Based Training	
<u>Costs</u>	
Course Development	\$ 16,560.00
Course Administration	\$ 6,600.00
Application Hosting	\$ 25,200.00
Learning Cost	\$ 60,000.00
Total Cost Per Account Manger.	\$ 541.80
<u>Benefits</u>	
Increased Revenue	\$35,000,000.00
Increase GPM%	30%
Total Increase GM\$ Per Manger	\$ 29,625.00
Decrease Training Cost Per Acct. Manger	\$ 325.00
Decrease HR Costs	\$ 905.63
Total Cost Reduction Per Manger	\$ 1,230.63
Total Benefit	\$35,246,125.00
Total GM\$ Benefit Per Account Manger	\$ 30,855.63
ROI from On-line Learning	5595%

As shown, the return on investment is more than 50 times the cost of implementing and maintaining the program.

The benefits include not only an increase in revenue and gross profit dollars, but also cost savings in both the expense of delivering training and the reduction of sales staff turnover.

Course Development Costs and Resource Requirements

Course development costs below assume the training content and graphics exist, are polished and published to the vendor's web LMS with only pure production work involved.

(No instructional design required by vendor. Complete storyboards and related documentation provided to vendor in electronic format in acceptable order. Graphics, text, questions provided to vendor in electronic format. No modifications of graphics and minimal design improvements required. Pre and Post-tests provided and one interactivity event per every eight pages. See industry cost comparison for cost of more complex, interactive courses.)

Given the level of WBT training proposed (12 service related courses delivered to 200 Account Managers) no additional headcount would be required. However, development and administration equal to approximately 3 man-months would alter current job responsibilities of the resource(s) assigned.

	Rate	Units	Measure	Total
Costs				
<u>Course Development</u>				
Creating/Editing Content	\$ 40.00	12	Hours	\$ 480.00
Creating Test	\$ 40.00	8	Hours	\$ 320.00
Graphics and Layout	\$ 50.00	6	Hours	\$ 300.00
Entering Users	\$ 20.00	2	Hours	\$ 40.00
Content Maintenance	\$ 40.00	6	Hours	\$ 240.00
Subtotal				\$ 1,380.00
Number of Courses				12
Total Course Development				\$ 16,560.00
<u>Program Administration</u>				
Communication / Promotion	\$ 40.00	1.5	Hours	\$ 60.00
Database Maintenance	\$ 40.00	2	Hours	\$ 80.00
Mailing Recognition	\$ 1.00	170	AM's	\$ 170.00
Report Distribution	\$ 20.00	12	Hours	\$ 240.00
Subtotal				\$ 550.00
Number of Courses				12
Total Program Administration				\$ 6,600.00
<u>Application Hosting</u>	\$2,100.00	12	Months	\$ 25,200.00
<u>Opportunity Cost of Time</u>				
Learner Training Time	\$ 50.00	0.5	Hours	\$ 25.00
Number of Learners				200
Number of Courses				12
				\$ 60,000.00
Total				\$108,360.00
# Account Managers				200
Total Cost Per AM Per Year				\$ 541.80
Total Cost per Course				\$ 9,030.00
Man Hours P/ Course Developed				49.5

Industry Average Cost Comparison

Instructional Design Work Required	Content and Graphics Development Required			
	Polish and Publish	Converted Interface	Standard Interface	Custom Interface
Pure Production	\$12,000	\$15,000	\$19,000	\$24,000
Storyboarding	15,000	19,000	24,000	32,000
Basic Instructional Design	19,000	24,000	32,000	36,000
Comprehensive Instructional Design	24,000	32,000	36,000	40,000

* Above information provided by CeleX. Figures are approximate for industry. Prices will vary by vendor. Above prices reflect those of CeleX as of December of 2000.

Estimated development and administration cost per course of \$9,030 is below the average shown above for the lowest level of WBT interactive content and customization.

Revenue Generating Potential

Beyond the opportunity to implement a more effective training medium for sales and possibly the entire company, the **WBT capability can be leveraged to NEC BNS end-customers to generate revenue.** Examples of delivering WBT to NEC BNS customers include:

- Technical administrator training of NEC products
- End-user telephone and voice-mail system usage (NEC PBX and terminals/key systems)
- IP Phone, video and conferencing use for Voice over Network solutions
- HIPAA security issues and personally identifiable information handling
- Network security and anti-virus/e-mail usage practices
- Using Cisco IP telephone features and unified messaging

To implement outside usage of the WBT application, web access to the courses must be established, as would an additional, secure and restricted access to the management reporting and administrative functions of the back office interface. All of these functions are available with the ePath LMS either hosted with the ASP model or purchased and administered in-house.

Pricing for end-customer usage of the application would be on a usage basis with discount schedule and minimal billing amount, plus a set up fee for populating end-user names and password administration. To effectively leverage the WBT application for end-customer revenue opportunities, NEC BNS would need much more control over the system and flexibility to administer it. This would point towards the purchase and in-house hosting and administration of the LMS.

Alternative Development Proposal

Alternatively, the application and database could be developed internally and reside in-house.

NEC CNAD (Corporate Network Administration Division) has submitted a proposal for the development and hosting of a system functionally equivalent to that of the ePath LMS. The application would be built in a two-phase process. First is the development of the back-end database tracking and reporting engine with security and administrative functionality while CNAD converts course curriculum to a web-delivered, interactive format. In the second phase the course development interface would be built allowing distributed author rights.

The advantages include more control and customization, with possible integration to NEC BNS enterprise applications such as the PeopleSoft HR system. Disadvantages include the up front cost and time to launch.

A similar proposal has been submitted from AIVIA, the firm currently engaged by NEC BNS for web maintenance and planning. Given AIVIA's position on the "inside" even while engaged in an outsourcing role, AIVIA could facilitate systems integration during development of the LMS. If the back-office functionality of the web based training engine was tied to existing NEC BNS systems such as network password administration, HR reporting and job titles, etc., then:

- Much of the administrative work involved in internal training would be reduced through elimination of redundant input such as user names and passwords
- Training courses could be better targeted and curriculums established by existing job titles
- Training program becomes more visible and established into regular business practices through HR department oversight and reporting

Given the desire to extend the web based training solution to a revenue generating service offering, the following solution would be ideal:

- Rent the LMS application from E-Path on a short-term basis (six months) while development of the custom application is under way.
- Convert existing training content to web delivery for the most important and time sensitive service offerings to meet revenue and penetration goals
- Tie customer web based training to the Customer Connection portal page
- Evaluate existing NEC BNS enterprise applications to achieve integration between systems to reduce redundancy and increase visibility

The pricing and ROI calculations in the previous section assume the proposed solution is used only for internal training.

Extending web-based training to end-user customers would follow a business case analysis of potential revenue and costs. The initial thought being to cover all costs of developing (or purchasing) the LMS and the staff to administer the system, thereby increasing customer satisfaction and reducing costs all the while realizing the original goal of effective internal training.

ePath Pricing Options

There are three purchase options for the ePath LMS: ASP (rent), purchase license and host in-house, and ASP Pre-paid (rent to own after 24 months).

ASAPSM Fixed

Number Of Learner Accounts During Term	Monthly Account Fee
1-100	\$ 1,000
101 - 500	\$ 2,100
501 - 1,000	\$ 3,150
1,001 - 3,000	\$ 5,600
3,001 - 6,000	\$ 8,400
6,001 - 9,000	\$ 11,200
9,001 - 12,000	\$ 14,000
12,001 - 15,000	\$ 16,800
15,000 +	Call

The fees above include all database storage charges. Term period is one year.

Purchased License Price

Number Of Student Accounts	Price
1 - 1,000	\$ 45,000
1,001 - 3,000	\$ 80,000
3,001 - 6,000	\$ 120,000
6,001 - 9,000	\$ 160,000
9,001 - 12,000	\$ 200,000
12,001 - 15,000	\$ 240,000
15,000 +	Call
Annual Maintenance Contract (provides free upgrades of major releases and technical support)	20% of Purchase Price per year

ASAPSM PRE-PAID

Number Of Learner Accounts	Pre-Paid ASAP Fee	Monthly Hosting Fee
1 - 1,000	\$ 40,500	\$ 1,000
1,001 - 3,000	\$ 72,000	\$ 1,600
3,001 - 6,000	\$ 108,000	\$ 2,400
6,001 - 9,000	\$ 144,000	\$ 3,200
9,001 - 12,000	\$ 180,000	\$ 4,000
12,001 - 15,000	\$ 216,000	\$ 4,800
15,000 +	Call	Call

The above charges include database storage.

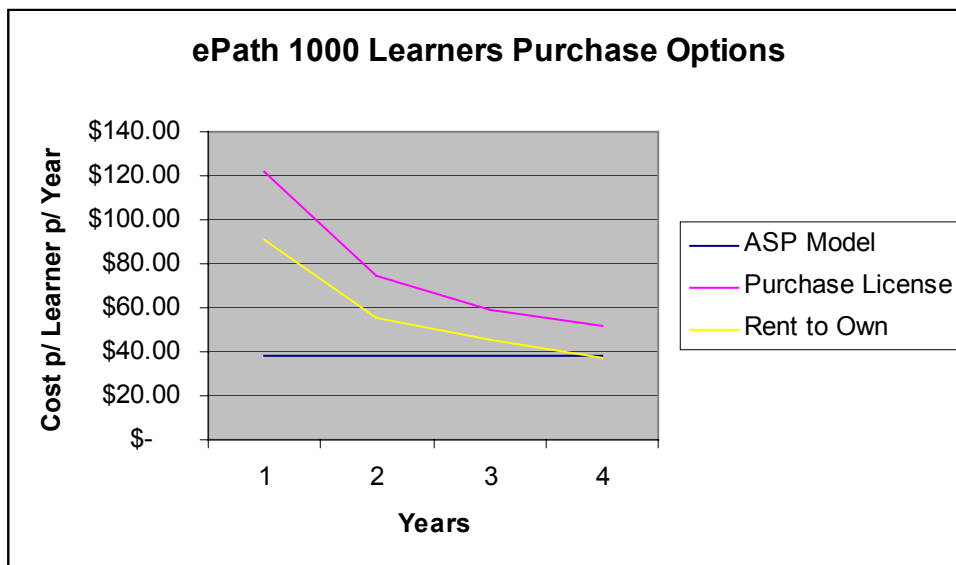
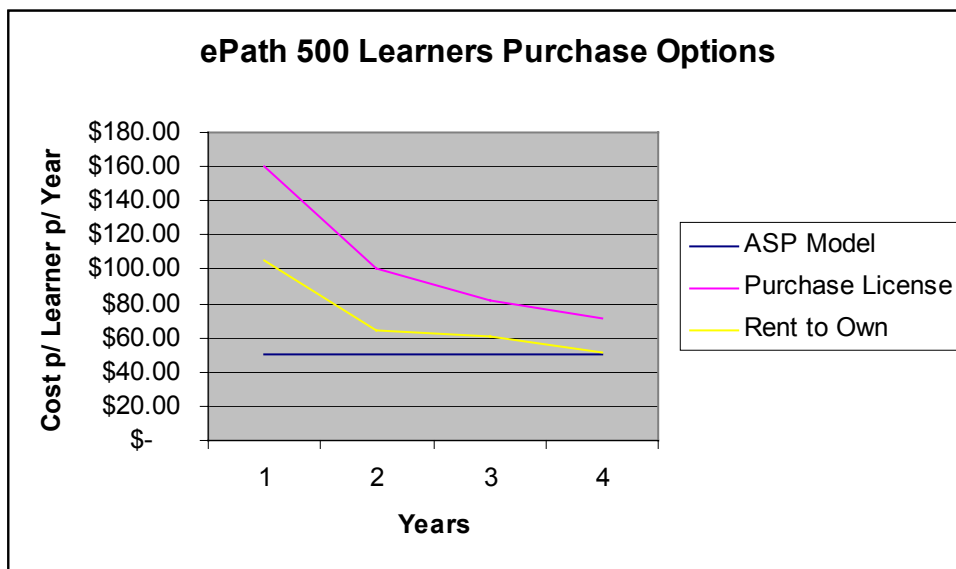
Options at the end of the Pre-paid agreement

After a period of 24 months, NEC BNS may either elect to purchase a learner-equivalent U-SERVETM license for \$1.00 or enter into a new hosting agreement with ePath Learning.

The charts below show the cost-effectiveness of the three different purchase options over a four year period at quantity discounts at 500 and 1000 learners. Hardware, maintenance and administration are included for both purchase license and rent to own options.

The ASP Pre-paid option (rent to own) is recommended due to:

- Same total cost of ownership over four years as completely outsourced ASP option
- Modest initial capital outlay (\$40,500)
- Application maintenance and support available from vendor during third and fourth years
- Increases control over application delivery
- Requires no I/T support to start (other than placing links on Intranet)
- Protects investment in system by reducing impact of vendor instability



Optional Development Service Fees

ePath Learning PRO-SERVICES provides solutions and resources ranging from complete course development and consultation on instructional e-Learning design to graphic art design and course conversion services.

	HOURLY RATES
e-Learning Development Services	
Instructional Systems Design (8 hr. Min)	\$100 per hour
Graphic Design & Development	\$70 per hour
WBT Course Production	\$60 per hour
Database/Web Programming Support	
Software Engineer	\$160 per hour
Web Programmer	\$100 per hour
Fixed Price Project Work is also accepted	Call

Development services usually equal \$20,000 per hour of learner instruction. At the assumed \$9,030 per half hour course developed in-house and given the course quality level of pure production with only polish and publish work required, outsourcing course development in lieu of internal resources could be justified. However, the initial content and graphics must still be developed with sound sales and marketing principles applied to achieve effective learning.

Customer Website to ASAP Integration Instructions

DESCRIPTION	PRICE
This document provides detailed instructions for integrating a customer's existing website to ePath Learning ASAP. The instructions enable learners to self-register within the existing BNSWeb to preserve consistency and transparency and then automatically redirect to the hosted courses. HTML code is included. The document is delivered as a Microsoft Word file via e-mail.	\$500.00