

## Introduction

Anytime you can get a return on investment of 8 to 1 or more, it's a grand slam. Yet, that's exactly what you get by replacing your existing OSS with Envision. The proof is clear; if you compare worst-case costs with a few Envision benefits, the immediate effect on operating expenses, profit leakage, management control and retained earnings is a very solid 8:1 ROI and an impressive increase in carrier market value. Here are the facts:

Acquisition Costs	Calculate By	50K Subs.	Actual
1a. Envision Software	Actual Cost / 60	\$ 25,084.00	\$
1b. Data Conversion	Actual Cost / 60	\$ 1,670.00	\$
1c. Training & Setup	Actual Cost / 60	\$ 1,670.00	\$
1d. Other Labor	Actual Cost / 60	\$ 500.00	\$
1e. Annual Support	Software Cost x .05 / 12	\$ 8,334.00	\$
1f. Finance Costs	Actual Cost / 60	\$ 0.00	\$
1g. New Hardware	Actual Cost / 60	\$ 1,000.00	\$
1h. Other Software	Actual Cost / 60	\$ 334.00	\$
1i. Migration Labor	Actual Cost / 60	\$ 945.00	\$
1j. Operational Staffing	Actual Monthly Cost	\$ 10,000.00	\$
1k. Miscellaneous	Actual Cost / 60	\$ 334.00	\$
<b>Monthly Cost Totals</b>		<b>\$ 49,871.00</b>	<b>\$</b>

Envision Benefit		ROI = 8.6:1	
2a. Customer Acquisition	Monthly Revenue x 0.05	\$ 125,000.00	\$
2b. Subscriber Retention	Monthly Revenue x 0.01	\$ 25,000.00	\$
2c. Time to Market	Monthly Revenue x 0.002	\$ 5,000.00	\$
2d. Bad Debt	Monthly Revenue x 0.005	\$ 12,500.00	\$
2e. Reduced Staffing	CRM & Collections x 0.2	\$ 26,000.00	\$
	Other Staff x .02	\$ 5,000.00	\$
2f. Effective Advertising	Monthly Revenue x 0.015	\$ 37,500.00	\$
2g. Enhancements	Monthly Revenue x 0.002	\$ 5,000.00	\$
2h. Reporting	Monthly Revenue x 0.001	\$ 2,500.00	\$
2i. Roamer Revenue	Monthly Roaming x 0.15	\$ 112,500.00	\$
2j. Profit Leakage	Monthly Revenue x 0.03	\$ 75,000.00	\$
<b>Monthly Benefit Totals</b>		<b>\$ 430,000.00</b>	<b>\$</b>
<b>Net Cost</b>		<b>- 49,871.00</b>	<b>-</b>
<b>Net Monthly Benefit</b>		<b>\$ 380,129.00</b>	<b>\$</b>
<b>Net Annual Benefit</b>		<b>\$ 4,561,548.00</b>	<b>\$</b>
<b>Increased Market Value</b>		<b>\$ 31,930,836.00</b>	<b>\$</b>

The above amounts are based upon a typical cellular carrier with a \$50 ARPU. Please see pages 2 - 7 for additional details and page 8 for ROI estimates at other subscriber counts.

## Basis

Envision pricing is based upon the inclusion of all modules and options with typical discounts. Staffing costs are averaged at \$40,000 per employee year (including benefits). Churn is calculated at 4% and bad debt is calculated at 2%. CRM staffing is calculated at 1 seat per 1,500 subscribers. Collections staffing is calculated at 1 seat per 10,000 subscribers. Other staffing is calculated at 1.5 seats per 1,000 subscribers. Roaming revenue is calculated at 30% of non-roaming revenue. New hardware is estimated at each subscriber level. New software is estimated at each subscriber level. Market value is based upon the amount of earnings before interest, taxes, depreciation and amortization (EBITDA) that all of this generates multiplied by 7 (typically used to evaluate carrier market value). These amounts are also used in the calculation of other subscriber count returns on investment listed on page 8. All amounts are USD.

**Please Note:** The Actual column on page 1 allows you to enter estimates based upon your actual revenue and costs, etc. This is the best way to see the true benefits.

## Acquisition Costs

While the price of any OSS is the amount quoted by the salesperson, its true acquisition cost is the sum of that price plus all unforeseen other costs (if any), less all tangible and intangible benefits received once it becomes operational. Because the most common reason for purchasing new OSS is to reduce expenses and increase profits, cost is a far better gauge of value than price. In fact, ideally, cost is a very large negative amount. This means that the resulting profit and other benefits substantially outweigh the price. When this happens, the purchase decision quickly pays for itself.

The following lists various factors upon which the true cost of OSS is usually based. These amounts are divided by 60 to allow a 5-year / 60-month amortization period. After this period Envision costs are typically reduced to just those of associated staffing and support. Yet, the benefits it provides continue to grow forever.

### 1a. Envision Software

This is the total quoted price of all Envision modules (OPTIMA, PASSPORT and/or PROTOCOL) and options such as Mediation, CIBER / TAP, Charging Gateway, etc., as well as any extra-cost subscriber count and location-based licenses, etc. Deduct all discounts from this total and divide the net amount by 60.

### 1b. Data Conversion

This is the quoted price of data conversion divided by 60. This pricing is based upon similar installations and data structures. The actual cost of data conversion is determined by the actual time required and may vary. Several factors that affect this time are included in a separate document titled "ARIS Migration Steps". If additional hours are required, this amount will increase by the per hour rate included in the quote. If fewer hours are required, the excess may be used for any other purpose (additional training, customization reports, etc.).

### **1c. Training & Setup**

This is the total quoted price for training and setup assistance divided by 60. This pricing is based upon the average times required in similar installations. Actual cost is determined by customer scheduling, the extent of pre-launch configuration, the detail of training requested, etc. If additional hours are required, this amount will increase by the per hour rate included in the quote. If fewer hours are required, the excess may be used for any other purpose.

### **1d. Other Labor**

This is the total price of labor (if any) that is not included in the amounts above divided by 60. Such labor will typically be listed as one or more line items in the price quotation or in a separate written quote. This usually consists of special requirements that must be met as a result of the sales or GAP analysis processes, data conversion meetings, custom invoice and report layouts, etc. In some cases, an offsetting discount may also be listed. This discount (if any) should be deducted from the total "Other Labor" price prior to calculating the monthly cost. Unless enhancements are quoted at a fixed price, additional hours (if any) will increase this amount by the per hour rate included in the quote. If fewer billable hours are required, the excess may be used for any other purpose or may be deducted from the purchase price.

### **1e. Annual Support**

One year of support is typically included in the quoted price. While the cost for additional support periods is published at 12% per year, various factors typically reduce this amount. So, it is best to contact ARIS for a quote. However, for the purpose of making a reasonable comparison, let's assume that on-going support will cost 5% of the non-discounted software price per year. This amount should be divided by 12 to calculate a monthly cost.

### **1f. Finance**

This amount represents the total acquisition finance charges (if any) when Envision and related hardware, etc. is financed. Finance charges (if any) should be divided by 60, and should not include principle amounts. In addition, the price quote may include a "Net Terms Discount". If Envision is financed, this discount may be lost and should be considered in the total price. If Envision is leased, a security deposit may be required. Final ownership may include forfeiture of this deposit and should be considered in the total price.

### **1g. New Hardware**

In many cases existing hardware is adequate to run Envision. This amount represents the total cost of all new hardware that is required. Typical requirements can be determined by requesting a document titled "Hardware Requirements" from your ARIS sales representative. In general, an entirely new system for 20 local users and 80 remote users (excluding workstations and network) will typically require (2) 4+ processor database servers (allowing for 100% backup), (1) small reporting server and (4) 2-processor WTS servers. While the cost of this equipment can vary widely, it will typically be between \$50K and \$80K (USD). Systems above 100,000 subscribers should also consider the cost of a SAN. This will add approximately \$150K. The total hardware cost amount should be divided by 60.

### **1h. Other New Software**

Envision requires several third-party software products, such as SQL Server, Windows, Adobe Central Pro (\$15,000), etc. Additional software, such as PC Charge (\$1,200), Crystal Reports (\$1,100), CCH Tax Tables, etc. may be desirable. Some required software is priced on a by-seat basis. Tax tables are typically priced by area of coverage. The total other software amount should include all licenses that must be newly purchased to operate Envision, divided by 60. This amount should not include existing software, such as MS Word, etc.

**1i. Migration Labor**

The process of migrating to Envision from an existing OSS application (if any) typically requires a degree of effort on the part of the purchaser's staff. While the cost of this effort is difficult to quantify, a reasonable guess would be 90 days of full time involvement by one individual per 50,000 subscribers and 5 - 10 days of effort by one person each in MIS, administration, accounting, inventory, marketing, billing and customer care. In most cases, a dedicated project manager should also be assigned to the conversion process for the 6 months or so necessary to reach launch plus the next 3 months that follow. The total labor amount should include all costs necessary to provide migration staffing, divided by 60.

**1j. Operational Staffing**

We are continually working on ways to reduce the staffing required to operate Envision. Furthermore, once setup is completed, Envision's daily operation requires very little on-going maintenance. Occasional rate plan and other table changes, password maintenance and billing-related process require the full time effort of approximately one staff member per 50,000 subscribers. In addition, all databases require routine maintenance. These procedures typically require several hours per week. This includes the re-indexing of certain files and the purging of old data that is no longer required (i.e.: raw usage). While this maintenance does not necessarily require the skills of a database administrator (DBA), it does require someone with appropriate computer skills. Alternately, this work can be performed by ARIS personnel as part of a maintenance agreement. The cost of this agreement is approximately \$2,000 per month. If staff must be hired to operate Envision and / or ARIS maintenance will be used, the associated monthly costs should be included in this category.

**1k. Miscellaneous Costs**

This amount should include all additional costs (if any) not listed in 1a – 1i above, and should be broken down into a monthly amount over five years. Some examples are marketing costs to announce the new system to existing subscribers and losses in productivity due to staff re-deployment throughout the conversion process.

## A Note About Costs

The costs listed above provide a very good ballpark representation of the typical amounts encountered when acquiring any new OSS product, regardless of whether through an outright purchase, a service bureau or an application service provider (ASP). Furthermore, additional requirements, promotional offers, the existence of adequate hardware, software and staffing etc. could increase or reduce the total cost amount.

The importance of comparing cost to benefits is almost identical to the importance of comparing an amount invested to the expected amount returned and the risk involved. For example, let's assume that the size of your business requires three staff members to be assigned to Envision's operation at an annual cost of \$40K each. This is not an increased cost of operation if (a) this staff already exists, (b) it can be re-deployed from reductions caused by Envision elsewhere and / or (c) staffing cost reductions elsewhere and other operational benefits more than offset this amount.

## A Few Unique Envision Benefits

It's easy to expect that any new software will provide benefits over older software and, in a perfect world this might always be true. However, in the OSS world, new software does not always mean new thinking and new benefits. In fact, most OSS is stagnant when compared to over 2,500 new enhancements that Envision provides users every year. More importantly, new features are always focused on subscriber acquisition and retention, improving collections, reducing staffing dependencies and automating processes to reduce costs and increase profits. This has resulted in thousands of unmatched features and benefits that are immediately evident. While the following lists just a few, by themselves, they quickly reduce Envision's quoted price to a cost of zero and less.

### 2a. Customer Acquisition

Envision includes a comprehensive list of features that are specifically designed to attract and capture new customers. These include lead tracking, quote generation, task management, telemarketing and telemarketing commissions, automated follow-ups and lead escalations, promotions management, number portability and exceptional discount, free use and bundling capabilities that are essential in any highly competitive market. In addition, Envision's multi-lingual, prompt-pay discount and personal directory capabilities allow users to cater to minority and fixed income prospects that might otherwise be missed. While much of this could be accomplished with extra-cost third-party software, the inherent lack of integration with other OSS processes would result in increased cost and reduced benefit. Furthermore, while the success of these included features is largely dependent upon their implementation, a 4% - 6% aggregate increase in income per month should be reasonably achieved. To conservatively measure this benefit in dollars, multiply your average monthly revenues by 5%.

### 2b. Subscriber Retention

Subscriber retention is every bit as important to growth as is customer acquisition. So, Envision provides exceptional CRM, trouble ticketing and correspondence facilities. It also includes automated churn scoring, rate plan comparisons, contract expiration notifications and follow-up escalations, as well as multi-lingual support, loyalty bonuses, talk groups, communities of interest, friends and family calling, volume and unit discounts, extensive bundling options, comprehensive self-help, EBPP and other unique and high demand offerings that cannot be matched elsewhere. Furthermore, because Envision includes more promotional options than any other OSS, and it is entirely table-driven, it can be instantly user-configured to match any competitive offer. The result is significantly improved subscriber retention. While these benefits are largely dependent upon implementation, a 20% - 40% reduction in monthly churn should be reasonably achieved. To conservatively measure this benefit in dollars, a 33% savings on 3% churn is assumed. Multiply revenue by 1%

### 2c. Faster Time to Market

Envision provides more ways of creating new revenue than any other product, and its out-of-the-box convergent design allows users to seamlessly add new services (CATV, IPTV, CLEC, VoIP, cellular, ISP, etc.) to existing offerings and quickly configure service bundles, cross service discounts, etc. Furthermore, only one of its 1,700+ user interface screens is service-specific. This means that if a carrier adds IPTV as a new service offering, the time required to train existing users is almost insignificant. When combined with Envision's intuitive table-driven design and its test rating and billing capability, it reduces the time-to-market like no other product. While the staying ahead of the competition and achieving rapid rollouts may be hard to appraise, we suggest using 0.2% (1/500<sup>th</sup>) of monthly revenue.

## 2d. Reduced Receivables Aging and Bad Debt

Envision provides automatic credit controls that include prepay, stop-limit, credit card and bank debit terms management and past due treatment processes that are fully integrated with payment commitments and payment receipts and can automatically send SMSs, e-mails and notices with relevant data inserts (available credit, past due days and balance, etc.), as well as escalate collection activities and change the service levels of accounts at certain available and past due amount tiers. This means significantly reduce bad debt exposure and the recovery of past-due amounts that would otherwise be lost. While results are highly dependent on configuration, modeling and the proper assignment of account controls, a 30% improvement in timely collections and a 30% reduction in write-offs are reasonable expectations. To conservatively calculate the monthly value of these controls, a 25% savings on 2% bad debt and write-offs is assumed. So, multiply monthly revenue by 0.5%

## 2e. Process Automation & Reduced Staffing Dependencies

Envision automates hundreds of processes that would otherwise rely on significant manual effort to complete. Some examples are credit and treatment controls, churn scoring, commission calculations and charge-backs, nearly 150 follow-up escalation categories (payment commitments, trouble tickets, sales leads, etc.) and more than 50 task scheduler processes (ACH & roamer settlement, churn scoring, database maintenance, etc.). Needless to say, this can significantly reduce staffing dependencies while improving consistency, accuracy and reliability. In fact, Envision typically requires 30% less staffing in collections and customer care while actually increasing quality. It also reduces other staffing dependencies by at least 3%. However, to be conservative, we suggest using the total monthly cost savings (wages, benefits, taxes, etc.) equal to 20% of customer care and collections personnel costs and 2% of all other personnel costs.

## 2f. Increased Advertising Effectiveness / Lower Cost

Envision takes the blah, blah, blah out of advertising with a long list of unique and exciting offerings that can give ads real substance. These include multilingual & split billing, talk groups, friends & family, communities of interest; prompt-pay, loyalty and referral awards, personal directory, parental controls, dynamic bundling, self-help and hundreds of other competitive edges that significantly increase the effectiveness of every advertising dollar spent. This not only results in increased business and helps to reduce churn by showing existing customers features that are not available elsewhere, it also reduces the amount and cost of advertising necessary to grab the Lyon's share of available prospects. While the percentage of revenue that any carrier currently spends on advertising is based upon competition, budget desired market penetration, etc, we will assume 5%. We expect Envision to increase effectiveness and reduce cost by 30% of that amount. So, multiply revenue x 1.5%

## 2g. Reduced Third-Party Software and Enhancement Costs

Envision development has always been driven by input from its diverse user community and in response to regulatory requirements and industry trends. This typically accounts for about 2,500 new features and enhancements each year. In addition, it has been designed to eliminate most extra-cost software modules and integration difficulties that are typical with other OSS products. These include a charging gateway (typically \$250K), mediation and switch control software (typically \$100K) and churn scoring software (typically \$150K), as well as software for trouble ticketing, purchasing and inventory, POS, credit scoring, prepay and metered billing, commissioning, number management, credit card processing and more. The value of these included modules will be self-evident when the Other Software Cost component of this analysis is completed. In addition, Envision includes hundreds of business essential features that would be extra-cost enhancements in other products. While any savings on enhancement costs is only a guess, we suggest 0.2% (1/500<sup>th</sup>) of monthly revenue.

## 2h. Improved Reporting and Documentation

Lack of reporting capability and poor documentation are common OSS complaints. Needless to say, these should be of primary consideration in the selection process. Envision offers over 120 report titles with up to 1040 filtration criteria each that cover all aspects of business. It also includes a powerful dashboard that lists 99 key operational parameters (new activations, open receivables, web activity, etc.) by day and by location. These can be sliced and diced however users wish. In addition, Envision provides an excellent data dictionary and Crystal Reports interface that allow users to easily create and add custom reports directly to its reports menu. Furthermore, Envision includes over 3,500 pages of often step-by-step documentation with over 1,500 screen examples. What is accurate reporting and documentation with instant answers to most questions worth? We suggest 0.1% (1/1000<sup>th</sup>) of monthly revenue.

## 2i. Increased Roamer Revenue

Envision helps wireless carriers maximize roamer revenues by managing TADIG and IREG testing, by producing accurate and timely outcollects to reduce stale-dated record exchanges and loss of fraud protection, and by giving users extremely versatile roamer record rating, free usage, bundling and billing options that can quickly generate new forms of revenue from existing subscribers. This significantly reduces time-to-market when adding new roaming partners and provides substantial revenue that would not be possible with other OSS. Needless to say, the benefit of these capabilities depends on a given user's ratio of roaming to non-roaming subscribers. However, we believe that a 15% increase is reasonable to expect. So, multiply your existing monthly roaming revenue by 15% to calculate the value.

## 2j. Reduced Profit Leakage

Profit leakage takes many forms, from inventory shrinkage, employee and subscription fraud and ordinary mistakes, to inaccurate and incomplete rating and billing. Envision was specifically designed with integrated systems that reduce shrinkage and fraud and guarantee the highest possible accuracy in rating and billing, including self-auditing and reporting processes. As a result, it can sharply reduce profit leakage in each of these areas. While the sum financial benefit may mean something different to every user, we recommend 3% of monthly revenue.

## A Note About Benefits

Software benefits are never automatically guaranteed. Instead, they rely upon proper configuration, implementation and use of associated features. However, since 1984, ARIS has installed its billing, CRM and POS software for over 200 customers in more than 60 countries. From this experience, we have evolved refined conversion and installation plans that focus on both matching the customer's existing operational and competitive requirements and maximizing the implementation of as many of Envision's additional money-making features as possible as part of the initial launch and months that immediately follow. This insures that customers realize immediate new benefits and an accelerated return on investment. After all, immediate improvement is the whole point of choosing new operational support software.

While all OSS vendors claim that their products are the best choice, etc., if you have seen an Envision presentation, and have compared it others, the difference is unmistakably clear. It's also why we have never lost a single customer to the competition.

## Additional Subscriber Counts

The following provides an overview of cost vs. benefits based upon the metrics described on pages 2 - 7 and assumptions about existing staffing, conversion issues, testing and training at 25,000 through 1,000,000 subscribers:

Acquisition Costs	25K Subs.	100K Subs.	250K Subs.	1M Subs.
1a. Envision Software	\$ 20,000.00	\$ 32,667.00	\$ 50,167.00	\$ 83,334.00
1b. Data Conversion	\$ 1,670.00	\$ 2,084.00	\$ 3,334.00	\$ 5,000.00
1c. Training & Setup	\$ 1,670.00	\$ 2,084.00	\$ 3,334.00	\$ 5,000.00
1d. Other Labor	\$ 500.00	\$ 750.00	\$ 1,000.00	\$ 2,000.00
1e. Monthly Support	\$ 6,875.00	\$ 11,667.00	\$ 17,917.00	\$ 25,000.00
1f. Finance Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
1g. New Hardware	\$ 667.00	\$ 2,500.00	\$ 4,167.00	\$ 9,000.00
1h. Other Software	\$ 250.00	\$ 667.00	\$ 1,000.00	\$ 4,000.00
1i. Migration Labor	\$ 945.00	\$ 1,278.00	\$ 1,778.00	\$ 3,000.00
1j. Operational Staff	\$ 6,670.00	\$ 10,000.00	\$ 16,667.00	\$ 48,000.00
1k. Miscellaneous	\$ 334.00	\$ 334.00	\$ 334.00	\$ 700.00
<b>Monthly Cost Totals</b>	<b>\$ 39,247.00</b>	<b>\$ 64,031.00</b>	<b>\$ 99,698.00</b>	<b>\$ 185,034.00</b>

Envision Benefit	ROI = 5.5:1	ROI = 13:1	ROI = 22:1	ROI = 48:1
2a. Customer Acquisition	\$ 62,500.00	\$ 250,000.00	\$ 625,000.00	\$ 2,500,000.00
2b. Subscriber Retention	\$ 12,500.00	\$ 50,000.00	\$ 125,000.00	\$ 500,000.00
2c. Time to Market	\$ 2,500.00	\$ 10,000.00	\$ 25,000.00	\$ 100,000.00
2d. Bad Debt	\$ 6,250.00	\$ 25,000.00	\$ 62,500.00	\$ 250,000.00
2e. Reduced Staffing	\$ 13,000.00	\$ 50,000.00	\$ 240,000.00	\$ 960,000.00
	\$ 2,500.00	\$ 10,000.00	\$ 15,000.00	\$ 60,000.00
2f. Effective Advertising	\$ 18,750.00	\$ 75,000.00	\$ 187,500.00	\$ 750,000.00
2g. Enhancements	\$ 2,500.00	\$ 10,000.00	\$ 25,000.00	\$ 100,000.00
2h. Reporting, etc.	\$ 1,250.00	\$ 5,000.00	\$ 12,500.00	\$ 50,000.00
2i. Roamer Revenue	\$ 56,250.00	\$ 225,000.00	\$ 562,500.00	\$ 2,250,000.00
2j. Profit Leakage	\$ 37,500.00	\$ 150,000.00	\$ 375,000.00	\$ 1,500,000.00
<b>Monthly Benefit Totals</b>	<b>\$ 215,500.00</b>	<b>\$ 860,000.00</b>	<b>\$ 2,255,000.00</b>	<b>\$ 9,020,000.00</b>
<b>Net Cost</b>	<b>- 39,247.00</b>	<b>- 64,031.00</b>	<b>- 99,698.00</b>	<b>- 185,034.00</b>
<b>Net Monthly Benefit</b>	<b>\$ 176,253.00</b>	<b>\$ 795,969.00</b>	<b>\$ 2,155,302.00</b>	<b>\$ 8,649,932.00</b>
<b>Net Annual Benefit</b>	<b>\$ 2,115,036.00</b>	<b>\$ 9,551,628.00</b>	<b>\$ 25,863,624.00</b>	<b>\$103,799,184.00</b>
<b>Net 5-Year Benefit</b>	<b>\$ 10,575,180.00</b>	<b>\$47,758,140.00</b>	<b>\$129,318,120.00</b>	<b>\$518,995,920.00</b>
<b>Increased Market Value</b>	<b>\$ 14,805,252.00</b>	<b>\$66,861,396.00</b>	<b>\$181,045,368.00</b>	<b>\$726,594,288.00</b>

For a complete price quote, supporting documents and / or an on-site or web-based Envision presentation, please visit our web site at [www.billingteam.com](http://www.billingteam.com) , contact us by e-mail at [sales@arisinc.com](mailto:sales@arisinc.com) or give us a call at +1(800) 874-7749 or +1(909) 980-1034.