

Customer Lifetime Model For The Magazine Publishing Industry

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INTRODUCTION

Since ages, magazines have served the information requirements of readers around the globe. However with the global economic slowdown, magazine publishers are forced to not just supply information, but also analyze ways to serve its clientele better. In this paper, we try to understand the potential trends and phases that magazine publishing lifecycle typically encounters. Thereafter, we try to simulate a model that can calculate the customer lifetime value for magazine publishers which would also aid in understanding the implications of the same

MAGAZINE PUBLISHING IN INDIA: TRENDS

With the global recession taking a toll in virtually every industry sector, the publishing industry is no exception. Price Water House Coopers in its "Global Entertainment and Media Outlook (2006-2011)" predicts an overall 3.1% CAGR growth for the magazine publishing industry worldwide during the period 2006-2011. Migration of readers to the Internet is expected to make a serious dent on the circulation for teen and special category magazines. However, huge demand for weekly titles, celebrity magazines and new launches is expected to offset the same.

The scenario in India, however, is a bit different. An expanding middle class and growing discretionary income are expected to be catalysts for new consumer magazines. It may also be that an increased economic well being and consumer sophistication is generating interests apart from plain daily news in a new demographic of second generation literates. Major launches of titles by international publishers targeting affluent readers will bolster consumer magazine advertising. Greater consumer choice is expected to stimulate magazine purchases and circulation spending. The business market is expected to record average double digit annual growth as well.

Favorable FDI policies and manifested growth potential, especially in the high-end niche genres have made India increasingly attractive to foreign publishers. Foreign publishers can own upto 100% of non news publication according to new policies. In 2008, the government allowed publication of Indian editions of foreign magazines. The content would be allowed to be exactly identical to the foreign magazine concerned and the India publisher would be free to add local content and advertisements. In January this year, the government decided to permit publishers of foreign newspapers to set up wholly owned subsidiaries in India to publish a facsimile edition here. All these are helping fuel the stream of new launches. However, a slight drop in English language title readership (with readers migrating to new regional language titles) has lead to decrease in circulation spending.

Slowing down of paid circulation is making publishers increasingly dependent on advertising. As the vulnerability to postal rate increases, publishers need to look for better retail distribution practices and more specialized and pocket sized publications.

Economic expansion and thriving telecom market is expected to propel trade magazine advertising. Trade magazines are predicted to benefit from a rebounding telecommunication market (building of an undersea cable to link its market in Europe, Asia and USA is a pointer) which is a key advertiser in B2B publications. These initiatives are creating business opportunities for a range of companies serving the market.

PHASES

The shelf life of a magazine is in between that of a book and a newspaper. Generally speaking, the publishing process includes the stages of the development, acquisition, copyediting, graphic design, production – printing and its electronic equivalents, marketing and distribution. Editorial, commercial and informational content are some of the most commonly used content for most magazine publications that involves a multi-faceted skill set as well as considerable money. For the publication business, cost is relative- the better the talent, the pricier it gets. This is also reflective in the commercial aspect of distribution and marketing- the better the quality, the more does it cost to pay for the product. Another important consideration is that magazine publishers spend a lot of time and money to buy and commission copy, which for many publishers would add more weight, quality and repute to their products. (<http://allnichesites.com/magazine>). A standard magazine publishing lifecycle may be divided into the following distinct phases:

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- **Planning Phase:**

This phase consists of conceptualizing the content, planning the content publishing (including planning of resource requirements and scheduling) and various other pre-publication processes.

- **Development Phase:**

The phase deals with translation of concept to manuscript and acquiring content. Content is edited and is ready to be published.

- **Production Phase:**

In this phase, content is published either in print or online. In case of print, the content is printed and bound in this phase.

- **Storage Phase:**

The phase in case of print magazine deals with warehouse/inventory management. Preparation of digital asset library is also an important activity in this phase.

- **Transaction Phase:**

The various financial matters in publishing industry lifecycle are handled in this phase. These include payment to vendors for assets procured, managing the order to cash cycle, contract renewal and management.

- **Delivery Phase:**

The produced product is distributed. The key activities in this phase for print magazines include planning transportation and distribution and ensuring delivery of finished products from warehouse to customer. For e-zines, digital rights management, hosting and server management needs to be taken care of.

- **Support Phase (ongoing):**

Customer support is critical for long-term maintenance of customer relationships. Problem Management is dealt in this phase.

- **Marketing (ongoing):**

Campaigning, branding activities along with lead generation and demand creation and capture fall among high priority areas for the new age publishers with increasing competition. Relevant market research and derivation of customer analytics are ongoing activities that impact all the above phases of the lifecycle. Customer Lifetime value calculation pertains to this phase.

REVENUE MODEL

Potential sources of magazines revenue include:

- Sales of final products via subscription and retail outlets.
- Advertising in consumer and B2B or trade magazines.
- Commissions from affiliate or other revenue-sharing programs.
- Sales of publishers' own products or services.
- Revenue generated directly from content (e.g. through syndication).
- Subscription fees.
- Voluntary donations from subscribers, if any.

The magazine's (online or print) revenue model may contain all of the above, or it may only cover one or two areas. However, the present downcast online advertising market has caused e-publishers to look at other alternative sources of revenue to support their publications.

Apart from manpower and infrastructure costs, potential sources of expense of magazines include:

- Concept conceptualization and publication planning activities.
- Content Acquisition.
- Content Publication.
- Printing & binding (not relevant in case of e-zines): this is usually outsourced to a third party.
- Warehouse management: This is more critical activity in case of printed magazines, primarily because of the short life span of a magazine.
- Financials: Author remuneration, contracting etc.
- Digital Asset Library(DAL) and Digital Rights Management (DRM).
- Content Transportation and Distribution: The end products need to be shipped either to customers or to various retail outlets.

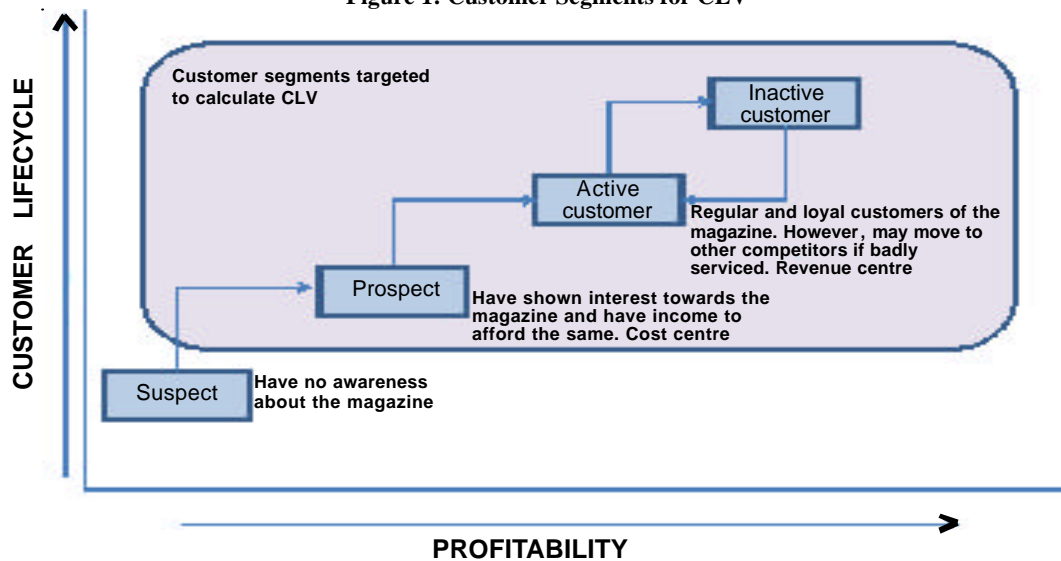
- Marketing activities: Both in print and audio-visual medium to enhance the brand value of the product.
- Problem/Service Request Management: Having customer helpdesk in case of complaints regarding subscription.

CUSTOMER LIFETIME VALUE (CLV)

Companies are not static entities. They need to adapt continuously to changing business environment to increase customer loyalty and grow their business. The key to business growth is to look for options to improve/maintain customer loyalty in the long run and lock its clientele.

Customer lifetime value reflects the present total value of a customer to the company over his or her lifetime. It determines customer's worth to the organization based on customer's current as well as predicted buying behavior. This is viewing the value of a customer in terms of how much he will purchase during his lifetime, not just on the current transaction. A valuable customer is one whose revenues over time exceed the company cost of attracting selling and servicing that customer.

Figure 1: Customer Segments for CLV



The generic model of CLV (Bob Hayes) can be broken down as a function of four elements:

- **NC:** Number of customers.
- **NP:** Number of times the average customer make a purchase each year.
- **CL:** Average customer life (in years) .
- **PPS:** Average profit per sale (total sales revenue – costs)/number of sales .

Using these elements, we can calculate the customer lifetime value for the entire customer base (or customer segment) : $CLV = NC \times NP \times CL \times PPS$

It is to be noted that a customers' tenure with the company involves three general phases, attraction (marketing), acquisition (sales), and service (service).

i) CUSTOMER ACQUISITION

Customer acquisition refers to the first-time purchase by new or lapsed customers. This focuses on the factors that influence buying decisions of these new customers. Promotions are perhaps the most significant attracting factor for publishers. However, Lewis (2003) conducted a study to demonstrate how promotions that accelerate customer acquisition may fail in the long run. He found that if new customers for a newspaper subscription were offered regular price, their renewal probability was 70%. However, this dropped to 35% for customers who were acquired through a \$1 weekly discount (Gupta, Hanssens et al, 2006). This implies that unless these acquisition discounts exceed the baseline acquisition rate of customers, they would be detrimental to the customer loyalty of a firm.

ii) CUSTOMER RETENTION

Customer retention is the probability of a customer making repeat purchases of the firms' products. In contractual settings like magazine subscriptions, customers inform the firm when they terminate their relationship. Retail purchasers need to be converted to subscribers so as to forecast the demand accurately and ensure confirmed purchase of firm's product.

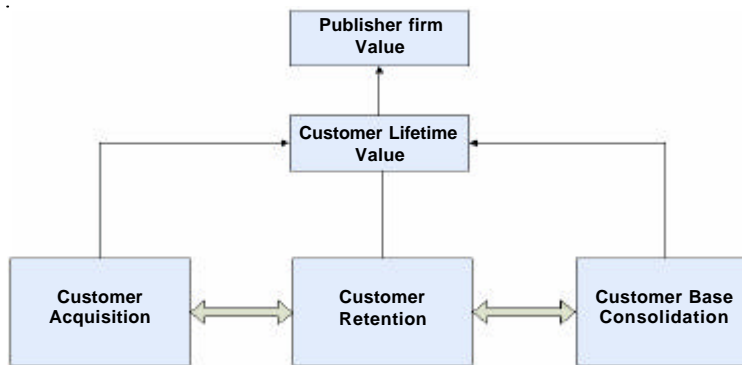
Empirical research shows that business growth is fueled primarily by customer loyalty. Loyalty results from customer satisfaction, and satisfaction is largely influenced by the value of services provided to customers.

iii) CUSTOMER BASE CONSOLIDATION

The third component of CLV is the profit generated by a customer in a given time period. This margin depends on a customer's past purchase behavior as well as a firm's efforts in cross-selling and up-selling products to the customer. Thomas, Blattberg, and Fox (2004) while modeling the probability of reacquiring a lapsed newspaper customer, discovered price to have a significant impact on customers' reacquisition probability as well as their relationship duration. This had allowed them to estimate the expected CLV for a customer at various price points (Gupta, Hanssens et al, 2006).

Within each customer lifecycle phase, the publisher is required to maintain a relationship with customers. As a result, to get a more accurate estimation of the customer lifetime value, organizations need to include the costs to service the customers. It is not just the costs of attracting and acquiring customers, servicing costs also ideally should include organizational resources such as customer service staff costs and employee training costs, administration and infrastructure costs.

Figure 2 : Basis of CLV Calculation



Once these costs associated with a given customer group can be established, the lifetime value of that customer group can be determined. While some customer segments could be very profitable, other customer segments might not be profitable at all.

INCREASING THE LIFETIME VALUE OF THE CUSTOMERS

The goal for management is to maximize the CLV to the company. To increase the lifetime value of the customers, organizations can do one or more of the following four things:

- New customer acquisition
- Increase buying frequency
- Increasing customer retention
- Increased margin through enhanced cost cutting measures

Higher CLV implies greater financial growth and a greater likelihood of success of the business model in the long run. It is important to note that because the CLV is a multiplicative function of four elements, a negative value of profits (i.e. costs are higher than revenues) results in a negative CLV no matter how large the other elements of the CLV are. Therefore, before measuring the lifetime value of a particular customer segment, it is important to know if the customer segment is worth growing or even worth having.

The profit value is usually a guesstimate due to lack of quantification of various costs associated with a given customer relationship. Neither is data available with the publishers to make such precise calculations nor they have a solid understanding of the company resources to maintain customer relationships. Whatever be the case, the estimation procedure of the profit value should be transparent and shared across the business to ensure that assumptions about its calculation are reviewed by stakeholders for their buy-in (Hayes, p 287).

THE MODEL

After identifying the extent to which a customer segment is profitable or not, the organization now must make a choice whether or not they want to invest in that customer segment to increase the lifetime value of the customers in that segment. Specifically, a company can increase the size of the customer base, increase the purchasing behaviors of the customer base, and increase the tenure of the customer base.

The model below depicts the derivation of Customer Lifetime Value model and its corresponding application to Magazine Publishing. The same has been adapted from Keane & Wang's famous Newspaper Customer Lifetime Value model. We have taken a sample magazine which is currently available in three states of India (for simplicity), Uttar Pradesh, Madhya Pradesh and Bihar. The magazine's electronic version (e-zine) is also assumed to be available. We have taken a rough estimate of the cost aspect from the various business processes that the magazine publishing industry typically undergoes as discussed earlier.

The total size of the target market is accounted with the total number of suspect households having a certain dispensable income per month (in this case Rs 10000/month). Total current sale is the sum of existing number of subscribers and approximate total sales from retail outlets per month. This helps us to arrive at the penetration rate of the magazine among its target segment. The advertisement revenue may be of two types: Zone dependent or zone independent. The former refers to large brands which are present in all the locations and hence ads are not customized. Zone dependant advertisement pertains to local shops or regional products and hence depends on the financial importance of the region. The publisher may use this magazine for promoting its other line of products, hence advertisement revenue for publishers products have been accounted for. However, this would be a very small amount.

E-zines are, however, zone independent. The circulation mode can be either subscription or onetime payment. Advertising in e-zine would refer to banner ads, contextual ads, sponsored content, syndications and commissions from affiliates or other revenue sharing programs.

The average circulation revenue from subscription and retail has been accounted for. Retail circulation revenue is higher than subscription revenue per customer, however, retail revenue is uncertain. Other sources of revenue for the publisher may include grants, lists, membership fees, donations etc.

Promotional/churn cost is the amount required to be spent per customer per year to maintain his loyalty towards the product. This may mean giving incentives, marketing/branding exercises or anything to sustain the customer's choice of the same product. With regard to existing customers, they have to be booked as sunk costs. The total sales revenue would be the sum of revenues from advertising, products sales, and other sources minus the promotional cost. It is to be noted that the model excludes manpower and administration costs for the calculation as these figures are not easily derivable.

The average customer lifetime for each zone is arrived at by the typical tendencies of a customer reading the same magazine year on year. This would depend on the competitive landscape and lifestyle of the region. The recent new customer acquisition costs have been accounted for to arrive at the model. Higher the promotional cost and/or higher the penetration, higher is the acquisition cost.

Table 2 calculates the cost for producing the magazine for a year for a single customer as per the parameters discussed earlier.

Table 3 calculated the year on year acquisition costs for the three zones taking the current cost as the baseline. Acquisition costs for ezine would decrease with the increasing digital migration of readers.

Table 4 calculates the revenue from each customer year on year assuming an inflation rate of 7%. Similarly, Table 5 calculates the year –on year cost increase assuming similar inflation rate.

Table 6 depicts the cash flow. Total profit is arrived at total revenue minus the total cost per year. We start the year zero calculation with the revenue from the customer from last year in place. Acquisition costs come into play only after the expected customer lifetime year. Total cash flow is thus calculated for 5 years for each zone and consequently, the Net present value (NPV) is arrived at assuming a IRR of 10%.

Thus in table 1b, we arrive at the total sales revenue for the publisher from the single product per year and NPV per customer for 5 years as per Table 6. Total NPV for the product would be total number of customers multiplied by NPV/customer. Hence, the % age NPV share /zone is calculated. Total % subscription for each zone is also computed. These two parameters, when compared, determine RAG (Red Amber Green) status for the product for each segment individually based on which recommendations/business decisions can be made as in the table. The zone where NPV % (%age share of NPV) is greater than total subscriber %age (%age share of subscribers) is the most profitable zone for the publisher to concentrate and invest its marketing/selling efforts to increase the penetration.

Table 2 : Cost Sheet (excluding manpower and administration costs)

Cost Sheet					
	Fixed	Variable	Print	E-Zine	
Concept Conceptualization	5		v	v	
Content Publication Plan	5		v	v	
Concept to Manuscript Ready	5		v	v	
Content Acquisition	15		v	v	
Content Publication	10		v	v	
Printing/binding			40v		
Warehouse Management	10		v		
DAL	5		v	v	
Contract to Renewal	10		v	v	
Procure to Pay	5		v		
Order to Cash	5		v	v	
Content Distribution	5			v	
Transportation and Distribution	15		v		
DRM	5			v	
Problem/SR management	5		v	v	
Marketing	10		v	v	
Cost/customer for Print Magazine(Rs)					145
Cost/customer for E- Magazine (Rs)					85

Table 3 : Acquisition Cost Sheet

Acquisition Cost Table						
Zone	Acquisition Cost (Yr 0)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Uttar Pradesh	30	33.00	36.30	39.93	43.92	48.32
Madhya Pradesh	40	44.00	48.40	53.24	58.56	64.42
Bihar	50	55.00	60.50	66.55	73.21	80.53
E-Zine	30	27.27	24.79	22.54	20.49	18.63

assuming a 10% increase in acquisition costs every year. This should grow as the sales increase

Table 4 : Revenue Inflation Sheet

Revenue Inflation Table						
Zone	Sales/customer (Yr 0)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Uttar Pradesh	382.00	408.74	437.35	467.97	500.72	535.77
Madhya Pradesh	458.57	490.67	525.02	561.77	601.09	643.17
Bihar	416.67	445.83	477.04	510.43	546.17	584.40
E-Zine	335	358.45	383.54	410.39	439.12	469.85

assuming 7% inflation rate

Table 5 : Cost Inflation Sheet

Cost Inflation Table						
Zone	Cost/customer (Yr 0)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Uttar Pradesh	145	155.15	166.01	177.63	190.07	203.37
Madhya Pradesh	145	155.15	166.01	177.63	190.07	203.37
Bihar	145	155.15	166.01	177.63	190.07	203.37
E-Zine	85	90.95	97.32	104.13	111.42	119.22

assuming 7% inflation rate

Table 6 : Cash Flow Table

Cash Flow Table						
Zone	(Yr 0)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Uttar Pradesh						
Net Income	382.00	253.59	271.34	290.34	310.66	332.40
Acquisition Cost	0.00	0.00	0.00	39.93	43.92	48.32
Total	382.00	253.59	271.34	250.41	266.74	284.09
		1.10	1.21	1.33	1.46	1.61
Total cash Flow						1708.161606
NPV(5yrs)						1383.499743
Madhya Pradesh						
Net Income	458.571429	335.52	359.01	384.14	411.03	439.80
Acquisition Cost	0	0	0	0	0	64.42
Total	458.571429	335.5214286	359.0079286	384.1385	411.0282	375.37975
Total cash Flow						2323.65
NPV(5yrs)						1862.72
Bihar						
Net Income	416.67	290.68	311.03	332.80	356.10	381.03
Acquisition Cost	0.00	0.00	0.00	0.00	0.00	0.00
Total	416.67	290.68	311.03	332.80	356.10	381.03
Total cash Flow						2088.31
NPV(5yrs)						1667.82
E-Zine						
Net Income	335.00	267.50	286.23	306.26	327.70	350.64
Acquisition Cost	0.00	0.00	0.00	0.00	0.00	0.00
Total	335.00	267.50	286.23	306.26	327.70	350.64
Total cash Flow						1873.32
NPV(5yrs)						1486.37

IMPLICATIONS

Customer value is the total benefit (tangible and intangible) that the business partners provide to a company throughout the life of the relationship. Companies are realizing that when operating in mature markets and facing tight competition, the creation of a profitable relationship with customers is a key differentiator. To know whether or not a relationship is profitable, one has to be able to quantify this relationship.

Some of the notable perceived benefits of calculating the CLV are:

- An ability to get a 360 degree view of the customer.
- The provision of information that enables a “deepening” of customer relationships.
- Informed calculations of the amount of “value” to return to customers in the form of loyalty schemes.
- Provision of cross sell and up sell publishers’ other products.
- The “proactive management” of customers.
- An increased sophistication in the ways that financial results are viewed.
- Taking into account factors beyond the control of the firm.
- An ability to pick and choose competitors’ valuable customers.
- Ability to allocate promotional budgets between acquisition and retention spending; and
- The provision of a more “personal service” for valued customers.

Only those customers should be attended to, whose trade-off of costs and customer retention effect is positive. We should always think in terms of long-term oriented methods. Customer lifetime value is a long term and dynamic figure. Initially, the average turnover per customer would be low; however, this would increase exponentially in case of long term strategy. A short term strategy would yield high turnover in the short run, however, the turnover would decline pretty fast with time. By segmenting customers across the two dimensions, current profitability and lifetime potential, marketing firms can better align marketing, sales, service resources and expenditures to optimize long-term customer value and ultimately, organization profitability.

The future beckons to us. In these highly competitive market conditions, it is high time for publishers to shift from a financially-driven to a sales-driven culture to enable magazine publishing industry to weather the troubled times.

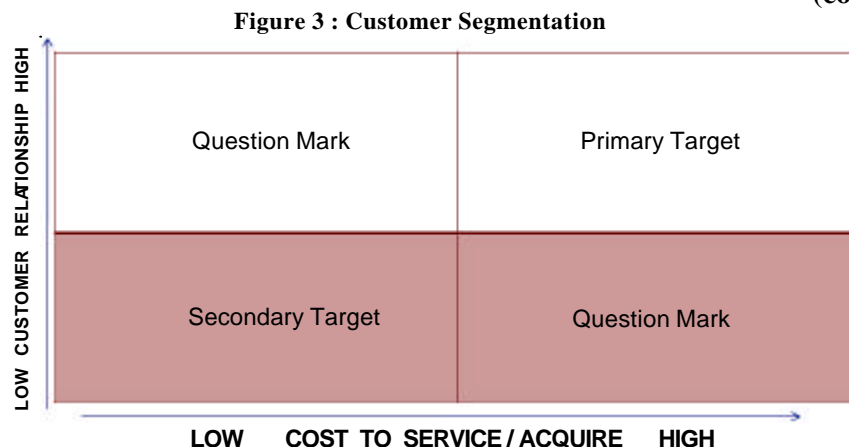
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should not inadvertently conflict with their key strategic objectives, core business principles or brand promise. Price discovery approach is very famous for online pricing. This approach should include not only active participation of the customers in the transactions, but should also include different forms of auctions, group buying and negotiations. Further, some innovative e-pricing strategies should be adopted. E-commerce firms can use the technology and Internet to make products and services sold on the net like the stock market. Give the consumers the ability to place “market orders”, “limit orders” and “open orders” and participate in an IPO like auction on any product or services offered on the net. The system will make the price of product/service fluctuate based on demand and supply and will offer the price that consumers will to pay; and a response from the market if it accepts the prices. As the barriers to entry into e-commerce are remarkably low, a wide variety of competitors are entering each business; the size, the quality, and competence of each firm varies widely. As surfers are not likely to search out each firm, firms should spend more money to make their prices visible on the web. This can be done through advertising in a wide variety of channels including radio, TV, telephone, ‘yellow pages’ and even through the direct mailing of printed catalogues. Last but not the least, price discrimination strategy should be operated in isolation, but it should be used on the basis of delivery time, speed of operation, functionality and features, annoyance and convenience.

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