Using lifetime value to gain long-term profitability

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Abstract The underlying rationale for a customer life time value (LTV) is well established, with the vast majority of literature citing its strategic benefits to businesses. Yet direct marketers frequently encounter difficulties in implementing its principles because of the lack of a systematic framework. This paper presents a practical guideline by using LTV concepts to assess an entire marketing mix. As such, three fundamental issues are addressed: (1) With a defined analytic goal under given circumstances, a new term 'LTVA' (LTV averaging) is proposed to facilitate traditional LTV proceeding; (2) an LTV analysis relies on a constant stream of data to drive its efficiency, which will be specified with an LTV functional data-mart; (3) whereas LTV affects short-term breakeven rate (BE%), a new benchmark, LTV BE%, is derived for leveraging decision powers in terms of long-term profitability.

BACKGROUND

The customer lifetime value (LTV) for a project is the net present value of the future profit that is realised on the average new customer during a given tracking window.¹ Weighting the future net contributions against current investment, LTV study reveals the most complete picture of business on the strategic whole.² Put another way, companies can only afford to acquire new customers for amounts less than the LTV. The lifetime computation attains this affordable rate that could significantly add to the short-term bottom line.

The merits of a customer LTV have been recognised but yet not served the industry well. Everyone talks about LTV, some attempt it, but few fully benefit

from it.³ So while the theory of LTV is seductive, most practitioners inevitably face the following technical challengers:

- The concept of LTV provides no explicit guidelines in a dynamic environment.
- LTV is an idle dream without a constant data stream sustained over consecutive years.
- The use of a dollar-based LTV to leverage the short-term breakeven rate (BE%) remains untapped.

These difficulties explain why most people are struggling to use LTV and put it into practice.⁴ This paper proposes step-by-step guidelines that address those principle issues prevalent in the realm of direct marketing (DM).

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QUESTIONS AND ASSUMPTIONS

What if the response rate (Reps%) for acquiring new customers falls below the BE% in the first round campaign (for instance, a Reps% of 2.00% versus a BE% of 2.33%)? If the difference is statistically significant, should you simply abandon this marketing initiative? The answer is: not before taking LTV into account.

The question is raised herein: how much is it worth spending to acquire a new customer today, the costs of which will be recovered through future business dealings with that customer? As such, three major issues should be settled. First, this paper introduces a customer LTV study in which a new approach, LTV averaging (LTVA), is used to simplify the traditional LTV one. Secondly, an LTV data-mart is developed to measure LTVA research efficiency. Thirdly, short-term BE% has to be converted to long-term LTV BE%, which enables direct marketers to establish long-term profitability using a common Reps% measure.

LTV tracks the past purchase behaviour of a group of customers and uses it to predict the future. Like other forecasting models, an LTV formulation holds its validity only if the following conditions remain relatively stable:⁵

- Distribution channel and media across a marketing mix;
- Product and/or service mix over the lifetime;
- Competitors and their strategies in pertinent field(s); and
- Economic and/or regulatory climate.

Because nothing stands still in the real world, LTV should never be applied in a vacuum. In order to cope with changes, it is best to factor both positive and negative impacts into modelling projections under given circumstances.⁶

THE LTVA MODEL PROPOSAL

Compared with sophisticated modelling procedures, like regression, with routine programme logic, the computation of LTV is more arbitrary. Not only are data prepared for fitting an LTV model, but also a systematic framework has to be purposely constructed. To this end, the author begins with an empirical LTV model and then customises it to the paper's approach.

From basic LTV to LTVA

Of all the models for calculating LTV in the literature, the most common, which is also the most convenient to practitioners, is the basic structural model:⁷

$$LTV = \sum_{i=1}^n \frac{(R_i - C_i)}{(1 + d)^i}$$

where i = the time period in which net future value (NFV) is discounted to net present value (NPV); R_i = revenue contributing to overheads during period i ; C_i = promotion cost of generating R_i ; d = capital discount rate; n = the number of desired tracking periods to realise LTV. This empirical formulation basically describes the customer LTV concept as defined in the first sentence except for one word; 'average'. Let N_0 represent the number of new customers acquired in base year 0. Thus, LTVA can be defined as:

$$LTVA = \sum_{i=1}^n \frac{(R_i - C_i)}{(1 + d)^i \times N_0}$$

where R_i and C_i need to be re-captured in the total amount. In this revised formula the total LTV at each period (i) will be for averaging-out LTV, by the initial number of customers (N_0) and then lumped together into the ultimate LTVA across an entire tracking window (n).

Table 1: LTVA procedure from acquisition to retention programmes

Acquisitions + retentions Marketing mix Time period	Source code	Ad codes (up-sell and cross-sell) to gain LTV					Source + Ad TR,W ... 0 – 5 Year (0 – 5)
	TR0 Year 0	TR1, TW1, TK1, ... Year 1	TR5, TQ5, TK5 Year 2	Year 3	Year 4	Year 5	
Number of customers	1,000	350	235	142	96	77	1,900
Gross sales margin (GSM)	\$22,000	\$8,571	\$6,025	\$4,231	\$3,045	\$2,549	\$46,421
Gross promotion cost (GPC)	\$25,650	\$6,530	\$4,237	\$2,457	\$1,579	\$1,218	\$41,671
Net profit (GSM – GPC)	(\$3,650)	\$2,041	\$1,788	\$1,774	\$1,466	\$1,331	\$4,750
Net\$/Cust (NFV)	(\$3.65)	\$2.04	\$1.79	\$1.77	\$1.47	\$1.33	\$4.75
Net\$/Cust (NPV) = LTVA(i)	(\$3.65)	\$1.86	\$1.48	\$1.33	\$1.00	\$0.83	\$2.84
CumNet\$/Cust (NPV)	(\$3.65)	(\$1.79)	(\$0.32)	\$1.02	\$2.02	\$2.84	
	(\$3.65) Initial Cost	+ \$6.49 LTVA	= \$2.84 Final Profit				

Cust=customer; NFV=net forward value; NPV=net present value; LTVA(i) lifetime value averaging; Cum=cumulative.

The beauty of LTVA is working on figures in ‘total’ and ‘average’ instead of on an individual basis, which greatly accelerates LTV proceedings and simultaneously resolves the long-term concerns to the marketing project. This is how LTV affects an initial campaign. However, several decisive criteria must be established to complete the LTVA procedure.⁸

Define an analytic goal

Setting an LTV analytic goal is of paramount importance in order to create modelling efficiency that favours marketing objectives and/or business missions. There are two common choices:

- Individual approach — to guide one-to-one targeting communication, a customer LTV should be tracked and analysed on an individual basis. This traditional method can differentiate each customer’s value to enable direct marketers to rank customers and thereby treat them differently. This is the essence of an ideal targeting pattern: tailoring offers for different customers’ needs.⁹ The individual-based approach, however, is rather complicated in

the light of LTV metrics as well as the tedious data mining and manipulations involved.

- Overall assessment — when evaluating strategic benefits as a whole project, one can focus successfully on LTVA by dealing with the overall LTV figure. This technique takes a short cut to reach the paper’s analytic goal by emphasising individual ‘averaging’ while ignoring the individual ‘differentiation’.

Adopt reasonable tracking period(s)

Although a shorter time interval (i) and a longer tracking window (n) contribute to the accuracy of lifetime computation, practitioners would rather take a trade-off selection due to limitations of research resources and timing. Hence i is typically defined as a yearly base to facilitate money-discounted conversion. How long does (n) extend? Theoretically, an LTV study will not be completed until the last customer leaves the business. A five-year time horizon is considered an adequate lifetime tracking cycle in practice.^{10,11}

Begin with source code

Source code is meaningful to an LTV analysis since it generates new customers

cum = cumulative; NPV = net present value
 Note: Figures in parentheses are negative

Figure 1: Lifetime value contributions by year

and identifies their interests, which are used in future marketing programmes.¹² For tracking purposes, if source code starts as TR0 in base year 0, the ad-codes associated with the current campaigns can be denoted as TR1, TW1, TK1, ... TR5, TQ5 and TK5 for the following years 1, 2 ... 5. As shown in Table 1, TR series TR1 through TR5 represent up-sell, whereas TW through TK exhibit cross-selling in relation to TR. Consistent coding schemes ascertain precision efficiency and precision of tracking feedback data. Promotion codes work parallel to customer ID for capturing LTV data. The former is aimed at tracking a group of customers by campaigns, and the latter pertains to individual differentiation.

Stick to the same averaging base

Table 1 demonstrates that the number of customers decreases progressively from year 1 to year 5. The downside trend implies the typical customer drop-rate, which does not affect the basis of formulating LTVA. Keep firmly in mind that net contribution each year is invariably shared or averaged by the initial numbers of customers (N_0) in year 0 rather than subsequent years 1

through 5; the reason being that each annual ongoing profit (LTVA) must be compared with the initial acquisition cost on the same customer's base in order to assess an entire marketing project over time. This is return on investment (RDI) in action which, however, pursues a long-term return with LTV engagement.

Time value of money

Money received in the future is not worth as much as the same amount invested today, which is more critical for a longer lifetime tracking window. As a part of the LTV model, the discount formula from NFV to NPV can be written as:

$$NPV = \frac{NFV}{(1 + d)^i}$$

Often, d is selected in terms of a prevailing discount rate in industry or a corporate hurdle rate defined by each firm.¹³ 10–15 per cent is commonly used in the DM industry. Ten per cent, at the lower end of the range, can be selected to offset an over-estimated i . This is because the cash inflow across a whole year is counted at the end of the time period. Notice that d is exponentially weighted with i . The discount rate can

significantly reduce the money value; the longer the time frame, the larger the depreciation.

CALCULATING LTVA

In this section, based on the conceptual framework of implementing a practical LTV model, actual data will be used to calculate an LTVA. As illustrated in Table 1, the marketing mix includes a product mix through different promotional channels. In this case, DM will be used in the LTVA analysis, but the methodology can be repeated for catalogues, telemarketing, e-commerce, etc.

Reallocate R_i and C_i

For the purpose of marketing analytics and database management, both C_i and R_i in the LTVA model are re-assigned as gross promotion cost (GPC) and gross sales margin (GSM).¹⁴ Cost is therefore broken down into two parts: the GPC associated with the campaign(s) and transactions as a part of GSM. There are two main reasons for doing this:

- 1 From a marketing perspective, separation into types of cost provides instrumental insights that let investors view money inputs from different angles.
- 2 For IT managerial efficiency, business expenses data can be captured and stored in different ways: promotion costs at the summary level and transaction costs on an individual basis.

Determine the initial cost

In the example, 1,000 customers were acquired from 50,000 'cold' contacts. Using the GSM and GPC provided in Table 1, the overall acquisition cost is \$3,650 (\$22,000–\$25,650). Since no

discount will be factored in at the base year 0, \$3.65 (ie \$3,650/1,000) is spent in acquiring one new customer. As the initial input is separated from any future contributions, an investor can easily tell the difference between the customer acquisition cost and the acquisition allowance developed by using a customer LTVA.¹⁵

Obtaining LTVA

Starting with the initial 1,000 customers, with retention efforts, an overall LTVA can be solved below:

$$LTVA = \sum_{i=1}^5 \frac{(GSM_i - GPC_i)}{(1 + d)^i \times N_0} = \$6.49$$

Where i refers to the annual tracking period, 1 through 5, respectively; $d = 10\%$; and N_0 is locked at 1,000 as a constant averaging base. Substituting the parameters given in Table 1 for GSM and GPC, retention programmes earn back \$1.86 in year 1, \$1.48 in year 2, ... and \$0.83 in year 5. Adding these gives an overall LTVA of \$6.49. This is the affordable rate of acquiring a new customer in base year 0.

View outcomes in two aspects

The first concern regards long-term overall profitability. Since an initial spend of \$3.65 is eventually recouped by \$6.49, the difference of \$2.84 is a net profit per customer (or 'Net\$/Cust'). A total net profit from the entire marketing mix is: $\$2.84 \times 1,000 = \$2,840$. By contrast to empirical LTV accumulated from each individual, LTVA is a convenient yardstick that provides a direct comparison between different projects in terms of marketing efficiency.¹⁶

The second perception relates to the return on investment (ROI) timeline. Long-term profitability is necessary but

S&H = shipping and handling; Reps% = response rate; BE% = breakeven rate; ROI = return on investment; LTV = lifetime value

Figure 2: An LTV data-mart used for processing LTV analytic data. (An arrow points from one-to-many relationship, dotted lines are used for temporary linkages).

may not be sufficient to ensure an optimal investment. An investor also needs to investigate a time horizon for achieving a breakeven — the sooner, the better. To tackle this issue, cumulative net\$/cust ('CumNet\$/Cust') is employed to demonstrate an incremental Net \$/Cust from the base year to the following years. As denoted in the final row of Table 1, LTVA turns the project profitable by year 3. The annual ROI histogram in Figure 1 provides a broad picture by addressing dual objectives — profitability and efficiency. Thus, even though this marketing mix is ultimately profitable, an investor must simultaneously consider if he/she can

financially bear the loss within the first three years.

The historic marketing mix reveals how retention efforts can eventually turn a costly acquisition into a profitable outcome. Under an established assumption or adjusted conditions were necessary, an LTVA analysis works out a strategic investment solution for any ongoing DM projects.

DATA CAPTURE AND MANIPULATION

As discussed above, LTVA can be quickly computed if all the required data is readily available. However, data tracking

and mining could be the biggest obstacle hampering most direct marketers. There is little, if any, discussion in the literature on data preparation for LTV analysis. Building a powerful relational marketing database is considered to be a high priority for driving LTV analytic efficiency, and this relies on teamwork, commitment and long-term painstaking efforts.¹⁷

A notable gap frequently exists between a marketing analytic objective and IT data warehousing initiative.¹⁸ To be more specific, LTV analysis focuses on a customer's historic transaction records — these must be consistent, robust and clean. A multi-functional data warehouse, however, could be overcomplicated and often miss key variables pinpointing LTV issues.¹⁹ To bridge this gap, an LTV data-mart is developed in phases I–III and accordingly mapped out in Figure 2. The data-mart streamlines both marketing keys and data formations.^{20,21}

Phase I: Define dataset keys to interpret LTV principles

- **CUSTOMER:** Uniquely identified by Customer ID, CUSTOMER is the core within an entire relational LTV data-mart, where each individual customer can be tracked, evaluated and scored in terms of historic transactions from INVOICE.
- **INVOICE:** One invoice number has a multiple relationship with customer IDs and promotion codes since one customer may place multiple orders via different campaigns during his/her purchasing lifetime. INVOICE retains all historic transactions tied to CUSTOMER.
- **PRODUCT:** Sales data are further detailed by item or unit, since one invoice number may contain two or more product numbers. Unit costs

must be gathered from PRODUCT and transferred to INVOICE to calculate margin per order.

- **ACQUISITION:** Prospect number from rental lists is temporarily assigned, and source code is a key element to be tracked for LTV analysis. After an ACQUISITION campaign is completed, first-time respondents are captured to an in-house CUSTOMER file whereas relevant sales are recorded to INVOICE and finalised results with source code to SUMMARY.
- **RETENTION:** Leads pulled from CUSTOMER are used for cross- and up-selling campaigns. Feedback responses are captured in CUSTOMER and INVOICE, where conclusions accompanying ad codes are moved to SUMMARY.
- **SUMMARY:** As the name indicates, SUMMARY stores summarised data from each campaign tied to the promotion code. To keep the database flexible and efficient, SUMMARY remains permanent, but ACQUISITION and RETENTION are periodically suppressed or purged.²²

Phase II: Build LTV data-mart to meet LTV analytic goal

The LTV data-mart in Figure 2 forms a foundation for capturing, extracting and manipulating LTV analytic data. After being properly incorporated into an existing data warehouse or marketing database, this data subset performs a unique function to drive up potential for LTV analysis, which can be characterised as:

- **Customer-centric** — since conjoint data sources are organised around CUSTOMER, every past transaction within this relational data-mart can

consequently be delivered and manipulated to probe each customer's behaviour that further predicts his/her needs and values.

- Marketing-oriented — tracking customers is essentially the process of gathering historic transaction data to explain past purchase patterns and uncover future marketing opportunities. The LTV data-mart creates such a capacity for assessing revenues, costs and profits either by campaign or on an individual basis, which provides multiple insights into marketing decisions.
- Efficiency-driven — efficiency is always a major concern when data collection/mining is conducted in a fast-paced marketing environment. With its highly consolidated and cross-sectional data structure, the LTV data-mart can quickly deploy an LTV data stream by prioritising both timing and quality dimensions, which is often unattainable in a data warehousing environment. As shown in Figure 2, SUMMARY takes a snapshot of each promotion while contextual data allow transaction details to be obtained from multiple layers. Furthermore, a choice between temporary and permanent data files can greatly accelerate data inputs/outputs.

Phase III: Obtain GPC and GSM

GPC is most likely to be a lump sum investment by campaign(s). In the direct mail industry, GPC primarily includes list rental costs, mailing costs, letter-shop and creative design costs. The promotion cost is typically quoted per thousand (M). For example, \$513/M means \$0.513 per piece. In other words, the total mailing cost for 50,000 pieces will be \$25,650 ($\$0.513 \times 50,000$).

The way to attribute GPC to a certain

time period is usually based on a campaign launch date, which simply aggregates multiple expenses from single and/or multiple campaigns into SUMMARY in a given year.

With a very similar procedure, one can obtain GPC for catalogue or package inserts. Outbound telemarketing, however, is somewhat different, since it involves intensive labour costs. GPC in the telemarketing industry is usually collected from call centers where all communication costs, such as labour and phone bills, are included. In e-business, like e-mail marketing, list rental fees account for a major portion of the GPC. Regardless of which channels are used for DM campaigns, the headquarters costs (ie managerial functions, decision supports facilities etc) are treated as non-direct investments and are, therefore, separate from GPC.

GSM is the difference between gross invoice payment and gross invoice cost. Payment is tracked in INVOICE and typically consists of order price and shipping and handling (S&H) charges. Total payments can be captured individually, by promotion, or in total for any given time frame. As mentioned before, LTVA utilises gross payment amounts so that you can skip the tedious access to individual transaction data. Invoice costs, however, are computed at two different stages: the first part (ie postage, billing and order return/exchange) comes from INVOICE and the second (ie, merchandise costs) from PRODUCT.

In order to arrive at the total sales margin (\$22,000) shown in Table 1, assume that a customer places one order for two different items from which \$48.00 is received as payment and \$4.00 is spent on shipping postage (ie mailing costs) in INVOICE. The merchandise costs, consisting of \$10.00 for item 1 and \$6.00 for item 2, stem from PRODUCT.

Since the cost at INVOICE level totals \$20.00 (\$16 for merchandise and \$4.00 for shipping):

$$\begin{aligned}\text{Invoice margin} &= \text{invoice payment} \\ &- \text{invoice cost} = \$48.00 - \$20.00 \\ &= \$28.00\end{aligned}$$

where \$28.00 differs from the average margin \$22.00 (\$22,000/1,000) because the invoice margin can vary from one order to another, particularly in catalogue businesses where one invoice could comprise a number of different prices in terms of quantities purchased. Thus, cost analysis of individual transactions relies on a well-designed LTV data-mart that gathers 1,000 invoice margins and summarises them into GSM of \$22,000 in year 0. In turn, GSM can be computed for years 1–5 in the same way. As long as GSM and GPC are obtained, total net profit in the base year can be readily calculated at $-\$3,650$ ($\$22,000 - \$25,650$). The cost incurred in the acquisition is high due to a seemingly low response rate of 2 per cent ($1,000/50,000$). In essence, 1,000 customers absorb virtually all acquisition expenses — including not only themselves but also the other 49,000 non-respondents.

Moving into the retention phase, the LTVA processing becomes a little more cumbersome but the methodology remains quite similar. For instance, GPC (\$6,530) is accumulated from each promotion (eg TR1, TW1 and TK1), whereas GSM (\$8,571) is integrated from multiple sales margins in year 1 and subsequent years (2 through 5).

DEVELOP LTV BE%

Although it has been shown that LTVA equates to \$6.49, it is still unclear as to how one should react to 2.00% (Reps%) versus 2.33% breakeven (BE%).

LTV analysis yields ‘net dollar per customer’; this is not comparable to ‘response rate’ — one of the most commonly used measures in the DM industry. To leverage a short-term BE% with the LTVA finding, one has to go one step further and develop a new break even benchmark — LTV BE%.

A short-term BE% is based on the first round campaign, regardless of promotions afterwards. Long-term belongs to LTV BE%, in which future profits accumulated over time could add to the short-term bottom line. Below, the author shows how a composite LTV BE% replaces a simple BE% and strengthens the decision making by aiming at long-term benefits.

At the acquisition stage, $\text{GPC} = \$25,650$ and an averaged invoice margin = \$22.00 ($\$22,000/1,000$). The number of orders for short-term breakeven (#BE) is equal to gross acquisition cost divided by invoice sales margin. Mathematically,

$$\#BE = \$25,650 / \$22 = 1,166$$

where 1,166 are the minimum orders for this particular project to cover the acquisition cost. With only 1,000 actual respondents, the orders are 166 short of #BE. This accounts for the up-front \$3.65 loss, which, in turn, ends up as a higher short-term BE% as follows:

$$\begin{aligned}\text{BE\%} &= \#BE / \#Mailing = 1,166 / 50,000 \\ &= 2.33\%.\end{aligned}$$

Notice the acquisition response at 2.00% ($1,000/50,000$) runs significantly below the BE%. Based on this limited perspective, no action would be taken. A long-term LTV BE%, however, gives a more informed decision.

According to the previous discussion, LTVA produces an affordable rate at \$6.49. The marketing mix over time is,

on average, better off by \$2.84 (\$6.49–\$3.65) since \$3.65 is paid up-front and \$6.49 is made in the end. To achieve a long-term breakeven, one can afford no more than \$6.49 to acquire a new customer today. This is the starting point for developing a new benchmark.

Taking the LTV BE% as a long-term breakeven rate, all future net contributions to overheads (LTVA) must be fully credited to the initial acquisition cost to overheads, which consequently reduces the simple breakeven. Let '#Reps' stand for initial respondents reaching a long-term breakeven, and 'Margin' for averaged invoice margin. The initial total deficit, $(\#Reps - \#BE) \times \text{Margin}$, should be balanced by the following total surplus $(\#Reps \times \text{LTV})$. The relationship can be expressed by:

$$(\#Reps - \#BE) \times \text{Margin} + (\#Reps \times \text{LTVA}) = 0$$

Solving this equation for #Reps gives

$$\#Reps = (\#BE \times \text{Margin}) / (\text{Margin} + \text{LTVA})$$

where #Reps hereby resembles the LTV #BE in line with the assumption above. This formula shows how LTVA influences LTV #BE, within which LTV #BE becomes smaller than #BE if $\text{LTVA} > 0$ (with a positive impact), and larger than #BE if $\text{LTVA} < 0$ (with a negative impact). $\text{LTV } \#BE = \#BE$ if $\text{LTVA} = 0$, which means either no net LTV contribution is found or virtually no LTV study is undertaken. Recall, in the base year, that there is no difference between LTV BE% and BE% in the absence of LTV. As a result, a decision maker cannot but rely upon short-term BE% (2.33 per cent). What happens to new benchmark LTV BE% with LTV

endeavours? Plugging LTVA (\$6.49), together with other relevant data, into the equation above,

$$\text{LTV } \#BE = (1,166 \times \$22) / (\$22 + \$6.49) = 900$$

Thus, $\text{LTV BE\%} = \text{LTV } \#BE / \#Mailings = 900 / 50,000 = 1.80$ per cent, which is greatly reduced from the BE% of 2.33 per cent. With LTV, short-term BE% has migrated to long-term LTV BE% over the whole project. Assessing Reps% (2.00 per cent) today in year 0, a decision maker can assess probability for the next five years by switching a short-term benchmark (2.33 per cent) to a long-term one (1.80 per cent).

Instead of giving up the potentially profitable opportunity, companies should strategically move forward based on a long-term benchmark — LTV BE%. The significant lift (2 per cent–1 per cent) at 95 per cent confidence level can be verified by referring to most statistical references.²³ This is how the application and rationale of the LTVA, alters the character of a business, allows one to continuously view it as a strategic whole and stimulates a host of possibilities that may be obscured by present accounting methods.

CONCLUSION

Without knowing the future value of a customer, it is difficult to project how much an investor can afford to spend to acquire one.²⁴ With an accomplished LTVA, investing in new customer acquisition becomes a very simple and practical process. LTVA analysis predicts that the marketing mix is capable of making \$2.84 per customer. Alternatively, LTV BE%, a far-reaching benchmark, allows one to make an immediate strategic decision and gain profitability in the long run.

When adventuring into the complexities of the LTV implementation, it is necessary to possess a practical LTV model to address an established analytic goal, as well as an LTV functional data-mart to expedite data processing. All efforts should be made to ensure that the LTV procedure is efficient and practical, which is generally a prerequisite for most practitioners who want to get a job done at minimum cost. LTV study embodies the very essence of the DM concept. In order to pursue a competitive strategy, a direct marketer relies on a constant stream of data on which to base judgments and on which to make adjustments.²⁵ With this cutting-edge technique, one can shift the goals of marketing from a short-term focus to long-term benefits.

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