

Using Marketing Analytics in the Entertainment Industry

The marketing world, in particular the direct marketing world, has relied on the use of data mining and analytics to deliver marketing solutions for many years. Despite the significant investment required at the time, the benefits of data mining and analytics have been leveraged by some direct marketing firms since the 1960's. Today, a significant investment is no longer a requirement. In fact, analytics have become a regular function within the marketing discipline and predictive modeling being the preferred data mining option.

Marketers across all disciplines now recognize that their vision of targeting the right names with the right offer and at the right time can only be achieved through the use of data mining and analytics. Two books that have become quite popular in the business world - Competing in Analytics by Thomas Davenport and Moneyball by Michael Lewis - emphasize the importance of analytics in almost all disciplines. Thomas Davenport, in particular, discusses the notion of data mining and analytics as being a key competitive advantage for corporate success in the 21st century. Both authors offer examples of how data mining and analytics have been adopted by the entertainment industry as a key competitive discipline.

To those of us who have been schooled within the direct marketing discipline, we inherently believe that every business can leverage analytics. Yet, as with any business problem or challenge, we need to understand how a business generates profits and whether or not profitability can be done improved (increased ROI) through the use of data. In the business of sports, the first stage of data mining (Identifying the Business Problem) would be to determine if a data mining or analytical need exists. For example, if you are a flagship team like the Toronto Maple Leafs or New York Yankees, you do not need to be very effective in achieving your goal of 'putting more bums in seats in a cost effective manner'. The reality for these organizations is that the product they offer is highly price inelastic – the price charged for the product can easily be increased or decreased with minimal impact on overall ticket demand. The use of analytics and data mining within this context is meaningless.

However, for most sports organizations, putting more bums seats in a cost effective manner is a primary objective. Historically, sports marketers have attempted to increase attendance and grow ticket revenue by simply allocating more marketing dollars to mass advertising. But this has not always achieved the objective of 'putting bums in seats' in a cost effective manner. Sports marketers need to understand the concept that "All Fans are not created equal" which is awfully similar to the standard CRM slogan of "Not all customers are created equal". Of course, the capability to do this is based on data and whether or not information is being captured and stored in somewhere. Unless someone at the receiving end of a ticket purchase transaction is capturing information about the ticket buyer, the activity or event becomes unavailable for any future analytics. This is important to understand as a significant portion of a team's ticket revenues might arise from unrecorded events like when tickets are purchased with cash at an arena or ball park. This limitation of data capture at the individual level obviously represents a barrier to many sports organizations who are considering the use of analytics within their marketing efforts. To pursue analytics in a more meaningful way, sports organizations need to think of alternative ways of capturing the transaction behaviour for future analytical purposes.

Technology is making it easier to capture purchase behaviour. For example, much information can be captured during online purchases. Using their creativity, marketers can expand information capture beyond ticket purchase to include concessions and merchandise. Through increased ability to capture data at the individual level, marketers can develop better programs to encourage incremental spend in both ticket and non ticket type transactions. The growing trend of online purchases has accelerated the marketer’s ability to capture individual level data and more importantly, to use this data and information as a way to differentiate customers

Capturing an individual or fan’s historic purchase behaviour enables organizations to take advantage of direct marketing programs like direct mail or email. Generally, organizations will follow an initial purchase with multiple offers through email or direct mail for tickets to future events, without taking full advantage of the information acquired to optimize the effectiveness of the marketing program. Oftentimes the content of the communication is mass-oriented, despite the opportunity these tactics offer to create a “one to one” exchange. Most sports fans (all individuals for that matter) want to be recognized for their uniqueness as a fan. This fact is a central tenet to the basic CRM marketing principle of knowing and understanding your customer. Sports/Entertainment marketers must analyse historical purchase behaviour to better understand customer buying patterns.

The following is an example of an analytics exercise that might be undertaken by the Toronto Blue Jays to improve the effectiveness of ticket selling programs.

The first step would be a segmentation exercise in which customers are listed in order of ticket purchase amount (sales revenue) from highest to lowest, and then grouped into segments such as high, medium, and low value. This could be done by initialing grouping customers into “deciles” or individual buckets representing 10% of the total customer base, and then combining these buckets into 3 groups. For each group of customers, we would determine sales revenue and the contribution each group makes to overall revenue. This example is illustrated in Table 1 below:

Table 1

Decile	# of Fans	Average sales revenue per customer	% of all revenue captured in decile	Segment
1	50000	\$2,200	33.18%	High
2	50000	\$1,800	27.15%	High
3	50000	\$1,000	15.08%	Medium
4	50000	\$800	12.07%	Medium
5	50000	\$500	7.54%	Medium
6	50000	\$100	1.51%	Low
7	50000	\$80	1.21%	Low
8	50000	\$60	0.90%	Low
9	50000	\$50	0.75%	Low
10	50000	\$40	0.60%	Low

In this example individual-level information has been captured through some type of electronic purchase (via phone or online) for 500,000 individual Blue Jays ticket buyers. Information from this initial analysis reveals that high value customers representing 20% of Blue Jays ticket buyers account for close to 60% of all ticket revenue; medium value customers represent 30% of the base and account for 35% of fan revenue; and low value customers representing 50% of total ticket buyers account for only 5% of all ticket revenue. Keep in mind that these revenue numbers only include information captured electronically; tickets purchased with cash at the gate will not involve the capture of personal information.

Even without capturing the data on all ticket purchasers, much information can be gained from that portion of the fan base that does have recorded historical revenue. An experienced CRM analytics practitioner would say that knowledge of what is recorded is good enough to identify or target customers for various CRM initiatives.

A second step in the analysis would be to analyze each of the different value segments to identify opportunities for marketing programs designed to address the specific needs of individuals within those segments. For example:

- In the high value group, we may want to identify fans that are declining in their ticket purchase behaviour and create retention type programs e.g. “VIP” program to stabilize the purchase behaviour of these valued, high risk customers;
- For the medium value group, identifying the customers that most resemble high value customers would provide a targeted group for which programs may be created to increase their ticket purchases and capture their high value potential
- For low value customers, low cost email correspondence and traditional mass marketing might represent the best marketing approach

Using a basic approach to analytics like those described above enables an organization to establish targeted marketing programs that treat customers uniquely and recognize the value of each customer to the organization.

Even if “putting bums in seats” is not a priority for such super brands as the Toronto Maple Leafs or the Boston Red Sox , there is always the opportunity to expand revenue by selling team merchandise. If individual fan data is captured for merchandise sales, specific merchandise purchase models could be developed. This information in turn could be over-layered with the value segments discussed earlier to produce more complex and customer-specific segments:

Table 2

Value Segment	Propensity to Purchase Leaf Jersey	Propensity to purchase Autgraph Hockey Stick	Propensity to Purchase Leaf Mugs	.. Etc
High				
Medium				
Low				

From the above information, we might find that customers in the high value segment are more likely to purchase Toronto Maple Leaf jerseys, while those customers in the Low Value segment are more likely to purchase branded mugs. Marketing campaigns can be developed to target customers with offers for merchandise that the customer is most likely to purchase. Further stratification of each value segment would enable the organization to identify customers in other segments that may have a propensity to purchase higher value merchandise. Ultimately, the most relevant merchandise offers can be matched to the right customers.

Table 3

Decile based on likelihood of purchasing Leafs Jersey	Propensity to Purchase Leafs Jersey		
	High Value	Medium Value	Low Value
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

As we can see, the use of data can be used to develop programs to enhance and reinforce ticket buying behaviour. At the same time, it can also be used to drive incremental revenue in other non ticket type revenue transactions. The world of sports is just in its infancy in adopting these principles. But the explosive growth in electronic data capture will cause these organizations to incorporate these techniques and approaches as part of their standard business practices.