

Woodlawn Associates
Management Consulting

Extracts from:

**Residential Solar
Marketing Effectiveness**

March 2012
(First Revised Edition, Mk II)

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- **How residential solar is marketed and sold**
 - How much do dealers spend to acquire each customer?
 - What is the “typical” marketing mix?
 - Which channels account for the most customers?
 - How do dealers vary on key metrics?
- **Optimizing overall customer acquisition cost and profitability**
 - Which marketing channels are most effective in terms of new customers per dollar spent?
 - What is the most efficient mix of channels?
- **Maximizing the potential of each channel**
- **Other notes**
- **Summary**
- **Appendix**

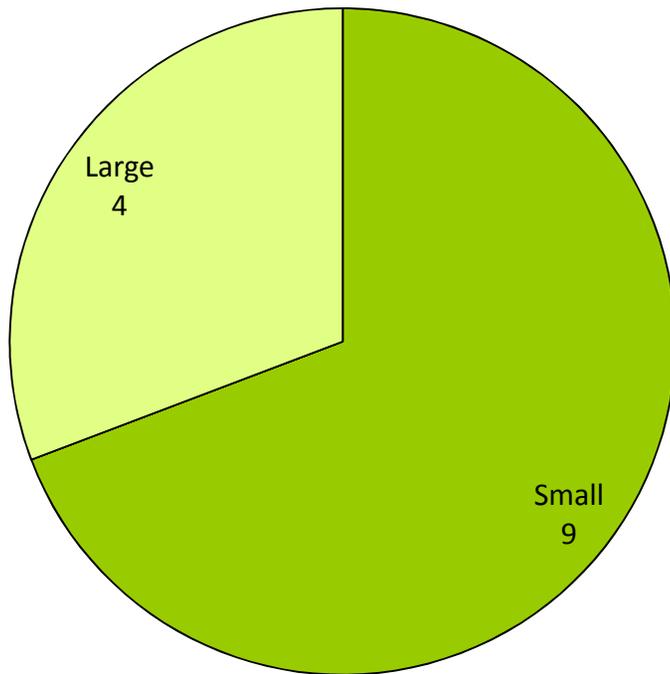
About Woodlawn Associates



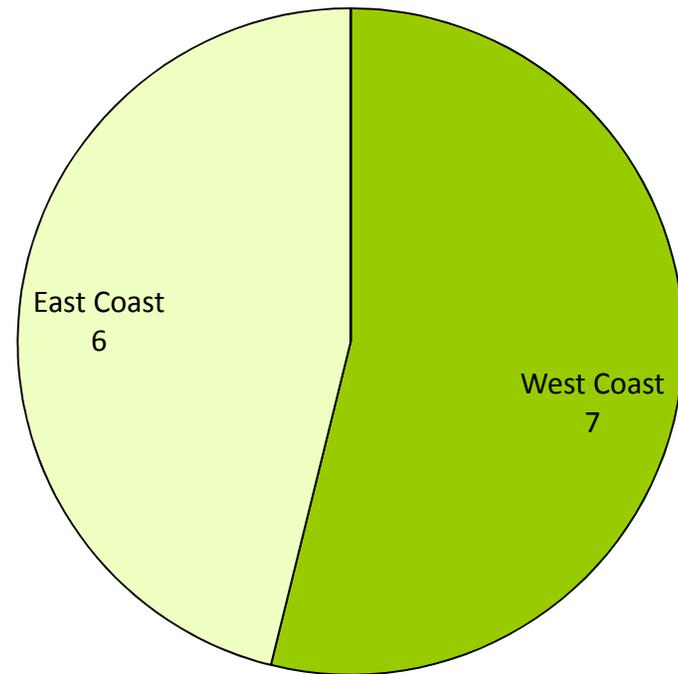
- **Management consulting firm with significant experience in solar:**
 - Go-to-market strategy for module and inverter manufacturers
 - Business strategy for module manufacturers
 - Residential solar finance
 - Residential dealer business strategy
 - Competitive analysis
- **Offices in Chicago and San Francisco**

Data provided by 13 co-sponsoring solar dealers

Dealer Size



Primary Dealer Geography



<u>Category</u>	<u>Systems Sold / Month</u>
Small	<15
Medium	15-29
Large	30+

Executive summary

- **Study based on data from 13 U.S. residential solar dealers**
 - Representative in size and geography of broader industry
- **Dealers spend an average of 17% of revenues on acquisition, or approximately \$5400 per customer**
 - Ranges from \$1810 to \$9605 per customer, but most are \$4000-6500
- **Cost per lead is approximately \$210*, but only 14% of leads convert. Most of acquisition cost is in Sales**
 - Channels generating high quality leads are inexpensive because Sales needs to spend much less time to yield a customer
 - Channels such as third-party leads, which have a low cost per lead—but also a low conversion rate—are actually among the most expensive channels
- **Dealers vary widely in the mix of channels they use**
 - They spend the most money on online advertising (SEM and otherwise)
- **Customer referrals are the largest single source of customers and also have the lowest acquisition cost, at about \$2400 per customer**
 - Despite its being the lowest cost large channel, many dealers are not as systematic or creative as possible about sourcing leads from this channel
- **In general, we believe there is considerable opportunity to shift spending from expensive, inefficient channels to less expensive, more efficient channels and to optimize within channels**

Total acquisition cost has three main components

Components of Acquisition Cost

Attributable Marketing Cost

+

Indirect Marketing Cost

+

Sales Cost

Description

Costs to *generate* leads that increase directly with the amount of a particular type of marketing

Costs to *generate* leads that cannot be directly attributed to a particular type of marketing

Costs to *convert* leads to customers

Examples

- Media buys, internet ad fees
- Per unit charges for direct mail; printing
- Cost of leads from third parties, referral fees
- Costs of designing particular campaigns
- Staffing costs for events, retail, and door-to-door
- Depreciation for items such as show booths

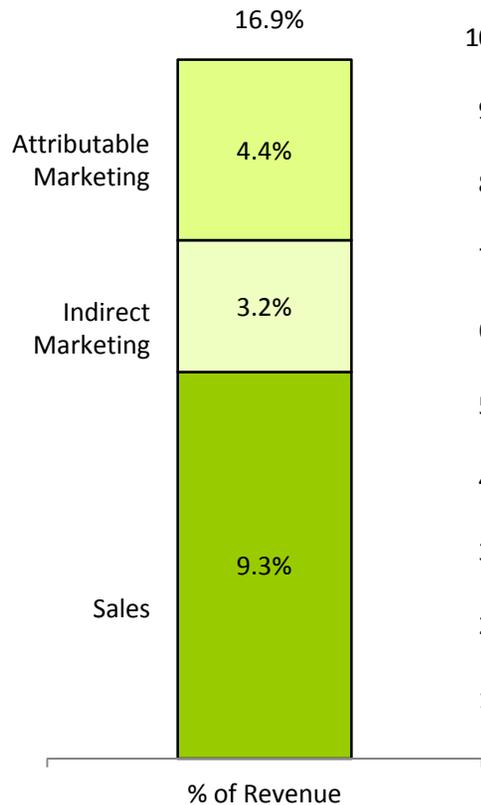
- Cost of marketing staff (salary, benefits, incentive comp.)*
- Brand consulting, logo design, ad agency retainers, business card printing
- Other marketing overhead (rent, IT, travel, etc.)*

- Sales salaries, benefits, and commissions*
- Cost associated with generating contracts, including design costs prior to contract
- Depreciation for items used by / benefiting Sales, such as vehicles
- CRM and design software expenses
- Other sales overhead (rent, IT, travel, etc.)*

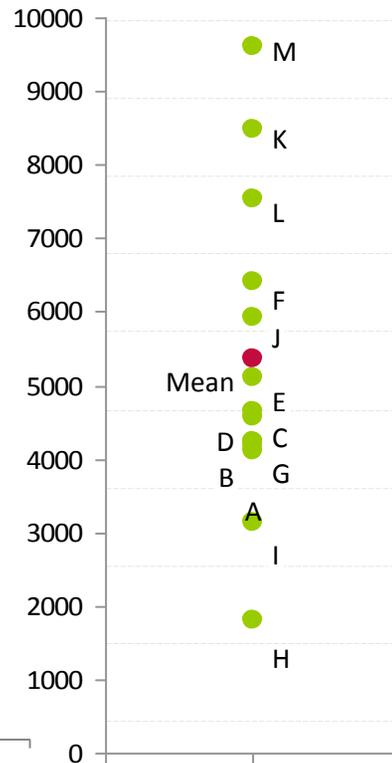
Notes: * Except as may be included in Attributable Marketing Cost for categories such as events, retail, and door-to-door.

Dealers spend an average of 17% of revenues on acquisition, or \$5373 per customer

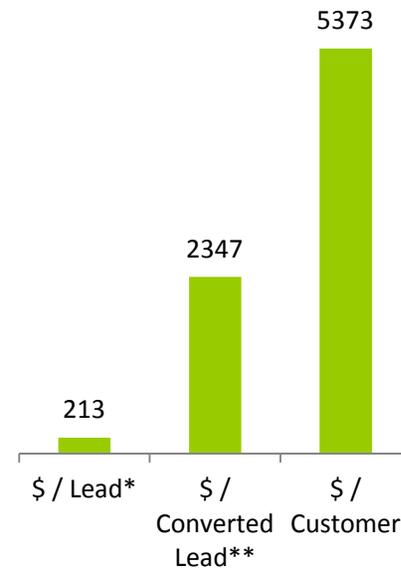
Average Acquisition Expense, By Type (% of Revenue)



Average Cost of Customer Acquisition, by Dealer (\$)



Average Cost per Lead, per Converted Lead, and per Customer (\$)



- Average acquisition cost ranges from \$1810 to \$9605 among dealers in the study
 - One often hears anecdotal figures of \$1500 to \$2500
- On average, East Coast dealers reported higher acquisition costs than their West Coast counterparts
 - Differences not statistically significant at 90% confidence level
 - See page 39 for detail
- About 96% of acquisition cost is in conversion of leads to customers
 - Sales and Marketing jointly responsible for conversion
 - On average it takes 8 leads to yield one customer (12.4% conversion rate)*
- See Appendix for a comprehensive comparison of dealers on these and other metrics

Source: Woodlawn Associates; n=13

Notes: * Omits one dealer counting only qualified leads, which have a higher cost (and higher conversion rate). Including this dealer, average conversion rate was 13.9%.

** Equal to total marketing cost / customer

Acquisition cost per customer for a given channel (or channels) is:

$$\boxed{\text{Acquisition Cost / Customer}} = \boxed{\text{Marketing Cost / Lead}} / \boxed{\text{Customers / Lead ("Conversion Rate")}} + \boxed{\text{Sales Cost / Customer}}$$

Where:

Marketing Cost / Lead is a function of:

- (a) the cost of all directly attributable and allocated marketing activities
- (b) the inherent receptivity of potential customers to the channels
- (c) the quality of marketing efforts

Conversion Rate is a function of:

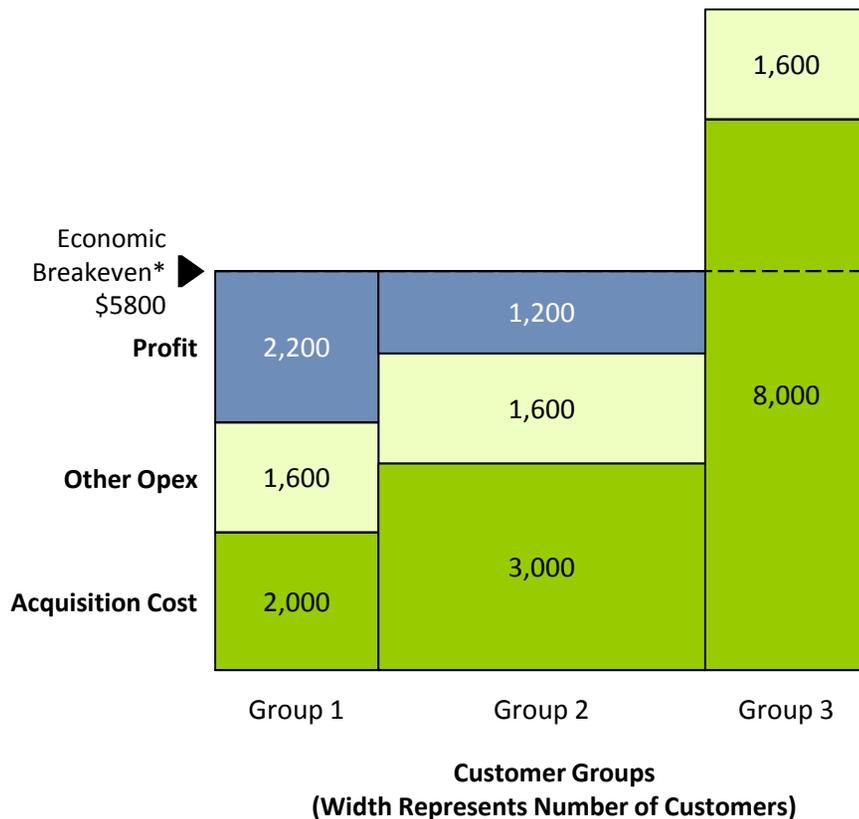
- (a) the quality of the marketing efforts (quality of leads)
- (b) the inherent receptivity of potential customers in the channels
- (c) the quality of the sales efforts (likelihood of conversion given a certain quality of lead)

Sales Cost / Customer is a function of:

- (a) the cost of all activities to convert leads to customers
- (b) the time spent to know if a lead from this channel will convert ("difficulty factor")

Minimizing acquisition cost is not the same as maximizing profit

Operating Expense to Acquire Customers ,
by Group
(Illustrative Example Only)

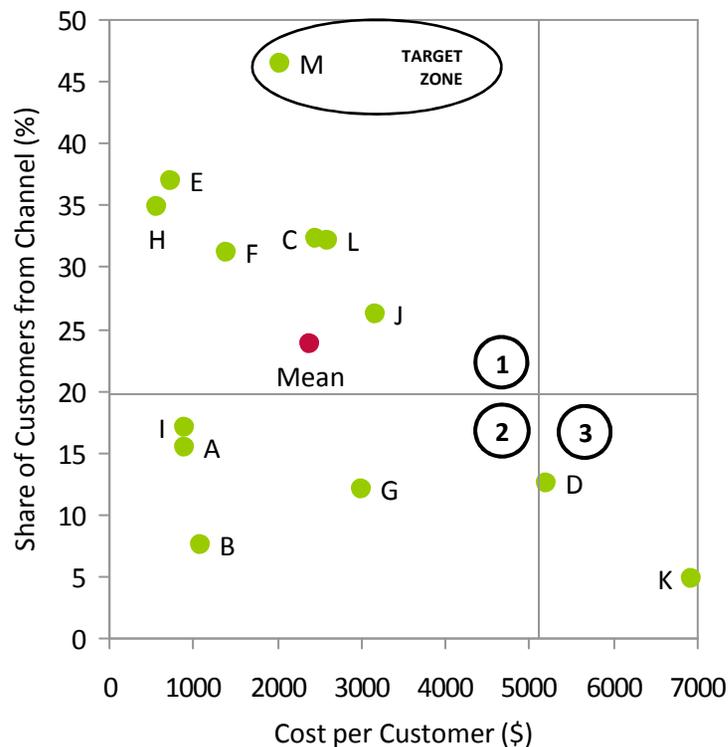


- Firing your Marketing and Sales teams would minimize acquisition cost, but obviously would not maximize profit
- To maximize profit, keep expanding the use of each channel until the net margin is at the economic breakeven point* or the customers from that channel are truly exhausted
- In the example on the left, suppose a dealer has calculated that it must make at least \$5800 in gross margin on a sale to break even, and that its non-acquisition operating expenses are \$1600
- If the dealer sells only to Group 1, its average acquisition cost is only \$2000, and its net profit / customer is \$2200
- If the dealer spends more money per customer to acquire customers in Group 2, its average acquisition cost will increase, but so will its profit
 - Could be a new group of customers through the same marketing channel or a different marketing channel
 - The \$3000 cost to acquire customers for this group plus the \$1600 in other opex is still less than the breakeven point
 - The profit margin on Group 2 customers is lower than for Group 1, but overall dealer profit still increases
- However, this dealer should avoid marketing to Group 3. The cost of acquiring these customers is so high overall company profits will decrease

Notes: * The point at which the economic profit on a sale is zero, after taking into account the cost of capital.
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Despite it being the lowest cost large channel, many dealers have not optimized for customer referrals

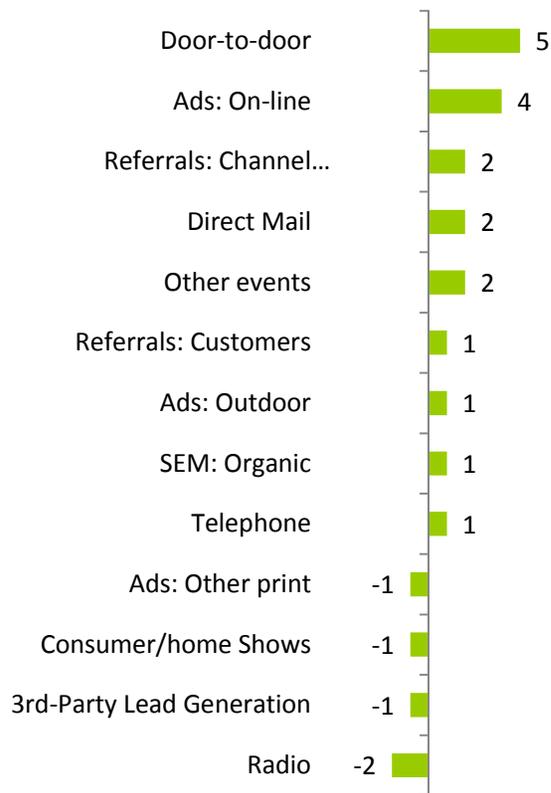
**Customer Referrals:
Cost per Customer vs.
Share of Customers from this Channel**



- Surprisingly, we find no relationship between the amount of spending on referrals and the share of a dealer’s customers from this channel
 - Suggests significant opportunity for optimization
- Dealers in Sector 1 have relatively many referrals, but could afford to spend more on this channel to increase business further
 - Cost / customer is still below industry average for all channels
 - Shift spending from other, more expensive channels
 - Aim for “TARGET ZONE” where share of customers increases but cost is still below economic breakeven
- Dealers in Sector 2 spend as much per customer in this channel as those in Sector 1 but get few customers. They need to systematize their efforts to seek referrals
- Dealers in Sector 3 have both high cost / customer and low share of business from customer referrals, and should both examine why cost is so high and revamp their system for seeking referrals
- Full version of report includes similar analysis for eight additional channels

Overall, dealers said they expect to increase use of canvassing and online in 2012, but use less radio

Number of Dealers Increasing Weight of each Channel in 2012 Mix (net # of mentions)



- Data represents dealers' view before this survey; several have mentioned intention to change strategies after seeing preliminary report
- Several dealers mentioned intention to increase use of door-to-door canvassing...
 - "We are going to start doing door-to-door in neighborhoods where we have installs." Dealer G
 - "We will definitely do more canvassing – that seems to be our horse of choice. " Dealer J
- ...though some are going the other direction
 - "We will also probably do less canvassing...The problem is if you are working down the right side of a street, there is another firm working the left side, and you will meet a third firm along the way. Good neighborhoods are saturated and we are wearing out our welcome." Dealer C
- Dealers also expect to more heavily weight online advertising
 - "This year we are going to work more web sites locally, like the site of the local newspaper." Dealer A
 - "Online will be a bigger share this year. We have a new web site and, with our new message, we think it will resonate." Dealer C
 - "We'll spend more money this year on SEO and enhancing the website...We are convinced that spending on the website will give a better return than hiring another salesperson..." Dealer G
- Overall, dealers plan to do less radio
 - "We will do less radio. We just don't have enough ammo." Dealer C
 - "We will decrease radio, although I am thinking about underwriting the local public radio station." Dealer A

Dealers say vendors can help with marketing in three key ways: low prices, leads, and category awareness

- **Above all, dealers want competitive pricing**

- “In the past Kyocera was probably the best [at helping with marketing] because they offered this amazing co-op program...But we are not selling them much anymore because we found we could get the same quality and performance at a lower price.”

Dealer E

- **They would also like leads**

- “To be helpful, I would say vendors buy internet ads or keywords, or do radio advertising, and then aggregate and allocate the leads to their dealers....Canadian Solar buys keywords and gives us leads—that’s really helpful.”

Dealer C

- “If they would do mass mailing that would be good. I’d like to see them do that and put my brand on as co-branding.”

Dealer L

- **But, they do not necessarily feel their vendors are good at lead generation**

- With some exceptions, vendor web sites leave a lot to be desired as consumer marketing tools

- “They could send us leads. Actually, they all say they will but they don’t.”

Dealer A

- “They are terrible at leads and shouldn’t try to collect them.”

Dealer I

- **Dealers would like greater awareness of solar, though they are not sure they not want vendors to invest in brand marketing**

- “Vendors should PARTNER with their dealers and not push their brand so hard...[they] should...not confuse the customer by leading with their brand.”

Dealer D

- “We are not trying to sell the ‘product’ much these days, so I wouldn’t tell them to try to go build a brand.”

Dealer E

- **Since each vendor’s starting point and assets are different, Woodlawn Associates’ recommendations for vendors vary by company. Contact us for company-specific recommendations**

Additional content included in full version:

- **Detailed information on variation in marketing mix**
- **Average share of marketing spending going to each channel**
- **Average share of customers coming from each channel**
- **Average cost of customer acquisition for each channel**
 - Also includes cost of acquisition for best-performing dealer in each channel (for channels with a cost above the overall average)
- **Average conversion rate in each channel**
- **Analysis of dealer-by-dealer performance in eight additional channels, with recommendations for channel optimization**
- **Review of sales compensation methods and link to acquisition performance**
- **Detailed comparison of dealers on key metrics**
 - % of revenue and \$ per customer spent on marketing, sales, and customer acquisition overall
 - Cost per lead
 - Conversion rate
- **Advice about how to optimize performance in each channel, the mix of channels, and overall acquisition cost and profitability**
- **Implications and recommendations for vendors (for vendors only)**

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