ACCELERATING NEW TECHNOLOGY ADOPTION

Pradeep Anand, President, Seeta Resources LLC

MIT economist Lester Thurow once posited that building wealth in a society was largely dependent on entrepreneurs who see financial opportunities and gain in changing human habits. However, entrepreneurship's creative and destructive powers are largely dependent on social and other systems that give entrepreneurs the freedom to destroy the old. "Societies that aren't ready to break with the past aren't willing to let entrepreneurs come into existence," he added.

A combination of conditions – a workforce dominated by aging baby-boomers and risk aversion, amongst many – promote the creation of strong habits in the oil & gas industry, creating firms that *aren't ready to break with the past*. Entrepreneurs, at start-ups, and *intrapreneurs*, at existing companies, who seek to 'change habits' in the E&P industry are often discouraged by the insular, impenetrable, monolithic exterior of their client firms and their close resemblance to anti-entrepreneurial societies. They blanch at the magnitude of resource-force needed to overcome the inertial forces in the industry. Consequently, executives at oil companies, oilfield service companies, large and small, and start-ups have a hard time justifying investments in new technologies.

However, many perceptive purveyors of new technologies, who have singular expertise in and perspectives of the industry, have been successful in the E&P business. Here are some common characteristics of entrepreneurial firms that have successfully speeded up technology adoption in the E&P industry, and avoided pyrrhic victories.

Many start with and attract a passionate team, but successful ones have hustle, flexibility, and speed to maneuver through difficult market terrains that are marked with obstacles and challenges. The team is built around a diverse but top quality core team, with additions coming on board through strong references. Naysayers or the disgruntled are systematically discarded.

The role of leadership at successful new technology firms, then, is that of a midwife or a catalyst. It does not implant ideas and concepts but, deeply stirs the superior team, and genuinely alters the way the organization thinks and acts by asking questions that reveal limitations, doubts, fallacies, and spuriousness of existing solutions.

These firms have an organizational structure and command system that the Germans call *Auftragstaktik* – a mission oriented one where a directive is to be followed in its spirit, not its letter, where greater leeway is given to the staff to execute and affect changes in customer behavior. However, they simultaneously record their successful processes for rapid replication and improvement.

Intrapreneurship-driven new technologies are often taken to market through mature organizations who sell on familiar turfs with familiar methods, where *Befehl* – an order that has to be obeyed to the letter – prevails. This is often a reason for failure of intrapreneurial efforts at existing companies.

Successful new technology firms understand that they have limited cash and monitor their cash flow constantly. They gauge their strengths, capabilities, and limitations, to focus on realistic objectives, exploiting their resources on quick hits in marginal changes in habits.

They accomplish this by intimately understanding and exploiting their market's three major forces – business climate, customers, and competition. Of these, uncontrollable business issues such as oil prices, regulation, politics, economics, taxes, inclemental weather, and others are often turned into positive forces and drivers that are additive to the arsenal used for creating better habits.

To speed up new technology adoption, they comprehend the *nature* of their customers, looking for cracks in the levees of existing habits. They engage with their customers to garner insights on those few sweet spots in their product/service repertoire that are critical for quick victories, so important in building initial momentum. They focus on early, rapid adopters of new technologies – typically, business units that have low market share, or have limited budgets and resources, or are remote outposts of large firms, with little access to corporate and other resources. These units are constantly challenged to meet market/corporate expectations and possess the local decision-making authority to seek relief through new technologies.

A successful firm's knowledge of the market terrain focuses on *vested interests*, whose power, revenue, and profitability bases, in existing habits, would be demolished, when habits change. Pockets in customer organizations that are intimately tied to competitive processes and technologies are viewed in the same manner as direct competitors. Successful firms avoid wasting their limited resources and steer clear from these camouflaged competitive coteries.

Winners not only stay away from incumbent competitors to their solutions but also make special efforts to appear vaporous and stay off their radar screens. Prudently, they do not attack these competitors head-on but, when necessary, in the flanks, taking small imperceptible bites. In addition, they are elusive and postpone a direct confrontation as long as possible, enticing an exhausted pursuing competitor to a friendly customer turf for a showdown, whose triumphant outcome is all but predetermined.

Successful new-technology entrepreneurs are aces at execution. They package, position, price, sell, and support their products and services exceptionally well, in their chosen customer base. They bring products to markets fast and conduct live market research to improve their offering, diligently avoiding the expensive trap that many product developers fall into, that of *creeping elegance*. In addition, they understand the importance of product positioning and continually improve the effectiveness of their product communications.

Most important, despite being cash starved, successful technology firms are pricing hawks and use pricing as an effective marketing tool. They don't give their innovations away. Pricing is not based on costs but instead on value, in comparison to the outcomes of using their technologies and the cost of habits they replace. They recognize that customers often will not share details of the value they deliver, and will work hard at creating competitive environments to reduce their costs of buying this new technology. So, they focus on recovering returns on their investments, sooner rather than later.

Most new technologies go through three phases of competition and differentiation. The first phase is based on product features/benefits, where customers will bear various inconveniences, including geographic and temporal ones, as long they have the ability to utilize the product. In other words, (any reasonable) price is no object. During the second phase, product features/benefits are somewhat equalized, and differentiation is on product surrounds, such as product availability, with limited price competition on the horizon. During the third phase, product and surround advantages have been neutralized by competition, and the prevailing differentiator is pricing.

Successful innovation firms recognize these cycles, and use them to their financial benefit, constantly staying ahead of the competition, tripping them, while creating and recreating multiple product cycles, and routinely and efficiently removing costs out of them to compete in the third phase. Some firms, especially those with high volume sales, ignore the first two phases and enter markets as if they are already in phase three to remove pricing umbrellas that could protect their competition's entry into the market. From the outset, these firms set competitive price targets and diligently work at reducing their costs to meet investors' return expectations at these prices.

In addition, successful new technology firms have great sales and support people, who can convince their selected customers to change their habits, with their firm's solutions. Usually, the chief executive leads the sales effort. In addition, the sales organization is given the freedom to break away from the traditional straitjacketed *sales funnel* and the CRM (Customer Relationship Management) sales processes that are based on mature businesses playing the odds.

Instead, to accelerate new technology adoption, every salesperson is considered a strategic hunter, seeking opportunities in the white waters of a *sales vortex*, where each rotation has four stages - *comprehend* the customer's habits and problems, *create* solutions around the new technology, *conquer* the customer, and *cultivate* for future benefits (see Figure).

Also, after a few successes at changing habits for the better, successful firms publicize these victories, letting their customer champions speak and promote their case histories to their eager peers. Smart firms use the media – newspapers, trade journals, magazines, and others – to promote their successes.

These few critical elements have contributed to faster uptake and superior financial results for new technologies, but over time, even novel strategies and fluid maneuvers age and become conventional because humans are conformists by nature. The danger is that once a specific strategy is successful, it hardens into a principle, and is applied indiscriminately. Successful firms focus on execution effectiveness and keep their operations turning and churning, continuously destroying clumps of conformity, bringing air into their soil.

Pradeep Anand is President of Seeta Resources (www.seeta.com), a consulting firm focused on accelerating revenue and margin growth of its client companies that range from FORTUNE 500 companies to technology start-ups.

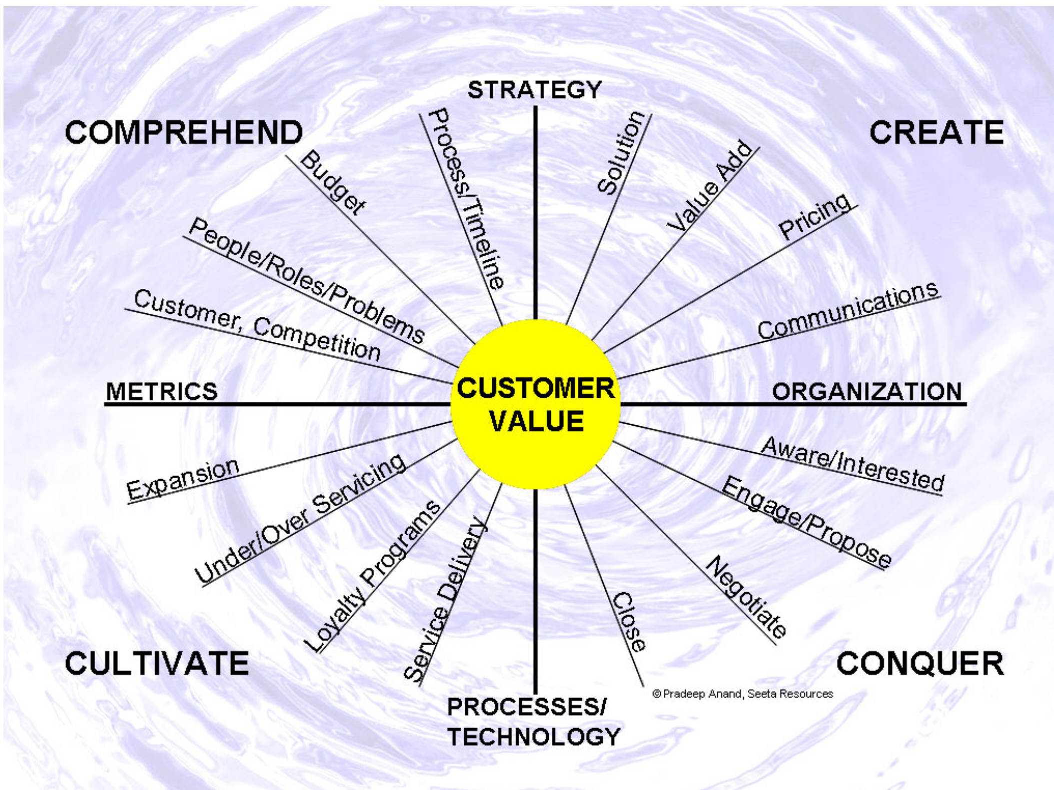

Figure: Managing Customers in a Sales Vortex