PAPERS

Reputation management in the biotechnology industry

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Date received (in revised form): 24th July, 2002

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Keywords: *reputation, business model, value chain, corporate communications*

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Abstract

As biotechnology companies mature, the focus of their activities shifts from a research-and-development orientation to a business model based on marketed products that deliver revenue and earnings. Companies are thus striving to occupy key positions at every stage of the industry's evolving value chain, covering each step from gene identification to patient care. The management of corporate reputation must therefore be based on the new biotechnology business model, which takes into account the shifting industry value chain. The authors discuss how the function of corporate communications in biotechnology is changing along with the industry itself, as well as the key components of a biotechnology company's reputation in the current environment. Additionally, a case study of Cephalon, Inc., is presented to illustrate how positive and negative events can affect corporate reputation in the biotechnology industry. The authors conclude with some observations on tactical solutions for building and managing corporate reputation in today's biotechnology industry.

INTRODUCTION

The evolution of the biotechnology industry offers some important lessons on the importance of reputation management; the industry's growth over the last five years is particularly illustrative. As few as five years ago some company leaders were full of hubris, seemingly ignoring the so-called 'old rules' about getting a product to market, generating revenue and producing earnings for shareholders. Many companies found they could be profitable by managing their 'burn rates' and ignoring other market rules and fundamentals. However, for some companies, such an approach was a recipe for failure, proving that many of the old rules still apply.

Clearly, the metrics for managing reputation are changing. Today we have a generation of biotechnology and biopharmaceutical companies that are maturing; companies are recognising that the reality of our business is based on marketed products delivering revenue and earnings. This paper will explore why good corporate reputations must match the new reality, in which many biotechnology companies are transitioning from a strict R&D orientation to a business model that is increasingly focused on products, profits and shareholder value. We will identify how the role of public relations practitioners and communications professionals is changing along with the industry, and we will suggest the key components of a biotechnology company's reputation. Additionally, we offer a case study based on Cephalon's experience over the past five-plus years, a period during which the company experienced a number of positive and negative events that had a noticeable impact on Cephalon's corporate reputation.

THE CHANGING BUSINESS MODEL

One of the most significant recent changes in the biotechnology industry is that companies are moving away from a 'pure R&D play' to a business model focused more on selling products, making money and generating value for shareholders. Three years ago, platform technology and science were the key

The components of market valuation are changing

drivers of a biotechnology company's valuation. There was an enormous amount of attention paid to science, especially in the genomics sector, and companies with exciting technology platforms were driving huge valuations. Today, valuation is driven by an approved product with retained economics, significant market potential and a long patent life. Many companies are delivering on the new business model, as shown by the growing number of profitable biotechnology companies – now estimated to be 15.[1]

Millennium illustrates the importance of positioning at every stage of the industry's value chain

Millennium Pharmaceuticals – which many industry insiders considered the 'king of the pure R&D play' – illustrates the shift taking place. As Millennium CEO Mark Levin noted last year in an interview with the *Harvard Business* Review:[2]

> we're seeing fundamental changes not only in the nature of drugs and drug making but also in the way value is created and profits are distributed throughout the industry . . . A company's position in [the drug development] process is critical in developing its profit potential.

Levin noted that when Millennium was founded in 1993, it situated itself

> at the furthest upstream end of the industry value chain: doing basic research into genes and proteins and selling their findings to big pharmaceutical companies. But as the distribution of value in the industry has changed, we've moved downstream, toward the patients who actually use and pay for the drugs.

Levin also observed that

> the value in our industry is shifting again. . . toward the more mechanical tasks of identifying, testing, and manufacturing molecules that will affect the proteins produced by genes, and which become the pills and serums we sell.

Companies such as Millennium – most biotechnology companies, actually – are now seeking to develop capabilities and a strong presence in *every stage* of the industry's value chain.

The imperative to occupy all the key positions in the industry value chain is reflected in the changing focus of biotechnology public relations (PR). In the industry's early years, reputation management (to the extent it was practised) essentially was driven by necessity or efficiency, with the efficiency of communications viewed as a function of PR inputs over their cost. In this model, issuing a continuing a series of low-cost inputs such as press releases was thought to be an efficient way to deliver messages and manage reputation.

The efficiency model gradually evolved into the effectiveness model, or the ratio of PR outputs over cost. With this model, what mattered was not that the company issued many releases, but that the company's message was effectively communicated in the resulting coverage.

Reputation correlates with financial performance and ROI

The return on investment (ROI) model, which positions business outcomes as the numerator and cost as the denominator, is where the PR function and the biopharmaceutical company need to be. Calculating an ROI puts a financial value on achieving the business objective, which is usually revenue. Reputation thus becomes increasingly dependent on a company's ability to execute a business model; execution results in a good reputation, which in turn correlates highly with strong financial performance and overall success.

Without a doubt, a favourable company reputation delivers financial payoffs. The correlation between a company's reputation and its financial performance (see Table 1) is demonstrated in a survey of *Fortune* magazine subscribers, an excellent surrogate for decision-makers and investors. The research, which was conducted with Yankelovich Partners, measured the impact of company reputation on share price.

Researchers assigned a 'corporate equity' score to each company reflecting a

Table 1: Financial rewards of good reputation

Corporate equity	Price/earnings ratio
High equity	28.4
Moderate equity	25.7
Low equity	25.4

Source: Council of Public Relations Firms web site; *Fortune*/Yankelovich Partners Inc. (1998).[3]

weighted combination of awareness, familiarity, overall impression, perceptions and the likelihood to engage in supportive behaviour (eg likelihood to invest, support the company during a crisis, recommend as a good place to work).

High corporate equity yields greater returns

Companies with high corporate equity had price/earnings (P/E) ratios that were nearly 12 per cent higher than those with low equity. The researchers estimated that for the average *Fortune* 500 company, a 12 per cent lift in its corporate equity score translated into a market capitalisation increase of US$5bn.[3] More recently, the top 10 companies in the 2001 *Fortune* 'Most Admired' companies survey outdistanced the S&P500 Index by a wide margin (+14.8 per cent) in terms of compound annual return over a five year period.[4] Clearly, the link between reputation and financial performance exists.

THE COMMUNICATIONS CHALLENGE

Intangible assets assume greater importance in reputation management

Historically, the value of intangible assets was considered relatively modest compared with tangible assets such as buildings, inventory and equipment. We now know this is not always the case. In today's fast-changing, knowledge-based economy, intangible assets – such as brand strength, customer relationships, intellectual property and human capital – can make up a large portion of a company's value. Indeed, it has been estimated that intangible assets can provide three times as much value as tangible assets.[5] Promoting those intangible assets, as well as tangible assets, is therefore critical to managing reputation and share price.

Demonstrating the value of corporate communications

The Cap Gemini Ernst & Young Center for Business Innovation estimates that up to 35 per cent of investment decisions made by sell-side and buy-side analysts are based on non-financial factors.[6] For those who are responsible for corporate communications within the biotechnology sector, the challenge lies in communicating the value of their company's intangible assets that contribute to enhancing reputation and driving market value. The Council of Public Relations Firms commissioned a spending survey of corporate communications directors at 476 companies ranked in the 1999 *Fortune* 'Most Admired' company listing. As shown in Figure 1, an analysis of the corporate communications budgets of the participating companies within each quintile of the reputation ranking validates a close relationship between an investment in corporate communications and corporate reputation. Top-ranked, highly regarded companies spend significantly more on communications than those companies that are less highly regarded.[7]

Increasingly, chief executives in biotechnology companies need to drive marketing efforts and marshal the support of various constituencies. Consequently, corporate communicators can provide a valuable service to their CEOs and their companies by demonstrating the value of communications in the rapidly evolving biotechnology industry. To do so, the following principles should be kept in mind:

- **Use business metrics.** Just as marketers are judged on market share, so, too, should professional communicators be measured on PR metrics such as share of voice and penetration of message. As the adage goes, what gets measured gets managed.

- **Measure change in perception and behaviour.** Companies need to measure how communication of corporate and product messages are

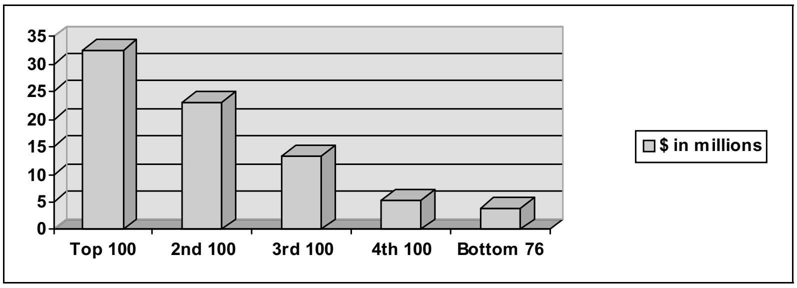

Figure 1: Corporate communications spending by *Fortune* 'Most Admired' companies[7] (Source: Council of Public Relations Firms)

linked to a change in perceptions and behaviour among their key audiences, as well as to financial and shareholder returns. By identifying PR objectives at the outset, qualitative and quantitative research can be applied to measure changing stakeholder attitudes and behaviours over time.

Bold assumptions and flexibility are not mutually exclusive

- **Make assumptions and dare to change them**. Communicators should not be timid about making constructively bold assumptions about the expected impact of communications initiatives. They should also be prepared to revise those assumptions as market conditions change or research proves otherwise. Flexibility and adaptive behaviour are necessary qualifications for communications professionals in this turbulent, ever-changing business environment and global economy.

- **Put a price on results.** Communicators must demonstrate the cost-effectiveness of PR efforts, not only in terms of their relative cost versus other marketing expenditures, but also in terms of the financial value of the market impact these initiatives engender. The ROI model should be applied.

CEO reputation and senior management accountability build corporate equity

COMPONENTS OF A BIOTECHNOLOGY COMPANY'S REPUTATION

The emergence of corporate reputation as a driver of value in the biotechnology industry has put pressure on companies to rank and assess the various components of a company's reputation. Listed below is what we have identified as the key determinants of company reputation:

- Favourable CEO reputation.
- Senior management who can execute.
- Marketed products; sales and marketing proficiency.
- Sound research pipeline.
- Smart partnering.

Favourable CEO reputation

As evidenced in most other industries, the CEO's reputation is integral to a company's reputation and overall success. Research shows that CEO reputation is estimated by business influentials (eg peer CEOs, business executives, financial analysts, business media and government officials) to account for 48 per cent of a company's reputation.[8] Just like any other wealth-creating asset, CEO reputation needs investment, needs to be managed, and needs to be leveraged over the long term to reap enduring benefits. Companies can utilise the equity that accrues from developing CEO reputation to attract more investors, more partners, more customers, more job applicants and more trust in corporate decisions. The same research shows that the key drivers of CEO reputation are credibility, integrity and high-quality communications to internal audiences about the direction of the company. Also important to CEO reputation is the need to build a high-quality management team and motivating and inspiring employees.

Senior management who can execute

The ability of the senior management team to *execute* the business model is critical to corporate reputation in most industries. In addition to the CEO, the senior team must communicate the vision throughout the organisation and *act decisively* and collectively to *meet expectations*. Outside constituencies must be confident that the top team can pull together and *deliver* on promises made.

Progress along the value chain depends on sales and marketing proficiency

Marketed products; sales and marketing proficiency

As biotechnology companies move further down the value chain toward patient-oriented solutions, product sales and efficient marketing become essential ingredients in leveraging a biotechnology company's reputation. As companies become increasingly judged by their ability to deliver revenue and earnings to sustain profitability and long-term investment value, greater emphasis must be placed delivering products to market.

A strong, deep pipeline is critical to reputation

Sound research pipeline

As noted earlier, a sound research pipeline – and a company's ability to deliver products to market – builds corporate reputation. A strong pipeline with a steady flow of products moving from one stage of development to the next – targeting viable, sustainable markets – is critical in the biotechnology sector. Widely publicised research failures have heightened investor and media attention to this key deliverable. Nevertheless, whether products are developed in-house or acquired in a late stage of development can be less important than getting products to market and building their long-term sales potential.

Smart partnering

The reputations of biotechnology companies are increasingly based on mergers and acquisitions (M&A) strategy and activity – not just on the size of the organisations they build, but also on good strategic and cultural fit. As companies face greater scrutiny than ever before, they must be able to communicate the good judgment behind their strategic alliances and partnering activities.

Large pharmaceutical companies depend on blockbuster products for growth, while trading at lower P/E ratios than biotech companies

BIOTECH *V* PHARMA: SIMILARITIES AND DIFFERENCES

As biotechnology companies mature, many find that the traditional distinction between the biotechnology and pharmaceutical sectors – large molecule *v* small molecule development – becomes somewhat blurred. Whether as a result of partnerships with pharmaceutical companies, or of substantial growth in revenue from marketed products, or growth in capitalisation, some profitable biotechnology companies are viewed more as 'small-cap pharma'.

As in the biotechnology sector, pharmaceutical companies are evaluated based on a combination of product sales and the strength of their pipelines. Whereas pharmaceutical companies need strong pipelines to protect against patent erosion, 'blockbuster' product sales have become the essential factor for growth in large pharmaceutical companies. Nevertheless, having already established their product markets, the large pharmaceutical companies generally do not promise percentage earnings growth beyond the mid-teens, even with one important new product.[9] For many biotechnology companies, any earnings would represent significant growth; consequently, these companies tend to trade at higher price/earnings ratios than their pharmaceutical counterparts.[9]

Although the two sectors have much in common in terms of components of reputation, pharmaceutical companies' reputations are often based on intangibles such as lifestyle/workplace issues and philanthropy. Eli Lilly & Co. and Pfizer are but two examples of drug companies whose reputations are built on a widely held perception that the companies are good corporate citizens. Many biotechnology companies have not yet devoted much emphasis to these intangibles because they are relatively young compared with the major pharmaceutical companies. Without such a base of goodwill built on intangibles, the

CEO's vision becomes even more important in the biotechnology space than in 'Big Pharma'.

CEPHALON'S EXPERIENCE: LESSONS LEARNED

A visionary CEO understands the profitability imperative and the importance of ubiquity in the industry value chain

The experience of Cephalon is a good case in point for demonstrating the importance of reputation management in the biotechnology sector. Cephalon's founder, chairman and CEO Dr Frank Baldino Jr has stated clearly that the company's strategy is to deliver shareholder value by growing product sales in the USA and in other major pharmaceutical markets, by building the pipeline, and through the acquisition of new products or companies. Baldino's vision – and Cephalon's success – reflects the recognition that becoming profitable and occupying all the key points in the evolving industry value chain is the new paradigm for the biotechnology industry.

The importance of managing expectations

Yet even with the clearest of visions and disciplined planning, things do not always go according to plan. In the mid-1990s, Cephalon had two in-licensed compounds in late-stage development, thanks to the foresight of Dr Baldino, who recognised early on that success ultimately would depend on the company's ability to deliver revenue and earnings to sustain profitability.

For one of those compounds, myotrophin, which was being studied as a potential treatment for amyotrophic lateral sclerosis (ALS, also known as Lou Gehrig's disease), there were suggestions from some Cephalon stockholders that the company had over-stated clinical results. There were allegations by the Securities and Exchange Commission that certain outside shareholders (not affiliated with the company) had profited, based on advance knowledge of clinical milestones. Although these issues were eventually clarified and resolved, the concerns all but overwhelmed the company. Development of myotrophin was halted, dashing the hopes of the company (which seemed within reach of its first marketed product), of patients and doctors (who believed in the drug's safety and efficacy), and of investors (many of whom believed that myotrophin would lead to significant financial reward). Cephalon shares subsequently tumbled from a high of US$40 in December 1995 to a low of US$4 in September 1998.

The myotrophin experience offers a lesson in expectation management

Media reports[10] have suggested that the myotrophin episode damaged Cephalon's reputation, creating a lingering perception that the company had wrongly chosen to invest in an ineffective drug. In reality, however, Cephalon's decision to stop funding research of myotrophin and to focus on bringing a different drug to market demonstrated the company's adaptability and decisiveness, thereby mitigating a severe blow to its reputation. Many biotechnology companies are derailed by funding and championing products that no longer deserve support, in either a clinical or regulatory context. In the case of myotrophin, Cephalon very effectively – if not elegantly, some say – stopped its active research programme with myotrophin and redeployed assets elsewhere in the pipeline.

Although bruised by the myotrophin experience, Cephalon survived and the company's reputation rebounded – largely by demonstrating an ability to deliver product sales revenue, earnings and profitability. Clearly, the reputation management lessons provided by myotrophin are the importance of carefully managing expectations and of under-promising and over-delivering to regulators, patients and shareholders alike.

Rebounding from adversity

What myotrophin took away from the equity in Cephalon's reputation, Provigil® (modafinil) tablets [C-IV] restored. Cephalon originally licensed Provigil, which is indicated for the treatment of excessive daytime sleepiness associated with narcolepsy, from France's Laboratoire L. Lafon in 1993 and effectively carried the drug through

Provigil restores cephalon's reputation through adherence to a new business model

clinical development and Food and Drug Administration (FDA) approval. The company built a new sales force and launched Provigil in the USA in February 1999. In late 2001, Cephalon acquired Lafon, thereby securing worldwide rights for Provigil and significantly improving gross margins on the drug by eliminating royalties. Sales of Provigil in 2001 more than doubled over the previous year, and Cephalon is now preparing to file for an expanded label.

The success of Provigil signalled how CEO direction and decisiveness, a product sales-driven business strategy, marketing savvy and adroit senior management can restore a company's credibility and once again attract the attention of investors. The case illustrates how important execution is to a business model that is built on delivering business outcomes (in the form of sales revenue from marketed products) and real shareholder value (in the form of earnings per share).

M&A activity must serve the company's vision and strategy

Finding – and being – a good partner

Just as the focus on the biotechnology sector is shifting to actionable business plans and late-stage, marketable compounds, the traditional views of what constitutes a good deal and a good partner are also in transition. *Start-Up* magazine recently identified a group of top- and middle-tier biotechnology companies such as Cephalon 'that have cash and are hungry for products – and are less prone than Big Pharma to reject compounds whose peak sales levels are projected to be less than \$500 million.'[11] The statement suggests that a new category of mid- and large-cap biotechnology companies should be viewed as serious potential partners, as they have demonstrated extraordinary success with products once thought too small for big pharma.

Strategic adjustments reinforce credibility and capture investor attention

Investors and other stakeholders are paying close attention to mergers and acquisitions in the biotechnology arena, but these activities are only as important as the vision and strategy they serve. As we have seen in recent months, a large transaction – not only in terms of headlines but also in terms of moneys and resources committed – is not necessarily a good transaction. To be a driving factor in enhancing a biotechnology company's reputation, M&A must demonstrate a company's ability to execute, collaborate, integrate, market and maintain momentum in the short term as well as the long term.

Capitalising on strategic transactions

Cephalon's decisiveness and strategic transactions over the past 24 months have positively impacted the company's valuation and reputation. One notable reputation-builder was the acquisition in 2000 of Anesta Corp., a developer of pharmaceutical products for oral transmucosal delivery. The transaction included a drug called Actiq® (oral transmucosal fentanyl citrate) [C-II], which is indicated for the treatment of breakthrough cancer pain. Although some financial analysts criticised Cephalon for allegedly paying too much for Anesta, Cephalon saw Anesta's struggle to market Actiq as an opportunity. In Cephalon's view, Actiq was being detailed by the wrong people, with the wrong message, to the wrong doctors. Cephalon redefined and refocused the marketing strategy, and today Actiq is a notable success. During 2001, Cephalon's first full year marketing Actiq, prescriptions grew by 180 per cent over the previous year.

Together, the Anesta and Lafon transactions reinforced Cephalon's credibility and captured investor attention, with the company's share price reaching an all-time high of US\$77 on 28th December, 2001, the day the Lafon acquisition closed. Additionally, Cephalon was able to raise US\$600m in convertible debt five days after the Lafon acquisition announcement, cash that will be used to fund additional M&A and for general purposes.

Financial credibility depends on an accurate reading of the business environment

Transparency in accounting

Research undertaken by Cephalon within the financial community shows that key ingredients for a successful biotechnology company are CEO credibility, a senior team that manages expectations and implements strategy, and the availability of funds to execute the strategy and market drugs.[12] But the research also demonstrates that maintaining a good corporate reputation requires vigilance, not to mention a keen sense of timing.

Regenerom, Xoma and Genentech offer additional lessons in reputation management

In an effort to fund commercial initiatives to boost future sales of Provigil and potentially extend the anti-seizure drug Gabitril® (tiagabine hydrochloride) into new markets, Cephalon entered into a joint venture with unaffiliated equity investors in early 2002. However, short sellers took advantage of the post-Enron environment, using rumour and innuendo about accounting irregularities to discourage investors. With investor confidence threatened, and Cephalon stock falling 13 per cent in one day in the wake of the short reports, Cephalon dissolved the joint venture.

Nobody questioned the legitimacy of the investment vehicle; the decision to dissolve the joint venture was based on the considerable change in the business climate since the venture was conceived. Although many companies – including some of the largest biotechnology companies – have used similar financing mechanisms, Cephalon came to realise that the approach was no longer appropriate in the current environment. Instead, Cephalon has chosen to rely on the strength of its underlying business, allowing the company to continue to invest in its products without modifying the company's sales and earnings guidance.

The episode underscores the increasing importance of transparency in biotechnology business accounting. The hard lesson learned is that in today's uncertain environment any innuendo of accounting irregularity – no matter how false or misleading – can be nearly as detrimental to a company as a revealed accounting irregularity.

LESSONS LEARNED FROM OTHER BIOTECHNOLOGY COMPANIES

Cephalon is certainly not the only biotechnology company to have weathered such pronounced swings in its corporate reputation. Other companies have experienced similar triumphs and tribulations, particularly with regard to research and pipeline issues, where strengths or weaknesses can either buoy or sink a company's reputation.

One such example is Regeneron, whose share price 'surged' in 1993 based on the expectation that its investigational treatment for ALS would be featured in a segment on CBS's '60 Minutes',[13] only to see its shares 'plummet' one year later when the compound failed to show efficacy in clinical trials, a development reported as 'another blow to the biotechnology industry'.[14] Similarly, the share price of Xoma Corp. rose in 1991 on the heels of a bullish analyst report and a favourable patent ruling for its experimental treatment for sepsis.[15] However, the company's shares lost one-quarter of their value in 1997 after Xoma withdrew its investigational new drug application for a psoriasis drug and discontinued the clinical programme for the sepsis product.[16] For some companies, the challenges may lie in managing operations and commercialisation issues. When Genentech agreed to settle a patent-infringement dispute with the University of California at San Francisco over the company's human-growth hormone, the settlement was described as 'a resounding victory for the university', yet Genentech's share price rose on the news.[17] Quite clearly, companies make mistakes, but those that manage them well are the ones that go on to tell their stories.

THE VALUE OF REPUTATION RESEARCH

As noted above, Cephalon commissioned extensive research to better understand how its corporate reputation has been influenced by events of the past five years.[12] The research was conducted

Reputation research validates Cephalon's strategic approach

among opinion leaders in the financial community, the scientific/academic community and the biotechnology industry. Essentially, the results show that Cephalon has a favourable reputation among those who are familiar with the company, and that the company has its share of both fans and critics.

Overall, Cephalon receives high marks for having a decisive management team, a relentless drive to succeed and skilful marketing talent. The company is recognised and highly regarded for its successful launch of Provigil, which many respondents view as the company's signature achievement. The research also pointed out where Cephalon needs to strengthen its capabilities and perceptions. For instance, opinion leaders from the biotechnology research and financial communities encouraged the company to increase awareness of its R&D initiatives by more openly sharing developments in its clinical programme. The average to low expectations about the company's pipeline among some of these opinion leaders suggest the integrity of Cephalon's scientific work may not have been emphasised publicly as much as the story of its marketed products and profitability.

Focusing on R&D and the underlying science will remain important

The new research uncovered a wide range of definitions for the biotechnology and pharmaceutical sectors, suggesting an industry in continual flux – a moving target defined by what it is *not* as much as what it is. Traditional definitions of biotechnology as an industry based on large versus small molecules remain. However, there is no denying that the lines between biotechnology and 'big pharma' are blurring. This lack of definition reflects uncertainty over how biotechnology companies are categorised by its most important constituencies.

Evolving definitions reflect an industry in flux

Therein, we believe, lies the opportunity for companies in this sector to define themselves in terms of their unique, demonstrated capabilities and performance, and having a strong presence in *every stage* of the industry's value chain.

CONCLUSION

Cephalon's extensive research and broad review of its corporate reputation provide an example of how biotechnology companies need to examine themselves seriously through the eyes of others. By looking for signals of shifting perceptions and attitudes within and outside the narrow confines of their industry – and by acknowledging and acting upon these signals – successful biotechnology companies can reach for leadership dominance and reputation capital. Those companies that emerge as leaders in this sector will be those that leverage and manage the key components of corporate reputation.

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