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SAN FRANCISCO SCIENCE EXERCISE AND TEACHING NOTE

Sean C. Safford

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San Francisco Science Exercise and Teaching Note

Sean Safford, MIT Sloan School of Management Ph.D. Candidate, prepared this exercise for Sloan MBA elective “Designing and Leading the Entrepreneurial Organization” taught by Professor M. Diane Burton. It is intended to be used with *Jerry Sanders*, HBS case no 9-489-021 and as a supplement to HBS teaching note no. 5-400-008. Correspondence to: ssafford@mit.edu

San Francisco Science Exercise and Teaching Note

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Overview

The San Francisco Science exercise is designed to be a practical application in entrepreneurship. Students are asked to outline the steps they would take to build a new company. The exercise emphasizes the entrepreneurial implications of social capital.

The exercise is intended as the second day of a two-class module focusing on the Jerry Sanders case (HBS # 9-489-021). The case describes Jerry Sanders, an attorney whose skill at developing personal networks and employing influence tactics has allowed him to acquire a promising medical technology and develop an entrepreneurial company that he sold to a more established medical device company at a considerable profit. The case ends as Sanders is poised to embark on a new entrepreneurial venture called San Francisco Science that will act as a “broker” between disjointed actors – inventors, financiers, manufacturers and doctors – in the medical instruments industry. By design, San Francisco Science will not invent, manufacture or market products of its own. Rather, its relationships will be the primary source of the company’s value. Sanders, as the CEO of the new company, will have to translate his personal charisma and contacts into a set of ongoing relationships that build the company. Moreover, San Francisco Science will not only have to insert itself into the existing network of companies that is the medical instruments industry. It will also have to alter the structure of that network by inserting itself into it as a new *kind* of organization – an intermediary. Sanders must establish the legitimacy of this new role.

This exercise begins by asking students to put themselves in Sanders’s shoes as the CEO of San Francisco Science and plan how they will launch their new firm. Students are then asked to assume the role of key stakeholders relevant to San Francisco Science’s viability and success. The exercise is designed for a class of about 60 students. It requires at least a 90 minute class period and is broken into four parts: (1) the assignment and set-up; (2) the “constituencies”; (3) the “teams”; and, (4) wrap-up and discussion.

This exercise follows the class in which the Jerry Sanders case has been discussed. Jerry Sanders is an entrepreneur who is launching a new venture that not only hopes to bring together disjointed organizational actors in the medical instruments industry, his company will serve as an intermediary among them. His business plan is written. Financing is set. Now its time to head out make things happen. Where are the opportunities? What is standing in his way? Who does he approach first? What is his pitch once he gets there? What does he need to know? How can

he find out, quickly? To answer these questions, Sanders will need to quickly figure out the landscape of the medical instruments industry and formulate bold strategies for establish his company within it. In particular, this exercise helps students to:

- (1) Identify and analyze the constellation of competitors, collaborators, allies and stakeholders that make up the competitive landscape: How does one identify who is central and who is not? Where are the holes in the nexus of inter-organizational, personal and other relationships? What opportunities do those holes represent? What are barriers do they create?
- (2) Formulate strategies for inserting new companies into this web of contacts, ties and relationships: Where does one's company fit into this structure? How does one get it there? How does one build trust, manage reputations, establish organizational identity and acquire legitimacy?

Exercise Synopsis

The exercise is broken into four parts: (1) the assignment; (2) the “constituencies”; (3) the “teams”; and, (4) wrap-up and discussion.

The Assignment

You are Jerry Sanders. You have sold X-Cardia to Imagyn and are two months into launching San Francisco Science with Shmulewitz and McHenry. Your new company is attempting to carve out a niche that connects inventors, physicians, financiers and established medical device companies. Prior to launching the company, you had completed the business plan and located investors. You have spent the last two months designing and building your new company.

Write a two-page letter to your old entrepreneurship professor (double spaced) retrospectively describing what you did during your first two months on the job.

The Assignment (page 17) is distributed at the end of the first class after the Jerry Sanders case has been discussed. It asks the students to write a memo describing their first two months on the job as the new company's CEO. Students return to the next class with a two-page memo in hand. The written memo serves two purposes. First, it is a cognitive anchor, fixing the parameters of the exercise around the theme of managerial action. In writing the memo, students are forced to consider what they would actually do. Second, the memo commits the student to a specific course of action. The written record precludes students from taking credit for things they actually did not

accomplish. Later in the exercise, after the students have had an opportunity to engage the ideas that emerge from their group discussions, the memo serves as a point of comparison emphasizing the distance traveled from a naive approach to entrepreneurship to the lessons the student takes away from the class.

The Constituencies

Arriving next class with memos in hand, students are asked to momentarily put Jerry Sanders out of their minds and take on new roles as other players in the medical device industry. In class, students are assigned to one of these six “constituents” groups: physicians, manufacturers, inventors, funders, potential employees or potential competitors. Each group is provided with a scenario outlining a particular problem facing their constituency (pages 18-23, below). The scenario accomplishes two goals. First, it reveals information about the interests, concerns, opportunities and constraints of the various constituencies. Second, embedded in the narrative is information about how each of the constituencies is tied into the industry. The students start off talking through their constituency’s options and opportunities. After about ten minutes, the students shift back into Sanders’s perspective to see how this information might inform his plan.

The Teams

In the next phase of the exercise, the students break out of their constituent groups and reconvene as “teams” composed of at least one representative from each of the constituent groups. Students initially report on what they learned in their individual constituencies. In the course of these discussions, the students begin to learn about the interconnections that already exist among the constituencies. For example, in several of the scenarios, the students learn that many members of the network have daughters who play soccer. Others have attended the same universities. These highlight different kinds of informal network connections that exist within any industry. At the same time, the scenarios indicate formal contacts among the organizations. For instance, a contractor brought into the team depicted in the manufacturing organization scenario has primary responsibility for maintaining relationships with the medical community. Again, after about ten minutes, students are asked to evaluate their initial ideas about how to proceed in light of this knowledge.

This second round of team discussions brings out some the “structural” aspects of the medical instruments industry network. It challenges students to think through questions such as: What is

the existing set of relationships in the industry? What parts of the network are well connected and which parts are relatively isolated? Which constituencies hold more power or status? Which are in a position to challenge San Francisco Science's entry? Which would simply not see Sanders's company as anything worth paying attention to? Again, comparing the ideas they committed to paper in their memos to the information they have learned in the group discussions should bring out several of these themes.

Wrap-up and Discussion

Ideally, the instructor will have some time to reconvene the class and wrap-up. We return to some of the themes, discussion points and takeaways that instructors might address in this part of the exercise after first briefly discussing the theory and research the exercise is designed to bring out.

Networks, Social Capital and Entrepreneurship

The exercise is a tool for illustrating several important themes that emerge from the growing literature on networks and networking. Entrepreneurs build value for their organizations by exploiting and enhancing their organization's social capital. Two facets of building social capital are key. The first is the structure of relationships within a network. The second concerns the quality of those relationships.

The structure of relationships within an industry is a key determinant of entrepreneurial success (Aldrich and Zimmer 1986; Burt 1992, 1997; Dubini and Aldrich 1991; Venkataraman 1989). Relationships filter information coming into a company and also direct, concentrate and legitimate information received by others about it (Burt 1997). However, because relationships are so important, companies tend to pool into "clusters." While dense clusters create an environment in which trust and fine-grained information transfer can occur (Uzzi 1996; 1997; Podolny 1993), information also tends to get recycled (Granovetter 1972). The lack of new information can lead to inefficiency and missed opportunities.

Jerry Sanders realized that doctors, manufacturers, inventors and investors all lacked efficient ways of finding and assessing each other. In particular, investors and manufacturers lacked an efficient way of finding and assessing new innovations. Communication between the medical community and the various actors in the medical instruments community were disorganized. San Francisco Science was conceived as a bridge among these groups filling, what Burt (1992; 1997) would call

the industry's "structural holes." By stepping into a brokerage role, Sanders is betting that San Francisco Science will both improve the efficiency of information transfer (and therefore clients' profitability) within industry. If San Francisco Science can establish itself as a broker among these groups, it stands to profit handsomely (Burt 1997; Martinelli 1994).

San Francisco Science, is intended to help other companies through this process. However, before it can do that, it needs to establish its own legitimacy and trustworthiness among the industry's major constituencies. New companies often lack legitimacy – a sense of acceptance and "rightness" among a relevant group of stakeholders – (Aldrich and Fiol, 1994; Stinchcombe 1965; Baum and Oliver 1991; Miner, Amburgey and Stearns 1990; Stuart et al 1999). Furthermore, lacking a strong track record or reputation in the industry, Sanders lacks the trust among important stakeholders (Venkataraman 1989; Powell 1987; Van de Ven 1976; Stinchcombe 1990; Gulati 1995a; Gulati and Singh 1999). The paradox is that gaining legitimacy and trust, are often a matter of access to and participation in organizational networks; however, access is itself a function of legitimacy and legitimacy.

This exercise is designed to highlight two approaches to overcoming the "liability of newness" paradox: (1) the use of informal ties and (2) approaching constituents from a "stakeholder" perspective. The first approach is to make use of one's informal ties. Network actors who are tied through identity and informal friendship networks share a "common language" facilitating mutual understanding (Dyer and Singh 1998; Uzzi 1996, 1997; Granovetter 1972). At the same time, informal ties are a potential check on the probability that either party will renege on mutual obligations since doing so may expose the offending party to retribution from others in the other community (Grief 2000; Burt and Knez 1995; Podolny and Page 1998). Entrepreneurs break into the closed circles of industry relationships "through the back door," so to speak, by exploiting already established ties in other realms of life.

The stakeholder approach focuses on the nexus of interests and concerns facing particular actors in the constellation of constituencies represented in the network. Rather than focus on "one on one" relationships, the stakeholder approach is mainly concerned with the triad (Rowley 1997). Stakeholders include any organization or individual that has both the ability to influence the outcomes of the firm and is, at the same time, a residual claimant of those outcomes (Kochan and Rubinstein 2000). In the language of the exercise, stakeholders are San Francisco Science's

“constituents.” In the stakeholder framework, entrepreneurs mediate among the conflicting interests and overlooked overlaps stakeholders bring to the table (Frooman 1999; Freeman 1984).

Teaching Plan

This exercise challenges students to entrepreneurs face in building and exploiting social capital. It is designed to address two important entrepreneurial themes:

1. Identifying and analyzing a constellation of competitors, collaborators, allies and stakeholders; and,
2. Forging strategic relationships within that constellation from scratch.

The first and perhaps most important takeaway for students is simply recognizing just how many constituencies entrepreneurs must take into consideration in formulating strategy and action. A good question to begin with is simply “how many of you mentioned all six constituencies in your memos?” Most students (and new entrepreneurs) will have considered only a few – primary customers and perhaps employees. Peripheral stakeholders – competitors, suppliers, financiers, government – are ignored at the entrepreneur’s peril.

Recognizing the range of constituents is only the first step. As the scenarios make clear, the constellation of stakeholders in the medical instruments industry is connected through a structure of relationships. Attachment C (page 15) is a graphical representation of the structure of this network. Begin by placing Attachment C on the board and ask students to identify wholes in the structure of the network. It is obvious from the diagram that investors and inventors are disconnected. However, other than this disconnection, one could read this network as relatively well connected – if not densely connected. Medical device companies seem to play a brokerage role among physicians, inventors and, through informal ties, potentially to financiers and potential employees. However, we know from the scenarios that the manufacturers’ core competence lies elsewhere. In particular, while structurally they occupy a brokerage position between inventors and financiers, as well as between inventors and physicians, they are not doing a good job of bringing those groups together. In the scenarios, the manufacturer has chosen to hire an outside consultant to manage contacts with the physician’s community. Their ties to the groups in this network are spotty at best.

Sanders needs to focus on forging the relationships that the medical device company has missed. Attachment D (page 15, below) is a list of barriers San Francisco Science faces as well as some ideas for overcoming those barriers suggested in the literature. Instructors should ask the students: “what stands in Sanders way?” and direct the conversation toward filling in the first column in Attachment D.

The first question students will likely raise concerns Sanders’s lack of a track record in the industry. Reputation is clearly going to be a key factor in Sander’s success. However, while he has successfully launched one product, his entire experience with X-Cardia was relatively short lived. One certainly might question the degree to which Sanders has actually established a track record on which to build. Second, should Sanders and San Francisco Science achieve a central role in this network, other might fear the new company could act opportunistically. In particular, information asymmetries could place inventors and investors in a disadvantageous position relative to San Francisco Science. Physicians may be fearful of adding yet another middleman. This raises the general question of trust. Third, San Francisco Science faces a significant problem with basic legitimacy. This is a new *kind* of company as far as existing stakeholders are concerned. Sanders will have to work to convince constituents to adjust their practices, routines and organizational structures to incorporate the new “intermediary” role San Francisco Science will play. Forth and finally, Sanders himself must ask whether he can trust others in the network. Assuming he is able to profitably establish himself, several other stakeholders could potentially offer a competitive challenge to his company’s position. Medical device companies – having been shown the way by Sanders – could step in later to emulate Sanders’ innovation and recapture the central position in the network. At the same time, employees would be in an even better position to take advantage of the path Sanders is about to forge.

How might Sanders overcome these barriers? What strategies should he employ? Earlier in his career, Sanders spent considerable time working up from within industries to develop trust from the bottom up. This is often a slow process. At this point, Sanders is probably more interested in taking advantage of what momentum he has built up from the sale of X-Cardia; he is not interested in building up a personal cache of social capital within the industry from scratch. Alternatively, Sanders might hire social capital into the company. Sanders will leverage his team of physicians and inventors to develop relationships within those communities. However, these measures will do little for Sanders among manufacturers or financiers. To succeed, Sanders will

have to employ his entire repertoire of influence tactics. Trust, especially in the early stages of an organization, is often built not in the formal ties that exist in a business context, but rather in the informal ties of social affiliations and identities. Sanders should take advantage of his extensive informal contacts, from daughters' soccer games to old college buddies. In addition, of course, he can also call on his past professional contacts who may have indirect business ties to constituents.

Stakeholder perspectives offer a different approach. Sanders should first take the time to research and understand the different interests each of the constituents brings to the table, not only with respect to San Francisco Science, but more importantly with respect to each other – a process not at all unlike the experience the students have just had in this exercise. Having done so, Sanders is in a position to play interests off one another. For example, engineers have an interest in focusing their energy on their tools and on the elegance of their solutions rather than on maintaining relationships. Investors have an interest in producing profitable products. San Francisco Science may be able to leverage its position between these the various actors as a kind of mediator seeking out common ground between the two groups and suggesting creative solutions for the interests that remain in conflict. Without having done the homework ahead of time to systematically think through who these actors are and what interests they bring to the table, Sanders' would fail to make any headway.

Exercise Logistics

The exercise is fairly logistics heavy and will require the students to do a significant amount of moving around. Preparation ahead of time is key. Attachment A (page 13, below) provides instructors with a checklist of significant tasks to be accomplished before and during the exercise. The "Overview of the Day" (pages 24-26) provides a detailed timeline of the tasks and assignments that need to be accomplished in the course of a 1½ hour class. This attachment is designed to be passed out to students in class. Its based on a class that begins at 10:00. Instructors need to change the printed on each page to reflect actual times. In addition, the instructor should prepare a sheet based on the "Sample Room Assignments" table in Attachment B (page 14) to hand out in class. The table individually assigns each student to a specific group for each of the two sessions. The first column indicates the room assignment for the "constituency" groups where the students will convene for the first twenty minutes. The second column refers to the "team" group where they will spend the second twenty minutes. The instructor should also designate a timekeeper/facilitator for each of the groups.

Both the six scenarios (found on pages 18-23 below) and the “Plan for the Day” hand outs (pages 24-26) contain detailed instructions for the students once they are in their groups; the groups should essentially manage themselves. Students should find the scenarios waiting for them when they arrive at their assigned breakout rooms. The exercise allows time for the students to introduce themselves to each other before diving into the scenario and the questions. In the constituency groups, the students are given ten minutes to discuss the scenario and then another five minutes to discuss their two-page memos in light of the discussion. After twenty minutes, the students need to switch into their team groups. Again, they have about five minutes to introduce themselves before reporting back on their constituencies and engaging in some general discussion for the next twenty minutes. It is then time to head back to the classroom for the instructor’s wrap-up.

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Attachment A: Logistics Checklist

BEFORE CLASS

1. Secure six break out rooms large enough for 6 or more students each.
2. Check rooms to ensure there are enough chairs, implements for writing on the boards, etc.
3. Label each room A-F
4. Each room is initially assigned a particular constituency (e.g., Physicians in room A, manufacturers in room B, etc). Place six copies (or more depending on group size) of the appropriate “constituency scenario” in each room.
5. Prepare room assignment list individually assigning students to “constituencies” and “teams” and identifying facilitators/timekeepers (follow Attachment B)
6. Prepare an “Overview of the Day” handout following “Overview of the Day” on pages 24-26.

IN CLASS

1. Hand out room assignment sheet (Attachment B) to students in class.
2. Hand out “Overview of the Day” (pages 24-26).
3. Guide students to their “Constituency” rooms (Rooms A-F)
4. Guide students to their “Team” rooms (Rooms A-F) – keep strict control of time!
5. Guide students back to the classroom for wrap-up.

Attachment B: Sample Group Assignment Sheet

Name	Session 1: Constituency	Session 2: Team
Adam Apple	A (room 201)	A (room 201) – Facilitator
Bonnie Bonnet	A (room 201) – Facilitator	B (room 202)
Cal Crompton	A (room 201)	C (room 203)
Dee Droplet	A (room 201)	D (room 204)
Erin Else	A (room 201)	E (room 205)
Fred Fell	A (room 201)	F (room 206)
Gina Grenada	B (room 202) – Facilitator	A (room 201)
Herb Herb	B (room 202)	B (room 202) – Facilitator
...

Session 1: Constituencies

- Group A: Inventors
- Group B: Physicians
- Group C: Financiers
- Group D: Competitors
- Group E: Potential Employees
- Group F: Medical Device Manufacturers

Session 2: Teams

Groups A, B, C, D, E and F: Multi-Constituency Discussion Teams

Attachment C: Medical Instruments Industry Network Representation

Figure 1. The Existing Social Network

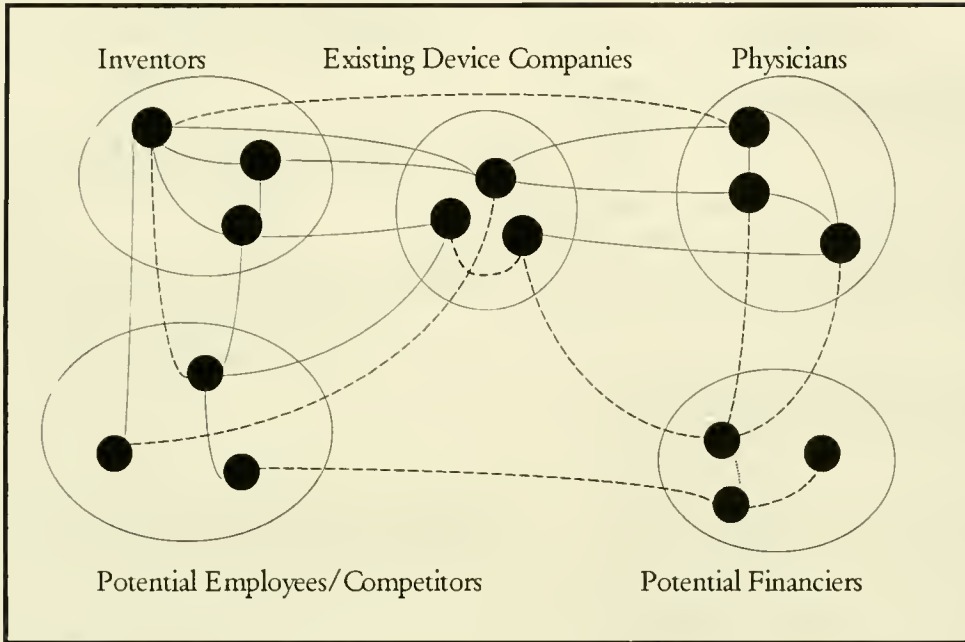
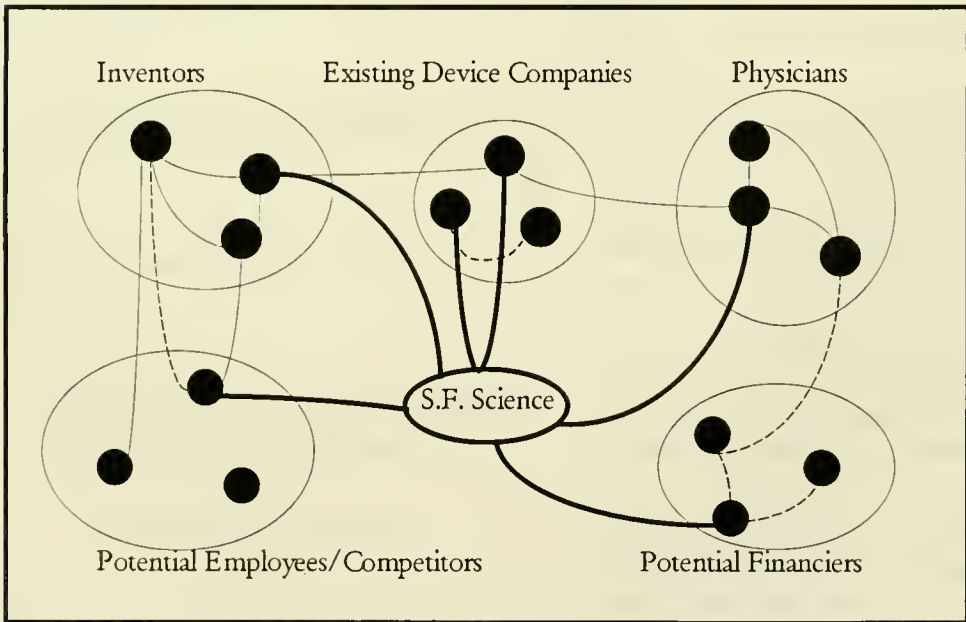


Figure 2. The New Social Network



Attachment D: Barriers to Access and Strategies for Success

Barriers San Francisco Science faces with gaining access to the constellation of stakeholders	Ways of overcoming those barriers
<ul style="list-style-type: none"> • Lack of experience and ties to the network • Little reputation or track record 	<ul style="list-style-type: none"> • Make use of partners' ties • Make use of alternative networks (college, grad school, church, kid's day care, kid's soccer) • Hire to bring in an individual with existing contacts
<ul style="list-style-type: none"> • Others perceive few barriers to SFS's incentives to defect and act opportunistically • Lack of trust 	<ul style="list-style-type: none"> • Establish informal reciprocal friendships on daughters' soccer field. • Be strategic about entering into relationships early on that you might have to defect from later on to gain access to better clients
<ul style="list-style-type: none"> • Lack of legitimacy for the intermediary organization he has in mind • Lack of legitimacy 	<ul style="list-style-type: none"> • Pull out distant personal ties to put in a good word. • Target peripheral members of the network with good ties to central actors and work into the center. • Leverage early adopters to convince skeptics • Appeal to ability to balance stakeholder interests
<ul style="list-style-type: none"> • Manufacturers could derail him if they felt he was a threat • Low power within the network 	<ul style="list-style-type: none"> • Form strategic alliance with manufacturers if they seem likely to be a threat • Possibly explore preemptive strike by attempting to lock up access to vital resources. • Work on gaining legitimacy and become "taken for granted" among other actors
<ul style="list-style-type: none"> • Low barriers to entry make it difficult to protect against potential rivals • Low power within the network 	<ul style="list-style-type: none"> • Act early to establish strong ties to influential members of the network • Balance strong ties (perhaps some redundant ties to maintain reciprocal relationships) with weak ties to maintain access to new information

San Francisco Science Exercise

Assignment

You are Jerry Sanders. You have sold X-Cardia to Imagyn and are two months into launching San Francisco Science with Shmulewitz and McHenry. Your new company is attempting to carve out a niche that connects inventors, physicians, financiers and established medical device companies. Prior to launching the company, you had completed the business plan and located investors. You have spent the last two months designing and building your new company.

For next class: write a two-page letter to your old entrepreneurship professor (double spaced, 12 pt. font) retrospectively describing what you did during your first two months on the job.

San Francisco Science Exercise

Inventors Scenario

You are a group of Berkeley engineering grad students from various programs (double-e, chemical, nanofabrication, materials, etc...). You meet regularly for lunch because all of you have an interest in medical applications of technology.

Each of you did undergraduate work at technological universities (MIT, RPI, Technion, Stanford, Cornell, Indian Institute of Technology, Cal Tech, etc...). At least a few of you have taken ideas to market that are in the process of becoming viable products. Some have friends who are doctors or who are in medical school. A few of you have contacts with students at Berkeley's Hass School of Management.

Two of your members have been working— in their spare time— on a technology that would make it possible to filter blood borne pathogens from donated blood banks. You are impressed with the technology's innovation and with the elegance of its solution. However, both of your friends are very strongly oriented toward research and development; neither has made strong contacts with business-people, investors, potential purchasers of the technology and neither has particularly strong interpersonal skills.

1. **Five to Six minutes:** Introduce yourselves (about 1 minute each).
2. **Ten Minutes:** Talk about what kind of advice you would give your friends at this point. What are their options and opportunities? What concerns should they be aware of? How do they pitch their ideas and to whom do they pitch them?
3. **Ten Minutes:** Now, consider the decisions each of you made in Jerry Sanders's shoes. Have your decisions put you in a position to effectively manage this constituency? Given what you now know, would you have made decisions any differently?

San Francisco Science Exercise

Physicians Scenario

You are members of a committee of doctors that advises the CEO of a major medical provider network (e.g., an HMO or a PPO) in the Bay Area. Each of you has graduated from prestigious universities. Many of you live in Palo Alto where some even have daughters that play in the same soccer league. It's not uncommon to strike up a conversation with a venture capitalist, an industry executive or a scientist from Stanford on the sidelines of your daughters' games. Two of you have dabbled in inventing technologies. However, these technologies have not made it to market.

The committee is composed of representatives from the various hospitals in the providers' network. Some of you represent teaching hospitals affiliated with UCSF and Stanford Medical Schools. Others represent local community based hospitals spread throughout the Bay area. The CEO of the provider network has informed you that she is coming under pressure to reduce costs. The question before you today is whether the steady stream of medical devices is worth the investment taking into consideration both cost effectiveness and medical efficacy.

An added twist is that teaching hospitals are getting paid to use some of this equipment since it is being tested in their facilities. However, in truth, very few doctors ever take the time to learn how to use many of these new technologies. They rely on the old methods they've always used. Community hospitals, on the other hand, are concerned about being forced to keep up with the latest technology. If the pace keeps up it could weaken their competitive positions.

1. **Five to six minutes:** Introduce yourselves (about 1 minute each).
2. **Ten Minutes:** Talk about what kinds of advice you would give the CEO at this point what are her options? What concerns should she be aware of? What information do you have about the new products on the market? How do you decide among them? How do you communicate with the medical instruments industry about your needs?
3. **Ten Minutes:** Now, consider the decisions each of you made in Jerry Sanders's shoes. Have your decisions put you in a position to effectively manage this constituency? Given what you now know, would you have made decisions any differently?

San Francisco Science Exercise

Financiers Scenario

You are a group of former dot.com executives... former because you have recently sold your company— a provider of network management services to online retailers— for several billion dollars. You have just closed the deal and are having dinner at a very swank restaurant overlooking San Francisco Bay.

Some of you have MBAs from top universities. Others have engineering degrees. Still others got in on the ground floor after meeting each other and deciding to start the business as Naval Academy cadets at Annapolis. Several of you live in Palo Alto where some have daughters that play in the same soccer league. It's not uncommon to strike up a conversation with a prominent physician or a scientist from Stanford on the sidelines of your daughters' games.

In its early stages, the company you have just sold benefited from angel investments. To return the favor, you have been discussing the idea of starting an angel investment fund of your own. Given the burst in Internet stocks, you want to stay away from dot.coms for the time being. You are considering turning your first investments either to biotech or medical instruments— areas that are outside your immediate expertise.

1. **Five to Six Minutes:** Introduce yourselves (about 1 minute each).
2. **Ten Minutes:** Talk about your options. What concerns should you take into consideration at this point? What are your opportunities? Would you consider funding San Francisco Science directly or limit it to particular technologies the company suggested?
3. **Ten Minutes:** Now, consider the decisions each of you made in Jerry Sanders's shoes. Have your decisions put you in a position to effectively manage this constituency? Given what you now know, would you have made decisions any differently?

San Francisco Science Exercise

Competitors Scenario

You are a group of MBA students at Stanford's Graduate School of Business. All of you have expressed an interest in getting into the medical instruments space. You meet periodically to discuss the industry and plan career strategies.

Some of you have contacts at Stanford's engineering school; in fact, some of you are engineers by training. One of you has an M.D./Ph.D. and has extensive contacts among researchers and doctors. Several of you are well acquainted with VCs and angel investors who are well established in the medical instruments space. Finally, you have all met and gotten to know the CEO of at least one established medical instruments manufacturer in the area who you had invited to give a talk to the group.

Several of you have plans in the works to launch start-ups managing specific products upon graduation. Others are interested in joining existing medical device companies in management positions. However, at today's meeting, someone has suggested that it might make sense to think about forming a broader company. By combining all of your talents, it might make sense to launch an umbrella company that will develop the products you separately have underway, sell them to existing companies and then move on to other products.

At least one of you has been paying attention to Jerry Sanders and is aware that he is probably about to form a new company, San Francisco Science, that is moving into the same space.

1. **Five to six minutes:** Introduce yourselves (about 1 minute each).
2. **Ten Minutes:** Talk about your options. What concerns should you take into consideration at this point? What are your opportunities? Is there value in creating the umbrella company or would it be better to develop products and sell them off separately?
3. **Ten Minutes:** Now, consider the decisions each of you made in Jerry Sanders's shoes. Have your decisions put you in a position to effectively manage this constituency? Given what you now know, would you have made decisions any differently?

San Francisco Science Exercise

Potential Employees Scenario

You are a group of MBA students at Stanford's Graduate School of Business. All of you have expressed an interest in getting into the medical instruments space. You meet periodically to discuss the industry and plan career strategies.

Some of you have contacts at Stanford's engineering school; in fact, some of you are engineers by training. One of you has an M.D./Ph.D. and has extensive contacts among researchers and doctors. Several of you are well acquainted with VCs and angel investors who are well established in the medical instruments space.

Several of you have plans in the words to launch start-ups managing specific products upon graduation. Others are interested in joining existing medical device companies in management positions.

At least one of you has been paying attention to Jerry Sanders and is aware that he is probably about to form a new company, San Francisco Science. At today's meeting, that person has suggested that it might make sense for another of the members of your group to approach Sanders for a job. This person has a great personality and very good contacts and therefore could bring a lot to Sanders's operation. At the same time, she would also benefit from exposure to the strategies and tactics Sanders employs. It seems like an easy way to build connections within the industry. In fact, the suggestion was that she might want to work for Sanders just long enough to possibly launch out on her own in a similar role.

1. **Five to six minutes:** Introduce yourselves (about 1 minute each).
2. **Ten Minutes:** Talk about your options. What concerns should she take into consideration at this point? What are her opportunities? How would she go about getting in touch with Jerry Sanders and convincing him of her value to the new company?
3. **Ten Minutes:** Now, consider the decisions each of you made in Jerry Sanders's shoes. Have your decisions put you in a position to effectively manage this constituency? Given what you now know, would you have made decisions any differently?

San Francisco Science Exercise

Medical Device Company Scenario

You are the senior management team of an existing medical device manufacturer in San Jose advising the Vice President from Strategy and Product Development. You meet regularly. Among you are included an outside consulting physician (trained at Cornell Medical School) who also advises several major hospitals in the area, the company's chief engineer (trained at Cal Tech), the general manager of the company's main manufacturing facility (has a BS from MIT and served as an officer in the Navy) and finally, the Vice President for Strategy and Product Development who has an MBA from Stanford Graduate School of Business and an engineering background. Several members of the team live in Palo Alto where their daughters play on the same soccer league. As it happens, these members of the team end up meeting physicians and investors on the sidelines of their daughters' games on a regular basis.

At today's meeting, the consulting doctor and the company's chief engineer are reporting on the major industry conference held this year in New Orleans. The chief engineer made several contacts with inventors and has a stack of new project proposals. The CEO has set a goal of bringing five new products to market by the end of the year. However, the current crop so far looks like it will only yield two worth pursuing.

The consulting physician also met with some of the company's major customers— medical providers located around the country. The hospitals are coming under intense pressure to reign in costs. However, they must also keep up with the latest technology in order to remain competitive relative to other hospitals in their local areas. The hospitals have signaled that they will be much more stringent with respect to weighing costs versus medical efficacy in making decisions on the pieces of equipment they will buy.

1. **Five to six minutes:** Introduce yourselves (1 minute each)
2. **Ten minutes:** Talk about what advice you would give the VP of Strategy and Product Development at this point. What are her options? What concerns should she be aware of? How would you go about finding new products? How would you evaluate their value to the company?
3. **Ten minutes:** Now consider the decisions each of you made in Jerry Sanders shoes. Given your discussion around the previous question, have your decisions put you in a position to effectively manage this constituency? Given what you know about this group would have made decisions any differently?

San Francisco Science Exercise

Plan for the Day (Sample)

Overview

10:00 – 10:10 Introduction and discussion of the logistics

10:00 – 10:15 Break into groups and move to break out rooms.

Session 1: Constituency Groups

10:15 – 10:20 Introductions

10:20 – 10:40 Discuss the scenarios

10:40 – 10:45 Change rooms

Session 2: Teams

10:45 – 10:50 Introductions

10:50 – 11:10 Discuss what you have learned from the first session.

11:10 – 11:15 Return to classroom

11:15 – 11:30 Debrief

San Francisco Science Exercise

Session 1: Constituents

10:15 – 10:40

Introductions (5 Minutes)

Spend about five minutes (one minute per person) introducing yourselves to each other.

Read the scenario that has been placed in each of the rooms.

Part A (Ten Minutes)

Use the scenarios to start a discussion and “get into” the role. Explore the opportunities, concerns and constraints posed in the scenarios.

- What **don't** you know about this constituency?
- How would you go about finding out?

Part B (Ten Minutes)

Spend ten minutes talking about the two-page description you brought to class in light of what comes out of the scenario discussions.

- Did you make use of your network ties?
- Did you make decisions with managing this constituency in mind?

MOVE TO SESSION 2 BREAKOUT ROOM AT 10:40

San Francisco Science Exercise

Session 2: Team

10:45 – 11:10

Take five minutes for introductions.

Representatives from each constituency should report on the major themes that came out of the constituency group discussion.

There is only enough time to allow two minutes per constituency.

Discuss as a group:

1. What networks already exist among the constituencies?
2. Does the existing network work efficiently?
3. What would you do to insert San Francisco Science into this network?
4. Which constituents are most important?
5. Can you address the interests and concerns of each of these groups?
6. Do you have one vision to communicate to each constituency or should you communicate different things to different constituencies?

RETURN TO THE CLASSROOM AT 11:10

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Date Due

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