Questionnaire for Physics Startups

INTRODUCTION

BACKGROUND AND EDUCATION

1. Were your parents entrepreneurial? What sort of work did they do?
2. Did you have any other entrepreneurial influences/activities growing up?
3. Tell us about your physics education—when and where you obtained your degree(s)
4. Who was your dissertation advisor? (If Ph.D.)
5. Did your start-up grow out of your dissertation or other graduate research?

THE STARTUP

6. Give us a quick outline of your career prior to this start up? (Academic/Industry/Other)
7. Would you describe yourself as more a “business” type person or an “academic” type person?
8. Why did you decide to go into your own business?
9. Do you have a mentor(s)? Who?
10. Were you involved in other startups prior to this one? (If no go to #14)
11. If yes, what happened to the earlier startups?
12. Was this a full time effort or something you were doing on the side?
13. What lessons did you learn in the earlier startup(s) that helped you to begin this startup?
14. When and why did you decide to begin this start-up?
15. To whom (besides partners) did you turn for advice or help in starting your company?
16. How long did it take to put everything together?
17. Did you have other employment during the early stages of this company? Do you now?
18. What role did you play in starting the company?
   (Idea person, primary founder, brought in for scientific credentials, etc. etc.)
19. How many founding partners were there in the startup?
20. How were the founding partners chosen/How did the founding partners come together?
21. Have you brought in outside management to assist in running the company? (Why or why not?)
22. How did you decide to locate your startup here? (Proximity to other entrepreneurial activity? Market considerations? Support and supply considerations? Proximity to university or other R&D sources? Labor supply?)

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23. Who do you perceive as the market for your product(s) and/or services? (Government? Other Businesses? General Public?)

STARTUP FUNDING OR FINANCING

24. How would you describe the initial funding sources for your enterprise? (3F—Friends, Family & Fools? Business Angel? Venture Capitalist?)

25. Have your funding sources changed over time?

26. If you have Venture Capitalist Funding, at what point did that become available?

27. Can you tell us about the procedures involved in obtaining capital?

28. Roughly what percentage of your funding was debt as opposed to equity (shares in the company) financing?

29. How did you collateralize debt issues? (Personal assets of founders? Assets of the startup? Etc. etc.)

30. How did you identify early investors?

31. What role(s)/influences do outside shareholders have in the company?

32. Have you gone public? (If No, go to 34)

33. How soon after the founding of your startup did you turn to IPO funding?

34. How successful was the IPO?

35. Was there a timeline for research and development? Who set it?

36. Have you licensed or sold IP developed by your firm to other firms? Startups? Major Corporations?

37. Do you have licensing agreements to use IP from other startups? Major corporations?

38. Do you have relationships with universities? Which ones?

39. Have you licensed IP from a University?

40. Do you have government funding? From where?

41. What risks did you foresee when you started the company?

42. How have risks changed?

NETWORKS

43. Do you have a network of people that you turn to or that turn to you to for ideas and/or intellectual support?

44. (If yes) How often do you interact with members of this network?

45. Do you play an advisorial role or serve on the board of directors for other companies?

46. Are there founders of other startups that you interact with professionally or socially?

47. Where do you recruit management and scientific and engineering staff?
RESEARCH ISSUES

48. How do you define “research” versus “development?”
49. What/Who are the sources for new ideas?
50. What role does research versus development play in your company today?
51. Has this changed since you began the company?
52. How many employees do you have?
53. What percentage of total staff is committed to research?
54. Who overseas research activities within the company?
55. What percentage of your budget goes to R&D and how is it divided between R and D?
56. What time frame(s) exist for your research projects? For your development projects?
57. How have those time frames changed since you began the company?
58. Do you do collaborative research projects with other startups/companies/universities?
59. (If Yes) What is your primary means of communicating with those researchers? (Face to face/email/telephone/letter/report etc.)
60. Do you have plans/ideas for new startups?

RESEARCH RECORDS

61. Do you have a records retention policy?
62. What primary R&D records do you preserve?
63. Lab Notebooks? Paper or Electronic?
64. Computer data?
65. How do you preserve computer data? (print outs, CDs, online, etc.)
66. Internal Reports?
67. Publications?
68. Do you have formal mechanisms for documenting new IP? What are they?
69. What among your research records do you consider important
   A. For the next 5 years?
   B. For the next 10-20 years?
   C. As permanent records?
70. Do you preserve any of your research records permanently?
71. Do you use a records management or storage service? Who?
72. How far back do you use records you have created?
73. Do you have a policy for preservation of electronic records?
74. (If yes) What is it?
75. How long do you keep Email?
76. Do you do literature searches? How do you do it?

SUMMING UP

77. Where do you see your company in five/ten years?
78. Do you hope to be acquired by another company? Go public? Manufacture a product for consumers, the government, or other businesses?
79. If you had it to do over again, would you start your own business? Be an employee in a firm? Decide to go into college teaching?
80. Do you do research extraneous to the company?
81. Are there other physics based entrepreneurs that you think we ought to interview?
82. Do you know of physicists that you would recommend for a “life history” interview?
83. Are there any other questions you think we should have asked/issues that you think were important in beginning your company?

Read the permission statement.