

Current State of Entrepreneurship @ Penn State

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Executive Summary

This document is intended to provide a current state assessment of the various programs that operate at Penn State with various offerings to support aspiring and current student entrepreneurs. Additionally, I provide thoughts on what is working and opportunities to further enhance the offerings. Finally, I provide a list of model programs and other resources related to the topic. I have tried to make the document as comprehensive as possible, though I'm sure that there may be some programs / people that have been overlooked or that I am not aware of.

Penn State has a diverse entrepreneurship ecosystem, with more resources than most realize are available. There are also a number of opportunities to build upon Penn State's initial successes.

Key Strengths:

- There are a number of programs on and around Penn State's campus that are dedicated to helping students explore and succeed in entrepreneurship. These include both academic and business resources. If students know where to look, there is generally something that can help get them moving in the right direction.
- Penn State has both a history of entrepreneurial success and some recent entrepreneurship success stories. This is in addition to a fantastic resource in its alumni base, spread out across all areas of business.
- The past several years have seen huge growth in programs for supporting early-stage entrepreneurs. No longer is there a gaping void between idea and venture capital funding. Entrepreneurs have a number of programs beyond Penn State to turn to and benefit from.

Key Opportunities:

- Despite the large number of available programs, unfortunately, the entrepreneurship landscape is heavily fragmented and resources are not integrated. Consequently, students interested in entrepreneurship use their time looking for the necessary resources rather than taking advantage of them.
- There is an issue of general awareness. Without high profile recent wins, there is a limited number of students who consider entrepreneurship as a viable career path or application of their ideas/creativity. Furthermore, students are seldom aware of academic entrepreneurship programs beyond their college/major.
- The third section of this document provides a highlights of the recent growth in external programs for early-stage entrepreneurs - there is a large opportunity to align with these programs and incorporate their best practices.
- Penn State's alumni base is a tremendous resource, yet, unfortunately, it is difficult to access and leverage. There is an opportunity to structure this resource more effectively, thus benefiting all Penn State entrepreneurs.

Entrepreneurship Contacts & Programs @ Penn State - who, what, where

- **Engineering Entrepreneurship Minor**, School of Engineering, Design, Technology, and Professional Programs, College of Engineering (<http://www.e-ship.psu.edu/>)
 - The eShip minor is one of the leading entrepreneurship education programs at Penn State and nationally. Originally funded with a grant from GE, the program is open to students from any major and draws great interest from those who know about it. Unfortunately, due to funding constraints, my understanding is that the program isn't able to publicize itself too widely, as its resources are somewhat limited. An effort is in progress to endow the director of the program. It has been mentioned that the program's name, "Engineering Entrepreneurship", precludes students from exploring it, giving the perception that it is limited to engineering students.
 - **Key Contacts:**
 - **Phil Boyer** - *acting director of the eShip minor* -- Phil has only recently joined the eShip program, but has already started seeking opportunities to get involved with the Lion Launch Pad and other initiatives
 - **Liz Kisenwether** - *former director of the eShip minor - co-director of the Lion Launch Pad* -- Liz has been a staunch supporter of Penn State entrepreneurship education and was a major factor in building the eShip program. She is a co-director and founding member of the Lion Launch Pad program (see below).
 - **David Wormley** - *dean of the College of Engineering* - strong support for the eShip program and other SEDTAPP programs for entrepreneurship education, board member of the Lion Launch Pad program
- **Lion Launch Pad** (<http://www.lionlaunchpad.org>)
 - Originally an independent non-profit, Penn State recently brought this program in house. Setup as a center of the University under Rob Pangborn, vice president and dean for undergraduate education, it is intended as a program to support aspiring undergraduate entrepreneurs regardless of their academic "home" in the university.
 - The program has finally obtained space in the Keller Building (near the Nittany Lion Inn) and is beginning operations. Eight student venture teams were admitted in the spring of 2010 following the Smeal IdeaPitch competition.
 - Funded by several generous alumni and an Advanced eTeam Grant from the NCIIA (National Collegiate Inventors and Innovators Alliance)
 - **Key Contacts**
 - **Liz Kisenwether** and **Robert Macy**, co-directors
 - **Rob Pangborn**, key university support
 - Board members:
 - **James Thomas** - dean of the Smeal College of Business
 - **David Wormley** - dean of the College of Engineering

- **Rob Shedd** - the Lion Launch Pad grew out of my Schreyer Honors College thesis and I've tried hard to remain actively involved and find ways to continue to support the program.
 - Other supporting individuals
 - **John Dietz** - director of development for the College of Engineering
- **Farrell Center**, Smeal College of Business, (<http://www.smeal.psu.edu/fcfe/>)
 - Home for Smeal's courses and programs focused on entrepreneurship
 - Unfortunately, due to funding and academic controls/restrictions, courses are generally limited to Smeal business students only. Furthermore, some have said that due to the academic requirements of the Smeal business degrees, it is difficult for Smeal students to participate in other programs (eShip minor, for instance) outside of Smeal. This is due to highly regimented course requirements and semester schedules.
 - **Key Contacts:**
 - **Tony Warren** - *director of the Farrell Center*, teaches MBA-level entrepreneurship courses, venture partner for Adams Capital Management (Pittsburgh VC fund) - created/taught Garber Practicum course for MBA students
 - **Garber Practicum:** MBA course where students manage a fund (~\$5m AUM) of alumni donations as a venture capital fund. The fund has made ~5-6 investments and receives presentations from entrepreneurs seeking funding typically each semester. It is a very popular class and for each company pitching the fund, the students generate a deal memo.
 - **Robert Macy** - *assistant professor for entrepreneurship* - teaches both undergraduate and MBA courses on entrepreneurship - *co-director of the Lion Launch Pad*
 - **David Lipson** - *distinguished Penn State alum - chairman of Moda Technology Partners*, co-taught the Garber Practicum course in Spring 2010, I believe he is taking over this course from Tony Warren. Philadelphia-based. *Connections to Temple University* as well, I believe.
 - Both Tony and Robert are key in making the **Smeal IdeaPitch** competition happen annually. IdeaPitch is Penn State's business plan competition. Ran for the 3rd time spring 2010. <http://ideapitch.smeal.psu.edu/> -- 27 teams participated in 2010 - the finalists were selected for the Lion Launch Pad program; see: <http://live.psu.edu/story/45595>
 - Unfortunately, with IdeaPitch occurring in the spring, for the companies that do win, many of them are graduating seniors and thus whatever motivation / support they receive from their efforts in the competition is usually undermined by the timing.
 - I believe the *effectiveness of using business plan competitions to encourage entrepreneurship is questionable*. My blog post on the topic: <http://blog.shedd.us/are-we-actually-creating-startups-through-business-plan-competitions/> Penn State's IdeaPitch is better than the average because of it's relationship with the Lion Launch Pad.

- Regarding Smeal course requirements, each student is required to take a "two-piece," intended to expose them to another business discipline outside of their major (Finance majors usually take Accounting, etc.). Recently, an entrepreneurship "two-piece" has been added, consisting of two classes taught by Robert Macy: MGMT 425 (New Venture Creation) and MGMT 426 (Idea Commercialization). This further increases entrepreneurship awareness among Smeal students, a reported issue previously.
- **Penn State Entrepreneurs Network** (<http://www.facebook.com/group.php?gid=198392299635>)
 - After many years of two parallel organizations running (one for undergraduates and one for MBA students), the two cohorts have merged their organizations. They run some events during the school year and are the most active formal organization of student entrepreneurs at Penn State. Usually highly aligned with the eShip minor.
 - **Key Contacts:**
 - President **Ethan Hirsch** is highly motivated to use the organization to bring together PSU entrepreneurs and expand the organization.
 - Organization's effectiveness limited by the standard student churn (takes a student a few years to figure out where things are at PSU and get involved, then they graduate)
 - They are working to pull various PSU entrepreneurship resources together at <http://entrepreneurship.psu.edu/>
 - Related Resources:
 - Google Group that used to be fairly active for undergraduates interested in entrepreneurship: <http://groups.google.com/group/psu-web-20>
 - LinkedIn group created for students interested in entrepreneurship, limited activity: http://www.linkedin.com/groups?home=&gid=74151&trk=anet_ug_hm&goback=.gsm_74151_1_*2_*2_*2_ltod_requests
- **Project Blue Pill**
 - A recent initiative (started April 2010) led by former PSU student-body presidential candidate **David Adewumi**. David founded a startup in summer 2008, called Heekya, as part of the Washington D.C.-based LaunchBox Digital startup accelerator (see part III).
 - Still in the formative stages, the *group aims to address the issue of students not knowing where to turn with ideas by creating a group that will execute startup ideas*. Along with this, the group intends to involve students in entrepreneurship mentoring and networking events similar to Y Combinator and other seed accelerator programs (see part III).
 - Several projects have been accepted into the program and students have apparently started working on them.

- David is forming an advisory board that includes **Schreyer Honors College Dean Brady, Matt Brezina (Xobni), David Rusenko (Weebly), Justin Goldman (LionMenus), and Rob Shedd.**
- *I have advised David that part of the issue is the fragmentation of entrepreneurship support resources and there are opportunities to partner with the PSEN and the Lion Launch Pad and to consider utilizing the existing organizational structures.* This would help to control further fragmentation and allow David & team to leverage the support that existing programs have already built, thus allowing David & team to focus on inspiring students to consider entrepreneurship and help students with ideas figure out how to move forward.
- It is unclear as of present where this program will head - David is an extremely driven and talented leader and I have no doubt that he will make an impact. I hope that he is able to focus his efforts as per the guidance of his advisory board to make the most substantial impact possible.
- See: <http://www.projectbluepill.org/>
- **NCIIA Invention 2 Venture (I2V)**
 - An annual event, run for the last 3 years, underwritten by the National Collegiate Inventors and Innovators Alliance. Usually attracts a large group of entrepreneurially motivated students. Run in October.
 - **Key Contacts:**
 - **Khanjan Mehta** - affiliate faculty with SEDTAPP, College of Engineering - the coordinator for the program and other NCIIA events at Penn State
- **Blue Line Incubator**
 - **David Barton**, a local State College entrepreneur, was one of the original supporters of the Lion Launch Pad initiative. David provided funding for the initial operations and office space for the program.
 - In 2008, as the Lion Launch Pad was being merged back into Penn State University to become a center of the university, David decided to continue to operate an incubator program out of his College Ave office for Penn State startups. Several alumni-run ventures have operated out of the space, including the 8trk Project, Triple Overtime Promotions, and Buzby Networks.
 - See: <http://www.facebook.com/group.php?gid=52298347035&v=info>
- **College of Information Sciences and Technology** (<http://ist.psu.edu>)
 - Several courses with an entrepreneurial focus, including the senior capstone class IST 440W.
 - College promotes a very interdisciplinary curriculum, combining technology and business. Out of the academic programs at Penn State, I feel IST students have a greater than average interest in entrepreneurship.
 - That said, besides the capstone course and some cross listed courses with the Smeal College of Business and other departments, there isn't much specifically focused on entrepreneurship that I am aware of within the College.

- One team of IST alumni are out in SFO building Weebly.com which went through the Y Combinator program (see below).
 - Multiple student teams have expressed interested in and have applied for various seed accelerator programs.
 - My home department, so I'm a bit biased. :)
- **Ben Franklin Technology Partners** (<http://benfranklin.org/>)
 - BFTP is Pennsylvania's premier early stage funding vehicle. It has been described as one of the best state-led efforts to support entrepreneurship. There is an office focused on Centre County based out of Innovation Park (see below).
 - Unfortunately, BFTP places a strong emphasis on barriers to entry and intellectual property protection, which are often not feasible for student startups at the stage of interest (they need the funding to pursue this protection) and there is mixed evidence as to whether IP protection is even effective for early-stage technology startups.
 - As a result, while BFTP is a strong resource for Pennsylvania, it has limited effectiveness for student startups at Penn State. Furthermore, with BFTP's recent budget cuts, current levels of support are unclear.
- **Innovation Park** (<http://www.innovationpark.psu.edu/>)
 - Home to the Centre County Chamber of Commerce Incubator (CBICC), the Small Business Development Center (SBDC), and the Penn State Intellectual Property Office (IPO) and Ben Franklin Technology Partners (BFTP)
 - Many programs, some even focused on students, run through the SBDC
 - Physically far removed from campus - few students aware of the offerings. This highly limits its effectiveness for use by students and is one of the chief reasons we have pushed to locate the Lion Launch Pad on campus.
 - Incubator is also expensive to work out of, further limiting the effectiveness for students.
 - Key Contacts:
 - **Linda Feltman**, Penn State SBDC

Opportunities to Support Entrepreneurship - what's working, what's needed

As you can see, there is a lot going on at Penn State that's focused on entrepreneurship and providing resources for students who aspire to be entrepreneurs. This is encouraging, however, often leads to a fragmented landscape of support, meaning that for those who are looking for support, they need to do a lot of legwork to find the people and programs that can help them with what they need. Many student entrepreneurs have expressed to me that they don't know where to begin. It took me the better part of 4 - 5 months of meetings and exploring the ecosystem for my SHC thesis research to figure out who everyone was and what resources they offer.

Below is an outline of thoughts on opportunities to improve upon the status quo along with some keys critical to making them successful.

- **Clearinghouse for Support:** students need somewhere to turn to help navigate through the resources available to them. This should preferably be independent of any academic program, to avoid conflicts and any program "owning" the resource. For this reason, the Lion Launch Pad, with its unique interdisciplinary setup has always seemed ideal for this purpose. With recent momentum that the program has been generating, the feasibility is increasing in this regard.
 - **Keys to Success:**
 - Must be known to students
 - Must be accessible to students from any academic program
 - Must be able to do make recommendations to students on where they should turn
- A more **structured process for supporting student entrepreneurs** that take a concept and explore a sustainable venture. Right now, the IdeaPitch competition is the most structured process for supporting entrepreneurs that exists. I am bullish on the fact that the IdeaPitch program is tied to the Lion Launch Pad¹, however, the fact that the competition is late in the year is ineffective for seniors and students who are committed to summer internships. For these students who go through the competition and then realize that their idea has merit (and they win resources to pursue it!), many of them are committed to head off to traditional jobs and the initiative is lost.
 - **Keys to Success:**
 - The process must be focused on supporting the entrepreneurs and helping them figure out what direction they need to go in, NOT

¹ I believe the *effectiveness of using business plan competitions to encourage entrepreneurship is questionable*. My blog post on the topic: <http://blog.shedd.us/are-we-actually-creating-startups-through-business-plan-competitions/> Penn State's IdeaPitch is better than the average because of it's relationship with the Lion Launch Pad, intended to provide the business "acceleration" that I mention in the post.

“owning” the ventures and keeping them in State College for economic development purposes. State College may be the right location for some, but it is not the right location for every startup, clearly.

- For optimum effectiveness, the process should mesh with existing EXTERNAL resources for supporting seed-stage entrepreneurs. Below I provide links to a list of what I term seed-stage startup accelerators. This is a growing genre of programs for nascent entrepreneurs and it is highly effective, in my opinion. However, many of these programs are oriented around a fixed timeline. The process should be compatible with the timeline of these programs.
- Using best practices from existing seed-stage accelerator programs, like regular speaker series. This could provide a venue for students interested in entrepreneurship who can't participate in standard classes to gain experience with the core concepts of taking an idea to sustainable company (minimum viable product, customer development, etc.) and for those students who are taking the courses to get additional exposure and important connections.
- **Demonstrate Feasibility:** It is my personal opinion that a big issue with encouraging entrepreneurship at Penn State is tied to the fact that few students know about successful Penn State entrepreneurs. This is not an ego issue, but rather because of this general lack of awareness, I believe most students don't see entrepreneurship as a feasible career path. We don't have any Googles or Yahoos in our recent alumni pool attracting vast media attention. As a result, students generally turn to the career paths they do know about - the traditional ones - and don't pursue high potential concepts they may come across. This is despite having some compelling success stories in recent memory: Weebly.com founded by a team of IST '07 students (Y Combinator company - see below), Xobni co-founded by EE '03 grad (Y Combinator company - see below), LionMenus.com / YNot Advertising founded by a team of Penn State students, and Steve Welch's bootstrapped biotech venture sold to Parker Hannifin in 2007. Clearly, the more Penn State-centric startups, the more startup internship opportunities and entry-level positions that become accessible to current students, in addition to a general awareness of Penn State entrepreneurship success.
- **Alumni Advisor Connections:** As a Penn Stater, we frequently hear about what a fantastic resource we have at our fingertips with the extensive alumni base. This is true, however, it usually presents itself in a serendipitous manner currently (finding football fans randomly in other cities while traveling, for instance). For those who want to use the alumni base to find advisors and mentors, it's rather difficult to figure out how to find the people that can help. The alumni search tool is rather arcane and the alumni pool is sheltered for

use by development. This is despite that many Penn State alumni would be happy to interact with Penn Staters they could assist. We need an opt-in means of alumni making themselves available to extend assistance for their areas of expertise. Helping to design an effective program would be a key way the advisory board could help.

Models & Resources - what else is out there? what should we align with?

Recent years have seen a large increase in the number of programs focused on supporting early-stage entrepreneurs. Many of these programs are highly successful and present an opportunity to take entrepreneurs beyond the programs and resources of Penn State's ecosystem. This section provides an overview of the major programs and trends. I believe that there is a large opportunity to align an expanded Penn State entrepreneurship effort with many of these programs.

- **Seed Stage Startup Accelerators:**

- There has been a recent growth in the last few years in what I term "seed stage startup accelerators". The model was pioneered by an organization called **Y Combinator** (based in Mountain View, CA, though also originally operated in Cambridge, MA, too). Founded by entrepreneur Paul Graham, YC operates two programs annually, one during the summer break and one during the winter months.
- Y Combinator laid the framework for what has become an extremely successful model of early stage investing and supporting entrepreneurs.
- YC provides **\$5,000 per founder (no more than \$20,000) and brings ~20 startups into each program for a 3-4 month intensive session of weekly speakers and regular coaching**. The money is less important than the **mentoring, which is the emphasis**. The founders work from their apartments in Mountain View, but get together weekly. The focus is on getting from idea to a working prototype. At the end of the summer, all companies present their businesses to a room of highly respected angel and VC investors on "Demo Day". See: <http://www.ycombinator.com/about.html>
- Y Combinator takes **approximately 6% equity** in each company. Many companies have a limited prototype or demo when accepted, but are still extremely early in the new venture creation process. High emphasis on skilled technology developers (or "hackers")
- The program is structured the way it is because it was **designed around the schedules of college student entrepreneurs** (either current students or recent grads) which are the most common demographic participating in the program.
- The format has met with **much success from YC and a higher percentage of YC companies get follow-on funding and there have been multiple high profile exits**. YC has established itself as the preeminent seed stage funding program.
- At last count, **over 800 startup concepts apply per program to Y Combinator**, accepting only about 2%.
- **TechStars**, a similar program operating in Boulder, CO, Boston, MA, and Seattle, WA, has also been highly successful. They publish their results here: <http://www.techstars.org/results/> TechStars follows a very similar model to YC's.
- **DreamIt Ventures** is based in Philadelphia and operates under a similar model with capital from Ben Franklin Technology Partners. **Steven Welch is one of the founding DreamIt Ventures partners and is an alum of Penn State**. DreamIt is starting its 3rd year of operation. (I participated in DreamIt in the summer of

2009 and highly recommend the program.) DreamIt follows a very similar model to YC's.

- There are **93 similar seed stage programs at the current time**. Many are just getting started; most follow a similar model. I maintain a list of these programs on my blog: <http://blog.shedd.us/321987608/>
- Given the high success rate of the seed stage startup accelerators and the widespread attention given to the programs, I believe there is a natural fit in **aligning a more structured process for supporting entrepreneurs with the application processes for the seed stage accelerator programs** (whether it is through the Lion Launch Pad or other vehicle). Most programs have application deadlines in the early spring. A summary of the deadlines for 2010: <http://kaljundi.com/2010/02/19/upcoming-startup-incubator-deadlines/>
- **University Associated Programs for Student Entrepreneurs**
 - Many universities speak about their business incubators. For the reasons outlined above and for the reasons that the seed stage accelerators are working, these are not effective solutions for students and are usually just a real-estate play for the universities. However, there are some good models out there for university-centric (even operated) programs to support student entrepreneurs. I've listed those that I'm aware of as part of the seed accelerator list on my blog (<http://blog.shedd.us/321987608/>); these are the highlights.
 - **Edson Student Entrepreneur Initiative at Arizona State University** (<http://studentventures.asu.edu/about>)
 - One of the first and best programs dedicated for student entrepreneurs.
 - An endowment provides \$200,000 in seed funding for student startups.
 - Originally located in a dedicated facility on campus, the program was recently moved to ASU's nearby business incubation facility (a move that might reduce the effectiveness of the program, as I believe it is highly important that the program be in close proximity to the main campus).
 - Dedicated Edson advisors work with the students on their ventures.
 - **Wharton Venture Initiation Program at the University of Pennsylvania** (<http://vip.wharton.upenn.edu/>)
 - The Wharton VIP program accepts student ventures 3x per academic year and student ventures can participate twice for up to 5 months (<http://vip.wharton.upenn.edu/program.html>).
 - A number of financial awards and grants are available to students (<http://wep.wharton.upenn.edu/awards.html>), including a grant to provide compensation for students who choose to work at established startups for summer internships.
 - Seed funding for companies is available (<http://vip.wharton.upenn.edu/awards.html>) to companies that have participated for at least one semester before applying.
 - Several companies have exited or achieved follow-on funding following participation in the program (<http://vip.wharton.upenn.edu/alumniEntrepreneurs.aspx>).

- **Stanford Student Startup Lab** (<http://sselabs.stanford.edu/>)
 - SSE Labs is run entirely by Stanford students, which makes it unique in that regard (<http://sselabs.stanford.edu/team>).
 - The program focuses on providing connections with mentors and other advising during a summer program (<http://sselabs.stanford.edu/details>)
 - The program takes 0% equity
 - A number of Stanford faculty members are involved, along with other entrepreneurs, as mentors (<http://sselabs.stanford.edu/mentors>)
- **Yale Entrepreneurial Institute** (<http://yalestation.yale.edu/yei/summer-fellowship.html>)
 - \$15,000 per team - 6-8 teams accepted for a Summer Fellowship program (<http://yalestation.yale.edu/yei/summer-apply.html>)
 - Speaker series and dedicated mentoring for each team
 - Workspace for the teams and access to reduced cost legal/accounting services
 - Yale also offers an incubator to provide “affordable office space” to student startups: <http://yalestation.yale.edu/yei/incubator.html>
- **Stanford’s Technology Ventures Program** (<http://stvp.stanford.edu/>)
 - Stanford has built a strong awareness of their entrepreneurship offerings through programs like their **Entrepreneurial Thought Leaders** program. A weekly lecture series held on campus, the program not only raises awareness of entrepreneurship for students on campus, but has become an important web resource for entrepreneurs outside of Stanford, as the content is syndicated with online videos and podcasts. It has evolved into a powerful engine to increase awareness of Stanford’s entrepreneurship programs. See: <http://etl.stanford.edu/>
 - Entrepreneurship content beyond the ETL podcasts is also made available through a Stanford TVP site called **Entrepreneurship Corner**. This is also another high-profile resource that is helping to increase Stanford’s entrepreneurship profile. See: <http://stvp.stanford.edu/outreach/educators-corner.html>
 - Similar to the Wharton VIP grants that provide compensation to students who take internship positions with early-stage ventures, Stanford TVP offers a program called **Mayfield Fellows** which provides funding for a 9-month work/study program, placing high-potential students with high-growth startups. See: <http://stvp.stanford.edu/teaching/mfp/>
- **Osage Ventures Raises \$100m Fund to Provide Follow-On Funding for University Startups** (<http://www.osageventures.com/partners.html>)
 - VentureWire reported in April that Philadelphia-area Osage Ventures partnered with the **University of Pennsylvania, Duke University, Yale University, University of Florida, California Institute of Technology, and the University of Michigan**.

- This is one of the largest funds I've heard of dedicated to funding spin-outs from universities. Granted that most of the ventures funded by Osage through this vehicle will be likely later stage startups, it still demonstrates strong interest in the results of university entrepreneurship.
- Osage will raise "at least \$100 million" for a new fund that will be used to **"exclusively participate in follow-on financing rounds"** for the university startups, VentureWire reported. The **universities would "receive a piece of the fund's profits,"** the report said.
- Read more: http://localtechwire.com/business/local_tech_wire/news/blogpost/7460281/

- Speaking of University Spin Outs, **Columbia University has one of the leading programs to facilitate and guide spin outs:** <http://www.techventures.columbia.edu/> Spin outs are typically later stage than what student entrepreneurship should be focused on. Innovation Park provides the resources needed for spin outs.

- My Schreyer Honors College thesis that served as the basis for the Lion Launch Pad is online here: <http://www.robert.shedd.us/thesis/SHEDD%20THESIS.pdf> Note that it's rather large (4.7 MB) and nearly 200 pages in length - it's also several years out of date, but is rather clear in defining the vision, I believe.