

BUSINESS INCUBATION AT CALGARY

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BUSINESS INCUBATOR GOAL

To Assist

A Group of People and Ideas

To make a Successful Transition from

A Purely Academic Environment

To Self-Sufficiency in the Commercial World

MISSION STATEMENT

To provide Appropriate Modular Building Space
and a Professional Supportive Environment
in which University Ideas can be
Rapidly and Successfully Developed
into Useful Products and Processes
by means of
the Entrepreneurial Method.

RESEARCH TRANSITION FACILITY
(RTF)
AT THE UNIVERSITY OF CALGARY

- INCEPTION & BUSINESS PLAN 2001-2
- FUNDING RECEIVED 2002
- DURATION OF PROJECT 2003-2008
- PHASED RENOVATION-CONSTRUCTION 2003-2005
- FIRST TENANT 2003
- GRAND OPENING 2005
- CURRENTLY 7 TENANTS
- ONE COMPANY HAS GRADUATED ALREADY
- ANOTHER COMPANY IS GOING PUBLIC SOON

WHAT THE INCUBATOR OFFERS

- A CREDIBLE FIRST BUSINESS ADDRESS
- CONVENIENT LOCATION CLOSE TO THE CAMPUS
- PROFESSIONAL QUALITY OFFICES, LABS AND BOARDROOM
- MODERATE RENT
- FLEXIBLE LEASES
- SUPPORTIVE ENVIRONMENT
- ECONOMICAL ACCESS TO SHARED OFFICE EQUIPMENT
- IMPRESSIVE VENUE TO MEET CUSTOMERS AND INVESTORS
- OPPORTUNITY FOR SYNERGY WITH TECHNICAL PROFESSIONALS POSSESSING COMPLEMENTARY SKILLS
- LINKS TO PROFESSIONAL BUSINESS SERVICES
- BUILDING SECURITY

WHAT THE INCUBATOR IS

NOT!

- *NOT* A FUNDING AGENCY!
- *NOT* A SOURCE OF FREE LAB SPACE FOREVER!
- *NOT* A REAL ESTATE INVESTMENT!
- *NOT* A PRIVATE BOONDOGGLE!
- *NOT* A THREAT TO UNIVERSITY VALUES!

BENEFITS FROM SUCCESSFUL BUSINESS INCUBATION

- LARGER NUMBER OF TECHNOLOGY COMMERCIALIZATION SUCCESSES
- HIGHER ROYALTY REVENUES FOR THE UNIVERSITY
- SYNERGY BETWEEN TENANTS WITH DIFFERENT TECHNOLOGICAL SKILLS
 - LEADS TO INVENTIONS THAT MIGHT NOT EMERGE FROM ONE FACULTY ALONE
- COMMUNITY IMPROVEMENT - COMPANIES INCUBATED LOCALLY ARE MORE LIKELY TO BE RETAINED LOCALLY ON “GRADUATION” TO COMMERCIAL SPACE
- MORE LOCAL ECONOMIC ACTIVITY- GOODS PURCHASED & SOLD
- LOCAL JOB CREATION – CONTRIBUTION TO SOCIAL HARMONY
- REVITALIZATION OF DECLINING AREAS - WITH SUNRISE INDUSTRY INVESTMENT
- SUCCESSFUL TECHNOLOGICAL ENTREPRENEURS
 - ARE LIKELY TO MAKE GIFTS BACK TO THEIR UNIVERSITY
 - PROVIDE GOOD ROLE MODELS FOR THE YOUNG IN DISADVANTAGED NEIGHBOURHOODS
- NEW COMPANIES AND NEW WORKERS PAY THEIR LOCAL TAXES AND THEREFORE REPAY THE CITY FOR ANY INVESTMENT IT MAY HAVE MADE
- A POSITIVE TANGIBLE MESSAGE IS SENT FROM THE UNIVERSITY TO LEGISLATORS, HELPING THEM TO JUSTIFY FURTHER GOVERNMENT FUNDING TO THE UNIVERSITY AS A WHOLE.

THE DUAL ROLE OF THE INCUBATOR MANAGER

MENTOR AND SUPPORTER

- REVIEWS APPLICATIONS FROM POTENTIAL CLIENTS
- PROVIDES FEEDBACK ON APPLICATIONS
- LINKS CLIENTS TO GOVERNMENT AND OTHER FUNDING AGENCIES
- WILL PROVIDE FEEDBACK ON BUSINESS PLANS IF REQUESTED
- ORGANIZES OPPORTUNITIES FOR SYNERGY BETWEEN CLIENTS
- MEDIATES BETWEEN CLIENTS
- ENCOURAGES CLIENTS
- BUILDS A PRODUCTIVE COMMUNITY

LANDLORD

- BUILDING DESIGNER
- LEASING MANAGER
- OPERATIONS MANAGER
- PURCHASING MANAGER
- SAFETY OFFICER
- NEGOTIATES SERVICE AGREEMENTS WITH MAIN CAMPUS E.G. TELECOM, NETWORKS ETC.
- DEVELOPS PROMOTIONAL MATERIAL FOR FACILITY e.g. BROCHURES, WEBSITE.
- ENSURES THAT THE INCUBATOR OPERATES ACCORDING TO UNIVERSITY VALUES
- FINANCIAL MANAGER WITH BREAK-EVEN OBJECTIVE
- ENFORCES FINANCIAL DISCIPLINE WHEN NECESSARY

COMMON CHALLENGES FOR THE NEW INCUBATOR

NEED TO CLARIFY MISUNDERSTANDINGS OF INCUBATOR'S ROLE

- THE INCUBATOR OUTPUT CONSISTS OF PRODUCTIVE TECHNOLOGICAL COMPANIES CREATING BOTH ROYALTIES FOR THE UNIVERSITY AND QUALITY LOCAL JOBS
- THE INCUBATOR ITSELF RUNS ON A NOT-FOR-PROFIT BASIS
- THE INCUBATOR IS NOT A REAL ESTATE INVESTMENT – START-UP COMPANIES ARE CASH-POOR AND CANNOT PAY HIGH RENTS WITHOUT JEOPARDIZING THEIR FUTURE & SO THEY SHOULD NOT BE GOUGED OR DISCOURAGED BY VERY HIGH RENTS.
- HOWEVER, FOR REASONS OF REALISM, THE SPACE SHOULD NOT BE RENT-FREE. TENANTS SHOULD PAY A MODERATE REALISTIC RENT THAT COVERS INCUBATOR EXPENSES
- THE VALUES OF THE UNIVERSITY MUST NOT BE COMPROMISED. THE MODUS OPERANDI OF THE INCUBATOR MUST BE VERY CAREFULLY DEVELOPED SO THAT ITS ACTIVITIES ARE COMPATIBLE WITH BOTH UNIVERSITY VALUES AND ALSO COMMERCIAL REALITIES (“THE ETHICAL ENTERPRISE”).
- LEGAL DEPARTMENTS HAVE LIABILITY CONCERNS WHICH ARE BEST ADDRESSED THROUGH A DISCLAIMER IN THE LEASE AND BY A CLAUSE REQUIRING TENANTS TO TAKE INSURANCE
- INTELLECTUAL PROPERTY DEPARTMENTS WORRY ABOUT LOSS OF LICENSE REVENUES – BEST ADDRESSED THROUGH THE FACULTY MEMBERS’ PRE-EXISTING EMPLOYMENT CONTRACT CONDITIONS.

TENANT LEASES

THE TENANT LEASES

- START-UP COMPANIES ARE VULNERABLE AND THEIR CIRCUMSTANCES CHANGE QUICKLY
- THEY ARE RELUCTANT TO COMMIT TO LONG TERM LEASES
- FLEXIBILITY IS IMPORTANT, PARTICULARLY REGARDING DURATION OF THE LEASE AND THE SIZE OF AREA OCCUPIED. TO STAY IN AFLOAT, START-UPS NEED TO BE ABLE TO UP-SIZE QUICKLY TO TAKE ADVANTAGE OF OPPORTUNITY AND ALSO BE ABLE TO DOWN-SIZE SWIFTLY TO RESPOND TO FINANCIAL ADVERSITY.
- HOWEVER, THERE ARE SIGNIFICANT EXPENSES ASSOCIATED WITH THE INDUCTION OF EACH NEW TENANT AND SO THERE IS A MINIMUM LEASE TERM OF 3-MONTHS AT CALGARY. MOST LEASES HERE ARE FOR 6-MONTHS AND 12-MONTHS.
- THE MAXIMUM LEASE PERIOD AT CALGARY IS 3-YEARS, AFTER WHICH THE START-UP IS EXPECTED TO MOVE OUT (“GRADUATE”) TO COMMERCIAL SPACE, FREEING THE INCUBATOR SPACE FOR NEW ENTERPRISES.
- FLEXIBILITY IN THE PAYMENT SCHEDULE CAN SOMETIMES HELP START-UPS SURVIVE A DIFFICULT PERIOD, E.G. ACCEPTANCE OF A BALLOON PAYMENT.
- HOWEVER THE FLEXIBILITY SHOULD NOT BE EXTENDED TO THE LEVEL OF THE RENT PER UNIT FLOOR AREA PER YEAR. FOR REASONS OF FAIRNESS AND HARMONY IN THE INCUBATOR, THESE RENT RATES SHOULD BE MAINTAINED AT THE SAME LEVEL FOR ALL TENANTS.

INTELLECTUAL PROPERTY (IP)

- CAN BE A SOURCE OF MUCH FRICTION
- I.P. AGREEMENTS TEND TOWARDS RIGIDITY THROUGH A NECESSARILY LEGALISTIC APPROACH ELIMINATING ALL PERCEIVED RISKS
- HOWEVER, THE INCUBATOR MUST EMPHASIZE FLEXIBILITY TO ACCOMMODATE THE RAPIDLY CHANGING CIRCUMSTANCES WITH WHICH THE ENTREPRENEUR MUST COPE TO SURVIVE
- IT IS BEST TO SEPARATE I.P. AND INCUBATION
- AT CALGARY THE I.P. IS DEALT WITH THROUGH THE TERMS OF THE FACULTY MEMBERS' CONTRACT OF EMPLOYMENT
- MANY APPROACHES USED AT DIFFERENT INSTITUTIONS
- SOME INSTITUTIONS TAKE PART OF THE RENT IN THE FORM OF EQUITY
 - NOT RECOMMENDED BECAUSE THE TIME BEFORE EQUITY LIQUIDATION CAN OCCUR IS VERY LONG AND INCOMPATIBLE WITH THE ANNUAL BREAK-EVEN REQUIREMENT FOR PRACTICAL INCUBATOR MANAGEMENT
- A MAJOR VARIATION:
 - ALL IP BELONGS TO THE UNIVERSITY, PROFS HAVE A RIGHT TO A SHARE OF REVENUE
 - OR***
 - ALL IP BELONGS TO THE PROFS, THE UNIVERSITY HAS RIGHT TO A SHARE OF REVENUE (CALGARY)

SPREAD OF CLIENT TECHNOLOGIES

- AT CALGARY THE AIM IS TO ENCOURAGE SYNERGY BETWEEN EXPERTS WITH VERY DIFFERENT BUT COMPLEMENTARY SKILLS.
 - E.G. ONE BIOLOGIST & ONE SECURITY SOFTWARE ENGINEER CAME UP WITH USEFUL TECHNOLOGY THAT NEITHER COULD HAVE DEVELOPED ALONE
- SOME INCUBATORS SPECIALIZE IN ONE AREA, PROVIDING SPECIALIZED LAB EQUIPMENT THAT IT WOULD BE HARD FOR A START-UP TO AFFORD.
 - E.G. BIOTECHNOLOGY INCUBATORS PROVIDE CENTRALIZED AUTOCLAVE CHAMBERS FOR USE BY SEVERAL CLIENTS IN STERILIZATION PROCESSES
 - THIS STRATEGY TAKES ADVANTAGE OF THE ECONOMIES OF SCALE, HOWEVER, IT ALSO LIMITS THE POSSIBILITIES OF INVENTION BY SYNERGY

DIVERSE TECHNOLOGIES OF CALGARY CLIENTELE

- PHARMACEUTICAL PAIN RELIEVERS
- AEROSOL SYSTEMS FOR MEDICAL DRUGS
- LABORATORY BIO-RESEARCH REAGENTS
- ELECTRONIC SENSORS FOR THE OIL INDUSTRY
- ELECTRONIC AUTOMOTIVE CONTROL SYSTEMS
- SOFTWARE FOR MANAGEMENT APPLICATIONS
- SUPER-ACCELERATED SOFTWARE
- INTELLIGENT SECURITY CAMERA SYSTEMS

POTENTIAL CLIENT TYPES AND TEAM COMPOSITION (I)

AT CALGARY THE INCUBATOR IS OPEN TO:

- FACULTY MEMBERS
- MATURE GRADUATE STUDENTS WITH SOME COMMERCIAL EXPERIENCE
- RECENT POST-GRADUATES
- NEW GRADUATES
- ALUMNI
- UNIVERSITY SUPPORT STAFF
- COMBINATIONS OF THE ABOVE

POTENTIAL CLIENT TYPES AND TEAM COMPOSITION (II)

ONE PARTICULARLY SUCCESSFUL GROUP HAS THE FOLLOWING FORMULA:

- THREE TENURED ELECTRICAL ENGINEERING PROFESSORS IN THE FOUNDING GROUP WHO LEND THEIR PRESTIGE AND DEEP SCIENTIFIC KNOWLEDGE TO THE ENTERPRISE.
- C.E.O. AND THE C.T.O. WHO RUN THE COMPANY'S DAY-TO-DAY DEVELOPMENT ARE BOTH FORMER MATURE ELECTRICAL ENGINEERING GRADUATE STUDENTS WHO TOOK A FEW YEARS OUT IN THE COMMERCIAL WORLD BEFORE RETURNING TO GRAD SCHOOL. THEY LEND THEIR COMMERCIAL KNOWLEDGE AND YOUTHFUL ENERGY TO THE ENTERPRISE.
- WORKFORCE COMPOSED PRIMARILY OF FAIRLY NEW GRADUATES WITH UP-TO-DATE TECHNICAL EXPERTISE WHO WILL BENEFIT FROM EXPOSURE TO THE KNOWLEDGE AND MATURE ORGANIZATIONAL SKILLS OF THE ABOVE TWO GROUPS
- THIS SEEMS TO BE A WINNING COMBINATION THAT MAKES THE BEST USE OF THE HUMAN RESOURCES AVAILABLE TO THE UNIVERSITY WITHOUT JEOPARDIZING THE PROFESSOR'S ACADEMIC CAREER AND TENURE.

INCUBATOR STRATEGIES TO BE AVOIDED

- NO PERMANENT MANAGER ON SITE
- FOR-PROFIT RENTS THAT START-UPS CANNOT REALLY AFFORD
- LOCATION FAR FROM UNIVERSITY & LONG COMMUTE
- BUILDING UNSUITABLE FOR TECHNOLOGICAL USE WITHOUT HUGE RETROFITTING EXPENSES
- SHABBY BUILDING DEPRESSING MORALE
- BUSINESS MANAGER WITH NO SCIENTIFIC BACKGROUND
- SCIENTIST MANAGER WITH NO BUSINESS EXPERIENCE
- ENTRY DETERMINED ONLY BY I.P CONSIDERATIONS RATHER THAN POTENTIAL CONTRIBUTION OF THE NEW TENANT TO THE CREATIVE AND PRODUCTIVE COMMUNITY IN THE INCUBATOR

MIXED USE INCUBATOR

POSSIBILITIES

- IN SOME CITIES, BUSINESS INCUBATORS EXIST FOR ARTISTIC, CRAFT, CULINARY AND OTHER ENTERPRISES, NOT JUST TECHNOLOGY.
- FOR A SMALL COMMUNITY, A CASE CAN BE MADE FOR A MIXED USE INCUBATOR, POSSIBLY WITH SEPARATE WINGS FOR ~ZONING/HEALTH REASONS. (ONE UAF GROUP HAS EXPRESSED AN INTEREST IN NUTRACEUTICAL FOOD PRODUCTS DERIVED FROM LOCAL PLANTS)
- THE MANAGEMENT OF A MIXED USE INCUBATOR HAS TO BE OF A HIGH QUALITY AND CAPABLE OF ADDRESSING THE CULTURAL AND BUSINESS NEEDS OF SEVERAL VERY DIFFERENT COMMUNITIES OF TENANTS SIMULTANEOUSLY.
- IT MAY BE POSSIBLE TO DEVELOP A SERVICE ADDRESSING ISSUES AND OPPORTUNITIES ARISING FROM THE FAIRBANKS AND REGION COMMUNITY OUTSIDE OF THE UNIVERSITY (SERVICE ANALOGOUS TO THE CANADIAN NRC INDUSTRIAL RESEARCH ASSISTANCE PROGRAM).
- THE SERVICE WOULD AIM TO PROVIDE A SOLUTION PATH FOR LOCAL CONCERNS. IT MIGHT INVOLVE CONSULTING THE SPECIALIST EXPERTISE FOUND WITHIN UAF WHERE APPROPRIATE, AND IN OTHER CASES IDENTIFYING OUTSIDE SOURCES OF EXPERTISE. THE LATTER MAY BE ACCESSIBLE IN PART THROUGH THE INTERNET SINCE MANY INSTITUTIONS NOW LIST THEIR EXPERTS BY SPECIALTY.
- THE INCUBATOR COULD IMPROVE THE SELF-SUFFICIENCY OF LOCAL INVENTORS BY RUNNING SHORT COURSES AND SEMINARS TEACHING THEM HOW TO MAKE FREE ON-LINE PATENT SEARCHES THAT WOULD HELP THEM DIRECT THEIR EFFORTS INTO AREAS OF OPPORTUNITY.
- SIMPLER TECHNICAL PROBLEMS IN THE LOCAL COMMUNITY MIGHT ALSO BE MORE READILY SOLVED BY ATTRACTING MORE O.E.M. TECHNICAL SERVICE REPRESENTATIVES TO VISIT THE RELATIVELY REMOTE FAIRBANKS LOCATION MORE OFTEN AND TO SERVICE MORE LOCAL CLIENTS. THIS COULD BE ENCOURAGED BY DESIGNATING A FEW INCUBATOR OFFICES TO BE USED INEXPENSIVELY BY THE DAY (PERHAPS FREE) BY VISITING TECHNICAL SERVICE REPRESENTATIVES AND BY PROVIDING THEM WITH MODERN COMMUNICATIONS ACCESS TO THEIR HOME OFFICES, E.G. BY WEB CAMS AND VIDEOCONFERENCING.

UAF ALUMNI

- UAF ALUMNI REPRESENT A CONSIDERABLE RESOURCE AND MANY POTENTIAL TECHNOLOGICAL ENTREPRENEURS WHO CAN HELP THEIR PROFESSORS TO COMMERCIALIZE UNIVERSITY I.P. WITHOUT JEOPARDIZING THE PROFESSORS' ACADEMIC CAREERS AND TENURE.
- IT WOULD BE WORTHWHILE MAKING AN EXTRA EFFORT TO KEEP IN CONTACT WITH ALUMNI AND TRACK THEIR ACTIVITIES WITH A VIEW TO INVITING SOME OF THEM THEM BACK AT AN APPROPRIATE JUNCTURE TO DRIVE UAF START-UP ENTERPRISES.

CONCLUSION

- THERE ARE MANY DIFFERENT TYPES OF INCUBATOR THAT CAN WORK WELL UNDER APPROPRIATE CONDITIONS
- A SUCCESSFUL INCUBATOR COULD BE DEVELOPED FOR THE PARTICULAR CIRCUMSTANCES FOUND AT FAIRBANKS
- THE ALUMNI OF THE UNIVERSITY SHOULD BE BROUGHT INTO THE PLANNING AT AN EARLY STAGE.