

Room for a Small One?

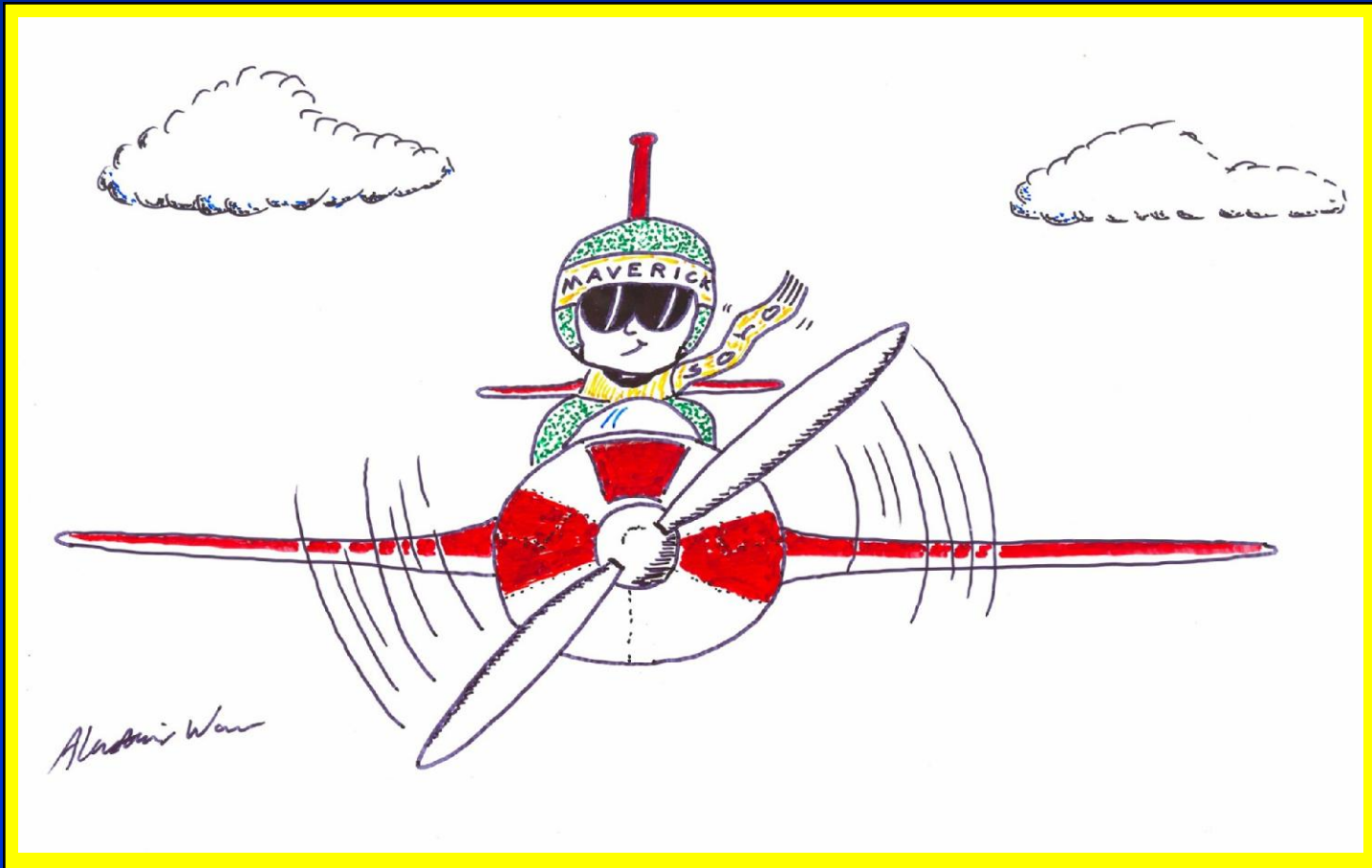
Dr. Wendy A. Warr
<http://www.warr.com>

“Animal Spirits”

“Fire in the Belly”



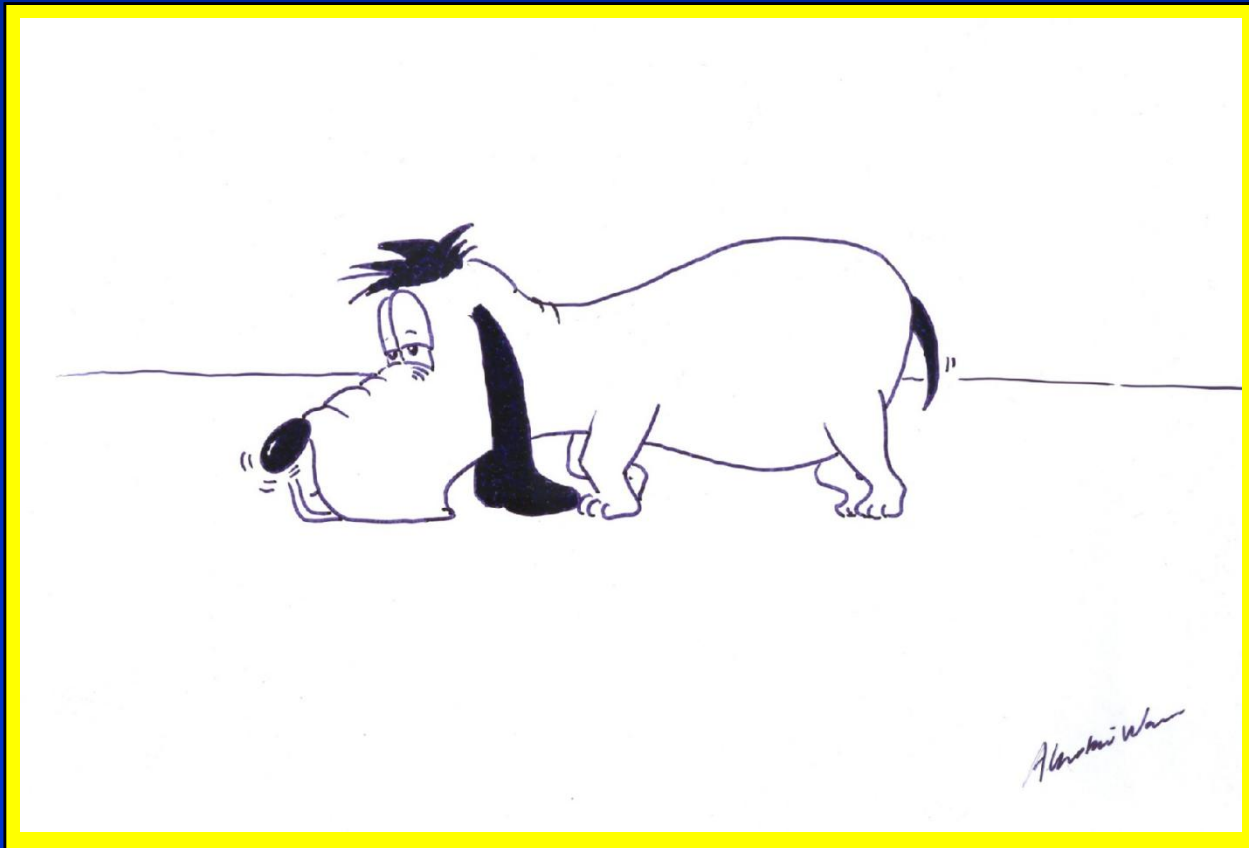
Going it Alone



What We Do

Since January 1992, Wendy Warr & Associates has been supplying business and competitive intelligence services to a broad spectrum of clients in the United States, Europe, Australia, the Middle East, and Asia. Our success stems from our extensive network and our specialized knowledge of cheminformatics and high throughput chemistry. Pharmaceutical companies, venture capitalists, publishers, software companies, and scientific database producers have benefited from our expert counsel and services in recent years.

What We Do



Finding Things Out



Companies

- Cheminformatics
- Content/publishing
- Research services
- Internet search and services
- Semantics/metadata/text mining
- Federated search
- Pipelining/workflow
- Miscellaneous

Cheminformatics

- Abacalab
- Accelrys
- ACD/Labs
- Altoris (ChemApps)
- Ariana Pharma
- Aureus Pharma
- BioMolTech
- Bio-Rad
- BioSolveIT
- CCDC
- CambridgeSoft
- c.a.r.u.s HMS (ViSoR)
- ChemAxon
- Chemical Computing Group
- Collaborative Drug Discovery
- Cosmologic
- Cresset Biomolecular Discovery
- Daylight CIS
- DeltaSoft
- Dotmatics
- Eidogen-Sertanty
- IDBS
- InChI Trust
- InfoChem

Cheminformatics

- InhibOx
- Inte:Ligand
- IO Informatics
- Leadscope
- Molecular Networks
- Molegro
- MolSoft
- NCI/CADD group
- NIH Roadmap
- Open Eye Scientific Software
- Pharma Algorithms
- Optibrium
- Pharmatropé
- NIH TRND Program
- Python Prescription (PyRx)
- Q-Chem
- Schrödinger
- SciTouch
- SimBioSys
- Simulations Plus
- Sunset Molecular Discovery
- Symyx Software
- Synaptic Science
- The Edge Software Consultancy
- Tripos (Certara)

Content/Publishing

- American Chemical Society
- BioMed Central
- Chemistry Central
- CrossRef
- Current Biodata
- Elsevier
- FIZ CHEMIE Berlin
- FIZ Karlsruhe /STN Internatnl
- Informa, T & F, CRC Press
- Information World Review
- John Wiley & Sons
- Knovel Corporation
- Nature Publishing Group
- Pharmavalet
- Public Library of Science
- Paterra
- ProQuest
- PubMed Central
- UK PubMed Central
- PubMed Central Canada
- Questel
- Royal Society of Chemistry
- Springer
- Thieme Publishing Group
- Thomson Reuters
- Wolters Kluwer Health

Research Services

- Argenta Discovery
- Assay Depot
- BioFocus DPI
- ChemBridge
- ChemDiv
- Cypotex
- Evolvus
- Molecular Connections

Semantics/Text Mining

- BioWisdom
- CiteSeerX
- Linguamatics
- SciWit
- SureChem (NPG)
- TEMIS

Pipelining/Workflow

- InforSense (IDBS)
- KNIME
- SciTegic (Accelrys)

Federated Search

- Deep Web Technologies
- Science.gov
- Scitopia.org
- WorldWideScience.org

Internet Search and Services

- ChemNavigator (Sigma-Aldrich)
- Chempedia
- ChemSpider (RSC)
- CWM Global Search (AKos GmbH)
- eMolecules

Miscellaneous

- Biochemical Infometrics
- Laboratree
- Microsoft Research
- ThalesNano
- TIBCO Spotfire
- Miner3D
- Golden Helix

Market Size

- ELNs (2008) \$71m
 - growing 20% a year
- Cheminformatics \$350m
- Patent chemistry \$400m
- STM Information (2007) \$19bn
 - growing 4-5% a year

Define Success

- What does “success” mean to you?
- Your likelihood of getting venture capital for a science-based business is very small
- You may never be a public company
- Some small, bootstrap companies (Daylight, Open Eye) have done good business and are happy

Risk



Innovation and Mitigating Risk

- Stay in touch with your customers
- Be customer-focused
- Hire brilliant people to work with you
- Remember the fundamentals of business
- Porter's Five Forces
- Pay attention to what is happening in the world and be prepared to react
 - Indian patents
 - recession

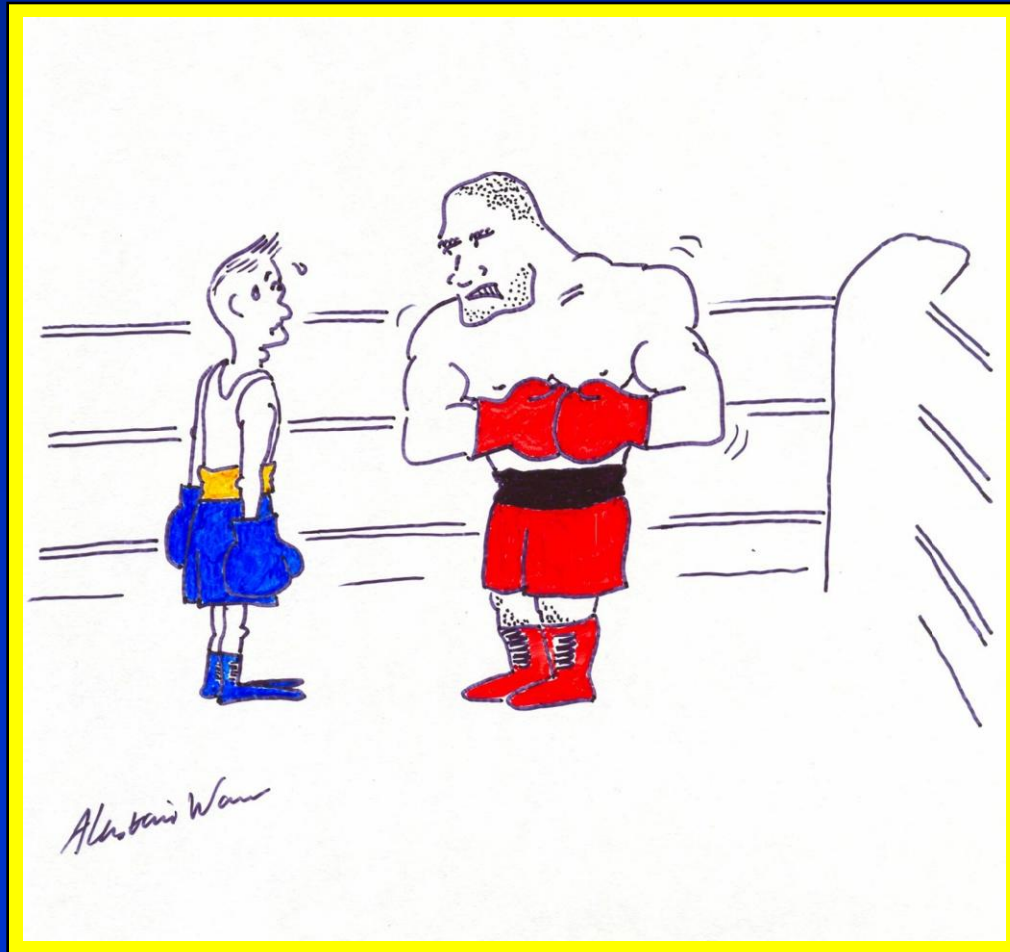
Customers and Markets

“A market never bought anything but customers do”

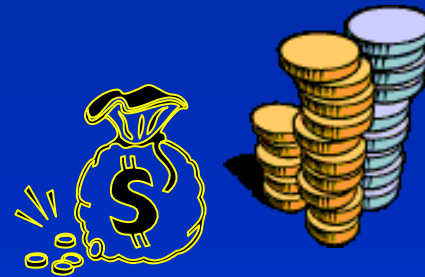
Differentiation Alone is not Enough



Competition



Cash is King



Two Examples

ChemAxon

- 1998 Founded by Ferenc Csizmadia (plus 2) with minimal capital, in Budapest
- Database management tools, drug design and discovery
- 1998-2002 Developed JChem Base; lived off consultancy

ChemAxon

- Bootstrap company
- 2001 Had 3 offers of venture capital
 - VCs wanted too much control
- Repricing and consultancy were the way ahead

ChemAxon

- 2002, 10-12 Employees
- 2010 About 50 staff
- Lightweight on sales
- 2005 First full time sales person
- 2005 First Japanese agent
- 2007 First US sales person
- Now 2 telesales in US
- 2009 First full-time admin person

ChemAxon 2010

- More than 300 corporate clients
- 18 from top 20 pharma/biotech
- GSK and Pfizer are major users
- 35 integrator partners

ChemAxon 2010

- Sales 41% US; 39% Europe; 20% RoW
- Revenues 50% from maintenance; 20% from VAR partners
- 30% growth in revenues 2008
- 60% growth in revenues 2009
- 70% of revenues plowed back into R&D
- Innovative, growing

ChemAxon Future

- Diversify both products and markets
 - SharePoint and Markush
 - India and China
- Double income over next 3-4 years
- Achieve critical mass
- Avoid over-spending and over-hiring
- Don't acquire a VAR partner if there are no staff to manage the acquired company

Threats to ChemAxon

- Competition from Open Source
- Major competitor could buy an OS company

InfoChem

- Specializes in storage and handling of chemical structure and reaction information
- Software handles huge amounts of chemical data, without degrading speed and performance of system
- Builds high quality databases
- About 25 staff, plus 60-80 building databases
- Steady growth, 1 employee a year

InfoChem History

- 1986 ChemoData founded
 - Peter Löw, Heinz Saller
 - Johnny Gasteiger (until 1987), TU Munich
 - Developed ChemInform
- 1988 GDR (“East Germany”) offered 1.8 million reactions (SPRESI)
- July 1989 InfoChem formed to sell SPRESI

More History

- November 1989 Berlin wall falls
- German government no longer funds ChemInform, Beilstein, SpecInfo
- 1990 Robert Maxwell plans SciTech Inform in Moscow (VINITI)
- Maxwell Communication Corp. already owns ORAC and MDL
- Maxwell realizes that InfoChem has rights to the VINITI reactions
- Maxwell negotiates contract with ChemoData and InfoChem
- Maxwell has debts from Macmillan acquisition, is forced to sell Pergamon, cannot acquire InfoChem and ChemoData

InfoChem History

- Fall 1990 InfoChem now has debt
- April 1991 Springer acquires 80% of InfoChem and ChemoData
- Springer plans to sell Beilstein
- 1992 InfoChem and ChemoData merge

InfoChem Products

- No system could handle 2.3 million reactions, 4m structures, so InfoChem developed software
- InfoChem CLASSIFY algorithm
- Subsets of SPRESI
 - ChemReact as REACCS database
 - First big deal; 30 licenses
- 1993 Fieser and Fieser (Major Reference Work)
- 1996 EROS MRW
- Science of Synthesis
- ChemReact 41 for PCs
- 1999 Internet version of SPRESI

InfoChem: Recent Work

- ~2006 Moved into auto creation of databases
- Synthesis planning
- 2008 Mining for Chemistry
- Text annotation
- Image recognition
- 2010 Markush structures

InfoChem Revenues

- Sales 60% US; 30% Europe; 10% RoW
- Revenues
 - 40% database building
 - 25% licensing search technology
 - 20% royalties
 - 15% mining for chemistry

InfoChem Success Factors

- Controlled, steady growth
- Financial stability with no strings attached
 - Springer owns, Löw and Saller set strategy
- CAS the major partner
 - CAS has SPRESI data and CLASSIFY
- Works with everybody
 - CAS, MDL (Symyx), CambridgeSoft, Accelrys, Elsevier, Wiley, Thieme, chemical companies

Technology

- Brave New World Companies
 - Visionary
 - First mover
 - Innovative new concepts
- Faster Better Cheaper Companies
 - Fast followers
 - Innovative new products

Source: Versant Ventures

Wave Theory



In short...

Start-up



An Uphill Struggle



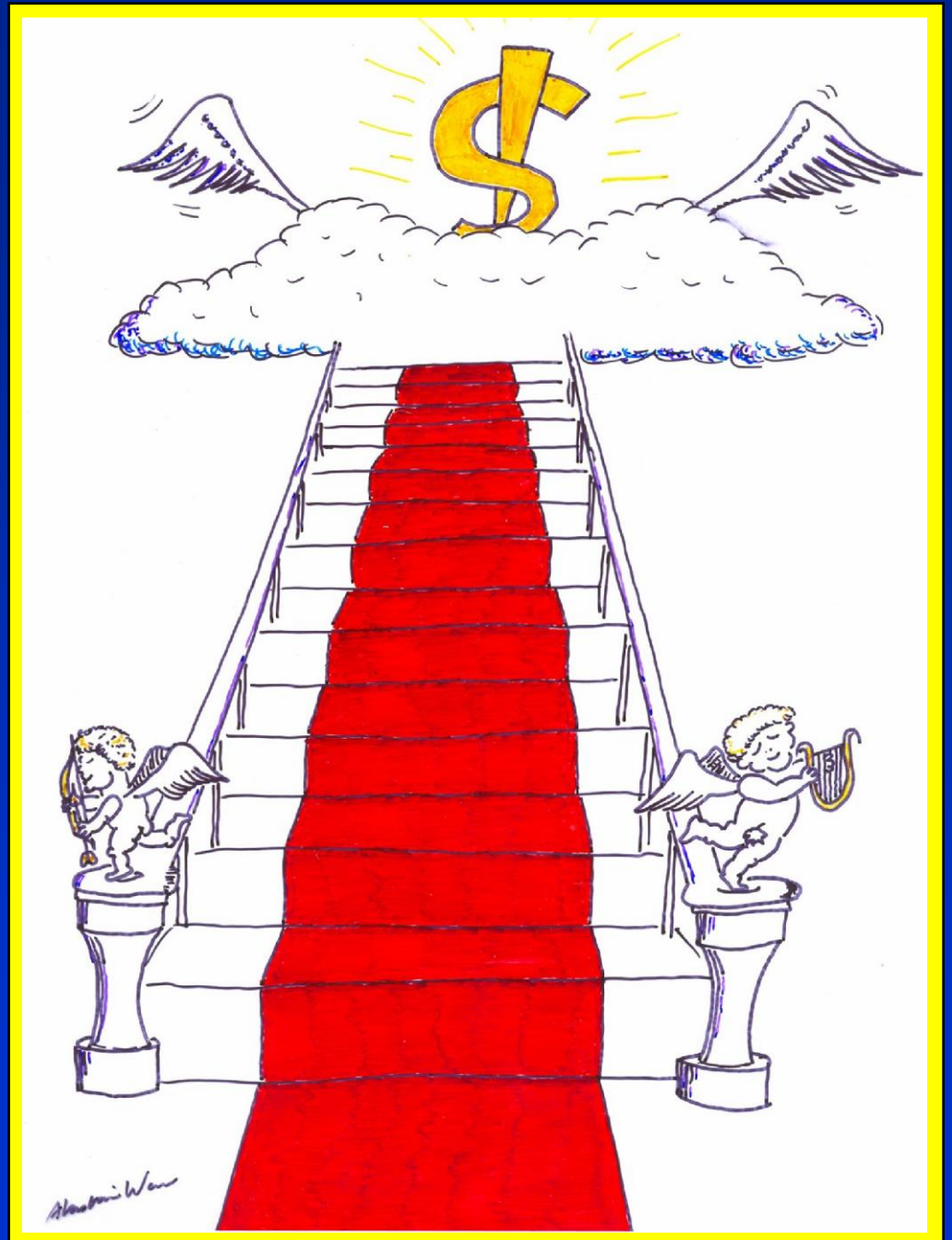
Exit Strategy

- Know when to get out of the driver's seat
- Initial Public Offering (IPO)
- Sale/merger
- Failure

Reasons for Failure

- Not enough capital
- Low sales
- Bad management
- Taking too much cash out too early
- Poor accounting
- Lack of experience
- Bad debts
- Setting prices too low
- Growing too quickly
- Fraud
- Operating costs get out of hand
- Poor supervision
- Competition
- Health problems of owner
- ...and more

Good Luck!



Acknowledgments

- Alex Drijver, ChemAxon
- Peter Löw, InfoChem
- John McAlister