E-Commerce - 7

Search Engines

Easily the most important marketing item

- Complicated by highly personalised search results

Google

- Try “Computer Science” - the lab comes on page 2
- Try “Computer Laboratory” - the lab comes top
  - poor nomenclature in the marketplace
- Try “Last minute holidays”

Algorithm

- Page ranking (peer review)
  - Which led to scams (checks IP now)
- Meta text, URL, page title, headings more important
- Massively parallel retrieval, rank and search

Google AdWord campaigns

Driving traffic

Special targets

UK Online - Parents and kids

WorldPOP - 12 to 16 year old females

actually paid by music industry

Adverts

Click to win a car

Known URL

www.microsoft.com

Freshness (even if just a date)

Nothing sadder than ‘last altered June 1999”

Social networks

Facebook, Twitter, etc

Logs and Audit

Who bought what and when
- I bought this from you and it's faulty
- Why have I been charged for this?

ISPs must keep records for RIP
- Regulation of Investigatory Powers

BCCi: The country's most popular destination
- How do they know?

Ad costs
- Separate landing pages
- Per impression
- AdWords
- Effectiveness

Words mean what I want them to

Hit: Primitive object served by the server
- Or proxy request (not quite the same)
- Multiple object to the page
- Impression: Banner ad served - measured by counter

Page view: Pages or frames served

Click: deliberate action by the user
- Not refresh or script generated
- But timeout refreshes are interesting

Visit: multiple pages on site
- trajectory

Unique user / day

Exit popups

Answers depend on the questions

Audit

- Advertising returns and effectiveness
- Confirmation of transaction

Traffic analysis

- 80% of the site is wasted

Confirming user behaviour

- Still need focus groups to find out why

Trend analysis

Data mining

Lots of data

- 100 bytes / hit -> gigabytes / week
- Multiple sources: e.g. helpdesk, servers, proxy, telephone logs, radius logs, etc

Hits, clicks, page views ,visits, trajectories, etc

Answers depend o the the questions

Personalisation and localisation

- Models of the user
- Bins and profiles

Collaborative filtering

- X liked these so you'll like them too

Affinity marketing

- Special offers from our carefully selected partners

Real-world matching

- Sainsbury's data mountain

Communities

Chat

Bulletin boards

Social networking e.g. Facebook, etc

BBC

Amazon

Feedback and people feel good about it

But beware false shoppers who are actually competitors

Typical behaviour

40% chat
- Maybe overstated because of frequent refreshes

10% mail, newsgroups, mail lists (75%)

5% help, admin, accounts, home page

3% search

2% favourite

Less than1% purchase (same as mail order)

Remainder fandom surfing
- 40% “specialist content”
- 30% shopping

Model (still) as ‘sad lonely geek’ BUT
Fastest growing demographic is women over 60
- Genealogy

Typical behaviour - 2

100,000 impressions

1% - 1000 clicks / new visitors
- about the same as mail shot
- CPC costs maybe $0.5 - $5

5% 50 register / trial
- depends how hard registration is

2% - 1 purchase

www.google.com/onlinechallenge

Typical funnel

Stat	Actual	% funnel	% conversions	
unique visitors	84867			
new unique visitors	82170	96.82%	96.8%	% Unique Visitors = New
unique download page visitors	15141	17.84%	18.4%	% New Visitors = Download
new registrations	4318	5.09%	28.5%	% Download = Registered
new trial users	3192	3.76%	73.9%	% Registration = Trial
new paying user	95	0.11%	3.0%	% Trial = Paying user
cancelled subscriptions	17	0.02%	2.8%	% Total subscriptions

Sales funnel

AIDA model:

Awareness	Interest	Desire	Action	Satisfaction
Prospects	Contact	Demo/Trial	Negotiate	Close Satisfaction

Impression	Click through	Register/Demo	Purchase

Alphabet soup

CPC	Cost Per Click (what Google charges)
CPA	Cost Per Acquisition aka COCA
ARPU	Average Return per User (in period)
CLV	Customer Lifetime Value

Apps

Proliferation of devices

- iPhone, iPad, Andriod, Fire
  - appinventor.mit.edu/explore/
- Facebook games, messaging games, etc

Controlled by vendor

- Limites revenue

Fashion (mostly)

- Top 10 list important

Social Media

Keep in touch

- Human face
- Consistent voice
- Community
- Feedback

Future

Mobile

TV

Clicks and mortar

Multiple devices

Adverts are annoying and don’t work - pop up hell

Content will no longer be free

Pay for E-mail

Conclusions

Invent your future

Go out there and build something

Sell it

Bonus material

Financing e commerce

Raising money

Valuation

Winners and losers

Futures

Lean startup

Book ‘the lean startup’ by Eric Reis

Minimum viable product

- feedback

Early and frequent customer contact

- build the case that there is a viable market
- low hanging fruit
- ‘the best is enemy of the good’

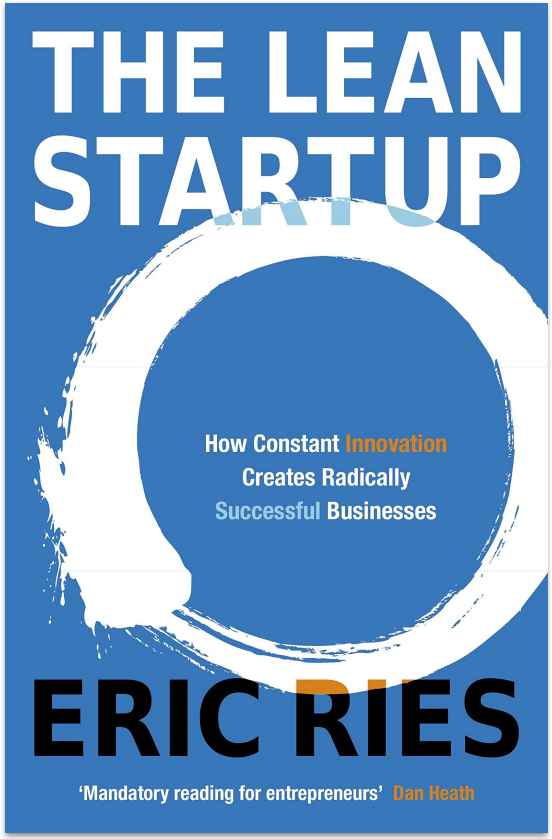
Analytics

- understand the value to the customer

Virtual company

- fail early and cheaply

Agile engineering



the web makes this possible easier, hackathons, crowdfunding

Sources of finance

Family and friends	£50k
Banks (need security)	£100k
Angels	£250k - £500k
Venture capital	£2m - £25m
IPO	£50m - 250m

Investor Criteria for a business

Market	Global sustainable under-served market need
Technical	Defensible technological advantage
People	Strong team
Financial	Believable plans, 60% IRR
Major Risks	Framework to understand and manage. What do you know? What do you know you don't know? How will you discover the things you don't know you don't know?

Writing the plan

1. Executive summary and funding requirement
2. Concept
3. The Market
   - 3.1 Global market size and need
   - 3.2 Sustainability
   - 3.3 Competition
   - 3.4 Marketing plans
4. The Team
   - 4.1 CEO
   - 4.2 CTO
   - 4.3 CFO
   - 4.4 VP Sales and marketing

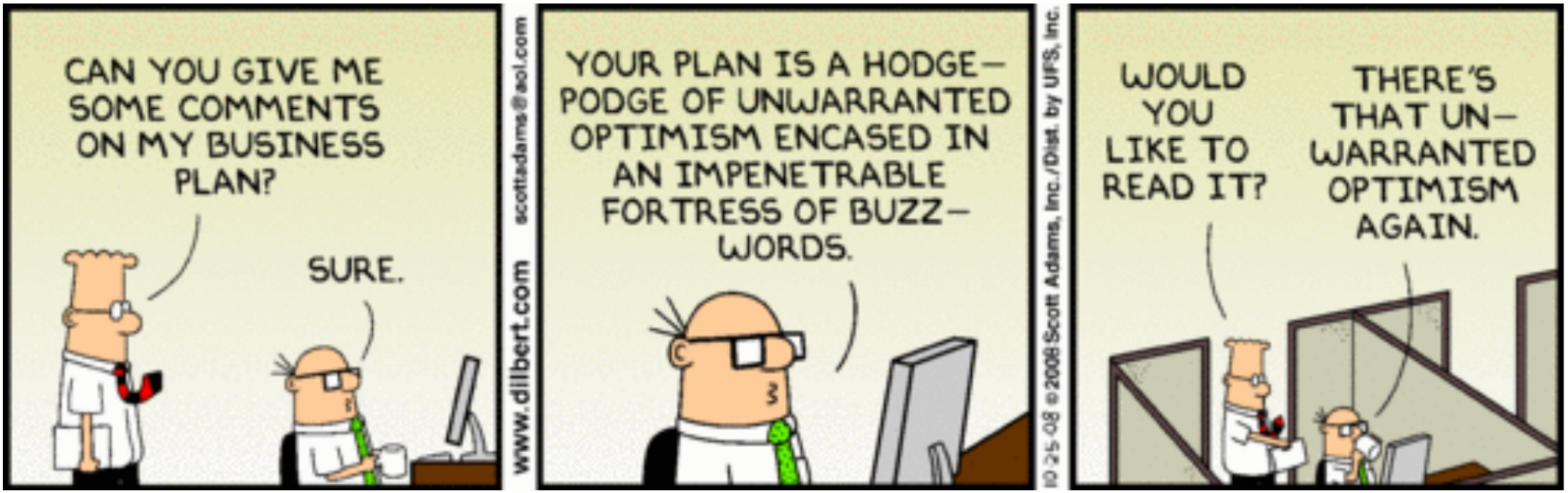
Writing the plan - 2

5. The technology and IPR
6. Summary of Plans
   - 6.1 Development plans
     - 6.1.1 Methodology
     - 6.1.2 Milestones
   - 6.2 Marketing
   - 6.3 Sales and distribution
   - 6.4 Industry and quality standards
7. Financials

Writing the plan - 3

Appendices:

- Financial model
- Key staff
- Letters of support
- Correspondance re IPR
- Full development plan
- Full marketing and sales plan
- Examples and brochures


CAN YOU GIVE ME SOME COMMENTS ON MY BUSINESS PLAN?
SURE.
www.dilbert.com scottadams@aol.com
YOUR PLAN IS A HODGE-PODGE OF UNWARRANTED OPTIMISM ENCASED IN AN IMPENETRABLE FORTRESS OF BUZZ-WORDS.
10-25-08 ©2008 Scott Adams, Inc./Dist. by UFS, Inc.
WOULD YOU LIKE TO READ IT?
THERE'S THAT UN-WARRANTED OPTIMISM AGAIN.

Valuation

Estimate of future yield - risk assessment

- Market
- Assets
- Ratio on current revenue
- Ration on current profitability
- Discounted Cash Flow (DCF)
- NPV of profitability
- Probability based methods

What goes wrong

Actual experience: not usually fraud

- angry customer phones up demanding to talk to someone korean at 3am

Bugs, blunders and incompetence

- free US flight for every hoover bought

Other places, other customs

- different laws; equities, porn, drugs, alcohol, fireworks, cigars
- product liability

Traditional business risks still apply

Still need traditional controls

- Double entry book-keeping
- Stock and accounting control
- Take up staff references
- Market analysis

Winners and losers

Winners

- Communication and communities
- Branded goods
- Bricks and clicks
- Specialty goods

Losers

- Content is NOT king
- Portals
- Get-rich-quick sites
- Smartcards, VOIP, interactive TV

Zuckerberg's letter to investors

Five core values for how we run Facebook:

Focus on Impact

If we want to have the biggest impact, the best way to do this is to make sure we always focus on solving the most important problems. It sounds simple, but we think most companies do this poorly and waste a lot of time. We expect everyone at Facebook to be good at finding the biggest problems to work on.

Move Fast

Moving fast enables us to build more things and learn faster. However, as most companies grow, they slow down too much because they're more afraid of making mistakes than they are of losing opportunities by moving too slowly. We have a saying: "Move fast and break things." The idea is that if you never break anything, you're probably not moving fast enough.

Be Bold

Building great things means taking risks. This can be scary and prevents most companies from doing the bold things they should. However, in a world that's changing so quickly, you're guaranteed to fail if you don't take any risks. We have another saying: "The riskiest thing is to take no risks." We encourage everyone to make bold decisions, even if that means being wrong some of the time.

Be Open

We believe that a more open world is a better world because people with more information can make better decisions and have a greater impact. That goes for running our company as well. We work hard to make sure everyone at Facebook has access to as much information as possible about every part of the company so they can make the best decisions and have the greatest impact.

Build Social Value

Once again, Facebook exists to make the world more open and connected, and not just to build a company. We expect everyone at Facebook to focus every day on how to build real value for the world in everything they do.

Futurology

Integration of the Infosphere

Thesis / antithesis / synthesis

Better ways to trade

End of Moore's Law

Integration of the infosphere

- .NET (www.microsoft.com/net)
  - Moving functionality into the network (Saas)
  - Disintermediating ISPs and Telcos
  - SOAP & RPC
- Google competes heavily
  - discovery of intent
- 7 Big functions
  - Identity
  - Payment
  - Diary
  - Message delivery
  - Address book
  - Storage
  - Search / DRM / content management / favourites / history

Integration of the infosphere

New services and devices

- Smart consumer
  - Dynamic bid for bandwidth
  - Toasters bid for electricity
- ipV6
- Smart TV, white goods, cars, toaster, toliets
  - “do you really want to have your third cup of coffee today?”
- Home nets / LTE (4g)
- P2P stuff - death of copyright
- Privacy issues
- Infrastructure capacity issues

Thesis / antithesis / synthesis

- Thesis
  - Unlimited communications and publications
- Antithesis
  - Entropy (99% of everything is crud - Theodore Sturgeon)
- Synthesis
  - No good solutions at present
    - search engines
    - personal agents
  - University connectivity
    - Pandora's box?
    - Virtual reality?

Better ways to trade

Perfect information <> Perfect market

- Effective monopolises (amazon, eBay)
- Market and auction structure

New models

- kickstarter
- time and demand sensitive

Global

- Security
- New currencies / bearer certificates
- Cell phone banking, market prices in Africa

Death of Moore's Law

Geometry reduction nearing limits

- Leakage, quantum effects

Massive parallelism only works for somethings

Bandwidth demand growing faster

- Return to local data
- Text -> Pictures -> video -> HD -> UHD -> UHD VR
- Universal connectivity

Privacy pendulum

Conflict between local and central control

Phase	Main frame	Mini computer	Desktop	Laptop	Mobile
network	stand alone	stand alone	low speed network 10Mb/s	high speed network 100Mb/s	Wifi / 4g 100Mb/s
	central datastore	department	individual	Company database Private Network	Cloud Data centre