Writing the Business Plan

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Whats the Business Objective?

- Long Term ISP business
- Growth and Sale
- National Agenda
- Leverage from other activities
- Risk protection

Business Planning Process

- Identify Market opportunity
- Identify Costs
- Model Tariffs
- Model Business Requirements

Market Identification

- Define Market segment
  - size
  - uptake
  - competitive position
  - market position

Identifying Costs

- capital costs
- recurrent costs
- marketing costs
- staff and administrative costs

Capital Costs

- equipment
  - core routers
    - capital cost depreciation at 30% p.a.
  - access servers
    - capital cost depreciation at 30%pa
    - capital cost per access port charged to customer

Capital Costs

- service platforms
  - ratio of service platforms to customer numbers
  - depreciation at 30% pa
- staff equipment
  - fixed capital cost per staff member
  - can be converted to recurrent via capital depreciation at a rate of 30% pa

Recurrent Costs

- equipment housing costs
  - equipment location costs
- lease line costs
  - telco leases
  - radio equipment costs
    - can be converted to recurrent cost of ownership at 20% depreciation of capital value

Marketing costs

- advertising
- staff
- publications, seminars, other marketing activities
- Total can be considered as a connection cost per client

Staff and Administrative costs

- technical support staff
  - usually fixed number
  - staff churn cost (30%)
- support desk staff
  - usually incremental off the customer base
- administrative staff
  - usually fixed number
- Other administrative costs
  - billing costs
  - debt risk factor

Lets put this together for a medium sized national ISP

- Cost Totals
- Cost proportions
- Scaling overheads as a percentage of capacity costs

- generation of the business model via marginal cost examination

Costs

- Leased Line costs - recurrent expenditure

Link Cost Calculation Worksheet						
The costs used here are not derived from any particular network - they are a simple example only						
Target Line Loading		**50%**	Line loading before more bandwidth is required			

International Line costs

International Circuit cost calculation			
Capacity of the circuit	Kbps	2048	
Cost of the circuit - total lease cost	monthly	$ 120,000	
Megabytes	monthly	685,670	
Max sustainable loading factor		**50%**	
Max sustainable traffic level		342835	
Break even cost per megabyte at target load		**$ 0.35**	

Domestic Line costs

Domestic Circuit cost calculation			
Capacity of the circuit	Kbps		2048
Average cost of the circuit - total lease cost	monthly	$	8,000
Megabytes	monthly		685,670
Max sustainable loading			**50%**
Max sustainable traffic level			342,835
cost per megabyte		$	0.02
line imbalance			0.75
Topology Factor			1.5
cost per megabyte		**$**	**0.02**

Marginal Transmission cost

Traffic Balance			
International	65%	$ 0.24	
Trunk	22%	$ 0.01	
Local	13%	$ -	
Total Delivered cost per Mb		$ 0.25	

Marginal Cost

- Calculate staff and equipment costs as a fixed overhead on the traffic volume - this allows the business to generate working capital to expand

Total Delivered cost per Mb		$ 0.25
Overheads		
Fixed rate overhead calculation		20%
Marginal Cost		$ 0.30

Capital Investment cost

- The enterprise will require initial capital investment which must generate positive earnings, which must be factored into the model

Marginal Cost		$ 0.30	
Return on cashflow		5%	
Target Average Retail Price per delivered Megabyte		$ 0.31	

Retail Pricing Model

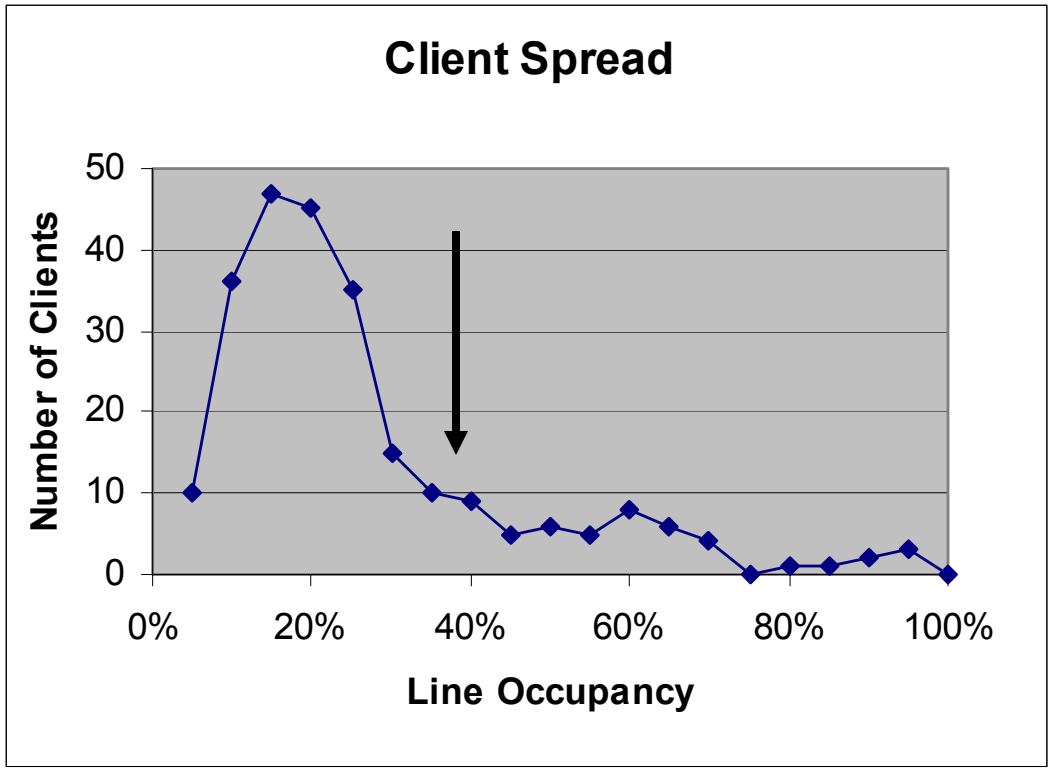
- Use a 64K access line as the basic unit of connection
- Assume an average line loading of business usage
  - average line occupancy of 20%
- Determine retail pricing from marginal cost at average line occupancy
- Flat Rate pricing

Retail Pricing Model

Retail Model		
64K connection Costs		
Maximum delivery capacity (Mb)	monthly	21427
Average line occupancy		27%
Average line delivery (Mb)	monthly	5,785
marginal cost		$ 0.31
Net service cost (transmission)	monthly	**$ 1,806.46**
Max service liability (avg traffic flow)	monthly	$ 6,690.60
Max service liability (absolute risk)	monthly	$ 9,450.00
Fixed Flat rate tariff	Monthly	**$ 1,806.46**

Risk Reduction

- Reduce risk of over exposure by using 'high' and 'low' volume tariff steps



Stepped Retail Tariff

Fixed Flat rate tariff	Monthly	**$ 1,806.46**
Dual Rate Tariff		40%
Low band average line occupancy		18%
High band average line occupancy		59%
Low	monthly	$ 1,204.31
High	monthly	$ 3,934.07

Additional Services

- Offer services at a variety of access speeds
- Use differential tariffs to encourage reselling
- Use a flater tariffs to strength direct retail position

Additional Services

Tiered Access Pricing			
		Tier Factor	
leased PSTN modem, rated at 19.2K	19.2	1.40	
64K	64	1.20	
128K	128	1.10	
256K	256	1.05	
512K	512	1.00	
Retail Schedule			
	Fixed	2 Tier	
		Low	High
leased PSTN modem, rated at 19.2K	$ 759	$ 281	$ 918
64K	$ 2,168	$ 1,445	$ 4,721
128K	$ 3,974	$ 2,649	$ 8,655
256K	$ 7,587	$ 5,058	$ 20,654
512K	$ 14,452	$ 9,634	$ 31,473

Dial Access

- Transmission is a minor cost for dial access
- Also must factor in:
  - modem capital cost and limited service life
  - phone support with large after hours component
  - marketing cost
  - customer churn rate
  - target market capture level (competitive price sensivity)

Dial Access

Modem Access Pricing		
Cost per modem hour		
Average modem speed	kbps	26
MBytes/hour		10.4
Average line loading level		10%
At Marginal Retail		$ 0.32
Service Activity Loading		300%
Retail - minimum level	hourly	$ 1.30
Initial retail marketing margin		30%
Retail	hourly	$ 1.69

The Business Challenge

- How to manage exponential

GROWTH

The Business Plan

- Establish tariff position
- Estimate Market size for the service
- Calculate Revenue
- Calculate service provision costs
- Revenue - costs = bottom line

Estimate Demand

Business Plan				
	Year 1	Year 2	Year 3	Year 4
Services In Operation (SIO)				
Type				
dial	300	2000	4000	10000
dial modems	30	200	400	1000
pstn	10	20	40	150
64K	20	40	100	200
128K	4	6	15	40
256K	0	2	8	25
512K	0	0	5	15
TOTAL	**64**	**268**	**568**	**1430**

Calculate Revenue

Revenue	$	$	$	$
Connection charges	210,000	588,000	832,000	2,250,000
Access charges				
dial	73,962	394,466	739,623	1,479,246
pstn	7,587	15,174	30,349	113,807
64K	72,837	145,673	364,183	728,365
128K	26,707	40,060	100,150	267,067
256K	0	29,210	116,842	365,131
512K	0	0	121,394	364,183
TOTAL	**391,093**	**1,212,584**	**2,304,541**	**5,567,800**

Scale the Network

- Estimate communications capacity to service the client base

Capacity calculation				
Calc Line Lease	132	427	1,116	2,827
Actual Line Lease	**128**	**512**	**1,024**	**3,036**

Estimate Costs

- Factor in service provision costs

Costs				
Equipment	140,000	420,000	640,000	1,800,000
Line Lease	82,500	330,000	660,000	1,956,797
Staff	250,000	350,000	450,000	500,000
Marketing	0	50,000	100,000	150,000
Overheads	120,000	120,000	140,000	200,000
TOTAL	**592,500**	**1,270,000**	**1,990,000**	**4,606,797**

The Bottom Line

Am I winning or losing at this tariff and market level?

Revenue	**391,093**	**1,212,584**	**2,304,541**	**5,567,800**
Costs	**592,500**	**1,270,000**	**1,990,000**	**4,606,797**
Profit/loss	**(201,407)**	**(57,416)**	**314,541**	**961,003**