
The Sigmoid Curve
Part II

Wednesday, December 6, 1995

Wednesday February 24, 1999

The Sigmoid Curve

- ◆ Implications for:
 - ◆ Industry (Biotech vs Pharma);
 - ◆ Development Professionals
 - ◆ Medicine (20th vs 21st Century)
 - ◆ and Project Managers

**-Dan Maher, 9/95
and updated 2/99**

What is the Sigmoid Curve?

- ◆ “The sigmoid curve is the s-shaped curve that has intrigued people since time began. It is the story of life itself....”

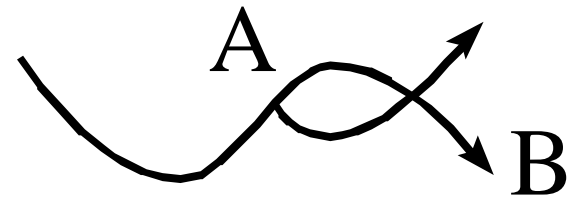
- ◆ Sigmoid Curve



Adapted from C. Handy, Where are you on the Sigmoid Curve? (Directors & Boards, Fall '94)

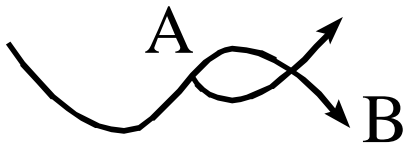
The Point to Make a Change

- ◆ The right place to start that second curve is at point A where there is the time, as well as the resources and the energy.....



The Sigmoid Curve

- ◆ “The secret to constant growth is to start a new sigmoid curve before the first one peters out.”



- ◆ “The accelerating pace of change shrinks every sigmoid curve.”
- ◆ “The units of time are getting depressingly small”

Personal, Professional, Organizational

- ◆ “A good career/life is probably a succession of second curves, started before the first curve fades.” Lives and priorities change as one grows.”
- ◆ If you snooze you lose.....

The Uncertain Period

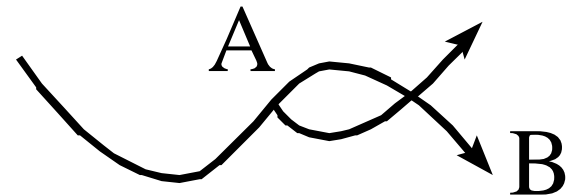
- ◆ “Many individuals, institutions and even whole societies, are in that (transition) period between point A & B. It is a time of great confusion, uncertainty and fear.”



Professional Implications

- ◆ “...the real energy for change comes only when you are looking disaster in the face, at point B on the curve....”

- ◆ “Consolidation”

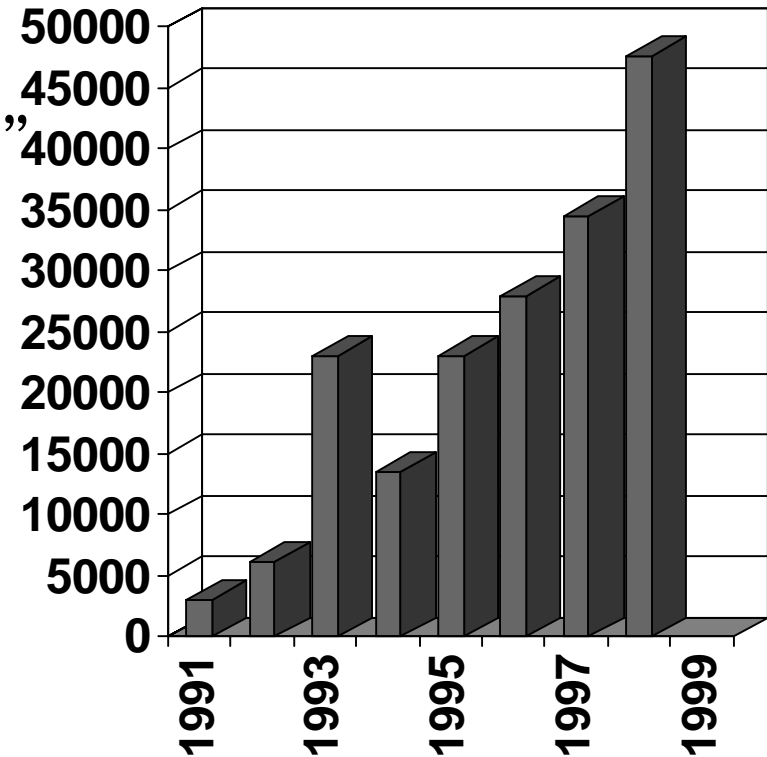


Drug Industry Consolidation

<i>Acquiring Company</i>	<i>Acquired Co.</i>	<i>Value (\$MM)</i>
Sandoz	Ciba-Geigy	\$27,000
Glaxo	Burroughs Wellcome	\$14,900
AHP Corp.	Americar	\$9,700
HMR	MMD	\$7,200
Merck	Medco	\$6,000
Hoffmann-LaRoche	Syntex	\$5,300
Lilly	PCS	\$4,000
Baxter	Grace W.R.	\$3,800
Sandoz	Gerber	\$3,700
SmithKline	Sterling	\$2,925
RPR	Fisons	\$2,600
Smithkline	DPS	\$2,300
Ciba-Geigy	Chiron	\$2,100
Akzo	Nobel Industrier	\$2,100
Hoffmann-LaRoche	Genentech	\$2,014
J&J	Cordis	\$1,800
Sanofi	Sterling	\$1,680

Drug Industry Cutbacks

◆ “The Incredible Shrinking Industry”



Biotech Vs Pharma, '94 Revenue

152 BioTech
firms:

\$ -1.3 billion

Top 12
Pharma:

\$ +16.4 billion

Source: BIO/TECHNOLOGY May '95

The Prediction

- ◆ Early next century there will be a handful of LARGE pharmaceutical companies left in the world, and biotech will no longer exist as we've come to know it.....

*So, what about Project
Management as a career?*

The future of Project Management (our careers...)

- ◆ Job changes occur often; stability will erode to where we will be “consultants”
- ◆ Clinical will most often drive PM career paths in most companies.....traditional pharma structure and practice will dictate advancement (or lack thereof).....
- ◆ JOAT and MON will build in value; experience will be rewarded; frequent job changes will be less of a handicap
- ◆ The division of traditional (CMC) PM vs Clinical PM will disappear-to be effective you need both skill sets

The future of Project Management (our careers...)

- ◆ Development expertise will exclusively reside within big pharma while research organizations will be mostly biotech “boutiques” or “feeders” a.k.a. R&D
- ◆ “Managing uncertainty” in R&D project management will dictate more reliance on the empowerment/performance of teams than “outstanding science”
- ◆ Impact of IQ vs the lack of an EQ equalizer; “the lack of an EQ makes smart people stupid”
- ◆ Process and Content management more critical than ever...

The future of Project Management (our careers...)

- ◆ Team Leadership a true art and science...
- ◆ Contract (outsourcing) management will be a defining skill.... "virtual team" a reality!
- ◆ Technology push will complicate the development process; timelines and resources (FTE's, time and money) increasingly pressured....beyond today
- ◆ To deliver on time and on budget will separate the leaders from the followers

*So, what about Medicine in
the next century?*

“Paradigm Shift”

- ◆ A fundamental change in medicine is occurring:
 - 1900's: illness > doctor > Dx > Rx
 - 2000's: DNA analysis at birth > metabolic monitoring over a lifetime > Rx/Tx to prevent illness
 - Still major illnesses not cured...

21st Century Medicine

- ◆ DNA-based tests for diagnosis and metabolic monitoring
- ◆ Disease Management prior to onset of illness; control of economics; prevention is key to delivery of healthcare (vaccines)
- ◆ Therapeutics targeted for disease sub-types; cocktail therapy
- ◆ Gene therapy will be realized
- ◆ Genomics will create more targets

The bottom line.....

- ◆ Increase your value by moves at A
 - ◆ Take more risk and diversify (keep watchful)
- ◆ When internal moves at A run dry consider external moves (carefully...)
 - ◆ “don’t let adverse facts ruin a good decision”
- ◆ Project Management is still hot
 - ◆ Good Generalists will be rate-limiting
- ◆ Medicine will fundamentally change and so then will our employers and customers.....

Carpe diem!

