

The Strategic Environment and Choices of Local Exchange Telephone Companies

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Lord Kelvin and the Telcos

As a businessman, Lord Kelvin (1824-1907) introduced the telephone to Great Britain. As a scientist, he also formulated the three laws of thermodynamics.

Like most "natural" laws they are phrased in precise mathematical formulae. The wits and wags of physics have recast them into less mathematical, but perhaps no less elegant, language:

The first law: *You can't win.*

The second law: *You can't break even.*

The third law: *You can't get out of the game.*

These laws look suspiciously applicable to the earnings situation of local exchange telephone companies today (hereinafter called "telcos"), including the Regional Bell Operating Companies (RBOC).

The First Law: You Can't Win

"Winning" for most corporations means earnings growth. If you outgrow inflation by 3-5 percent, you win.

Historically, the winning formula for telcos was based on a contract with the government, a "social contract" if you will. You, the company, will grow to provide everyone with a phone. We, the government, will protect your monopoly and assure an adequate return on your investment.

Expansion into the unserved population

was the engine of growth — it ran for a century. But now future earnings stand threatened by nothing less than past success. Everyone has a phone.

Of course everyone doesn't have a phone — there's still work to be done. But there's no big engine of earnings growth left in it.

Of course some of the growth came from providing more services (like long distance) to those who already had phones. But more of that later.

The Second Law: You Can't Break Even

The administrative embodiment of the social contract is a formula, called "Rate Base Rate of Return (RB/ROR)." It says in precise mathematical language "RR [revenue requirement] = OE [operating expenses] + T [taxes] + d [depreciation] + r(V-D) [allowed rate-of-return times (total investment minus accumulated depreciation)]." In common parlance the formula reads "you can keep a percentage of your book value."

Some of us were around when a full-function engineering pocket calculator cost \$800. Now it's \$40. I remember when a radio was as big as a filing cabinet and a well-to-do family had only one. Now most families can't tell you how many radios are hiding in closets. What's this got to do with telcos?

It means that the cost of everything electronic or optical is going down. It's going down fast — by an order of magnitude every

five years. That includes cables, switches, multiplexers, and other telco hardware. In the long run, for any fixed level of service a telco provides, its BOOK VALUE WILL DECLINE as plant is replaced with cheaper and better plant. The RB/ROR formula ties earnings to book value. Just as the engine of growth grinds to a halt, the economics change so that standing still, or maybe even growing, means earnings shrink.

This produces a nasty paradox: You can function in a growth market, do a better job, and maybe suffer earnings contraction.

It also means that information products and services are making a transition from scarcity to abundance. People want more telco services, just like everything else. More of that later also.

The Third Law: You Can't Get Out of the Game

Whence the rush of telco initiatives to abolish RB/ROR and disconnect earnings from plant value. Proposals have run the gamut from abolishing regulators to sharing the goodies. The major ones are these:

- **Social contract:** Residential/rural (or whatever) rates are frozen or limited. Other rates are deregulated. Profits are uncontrolled.
- **Price cap:** Prices in some form are capped. Otherwise, there is pricing and maybe earnings freedom.
- **Incentive:** Profits above a certain rate are shared between ratepayer and shareholder.

As of 1990 the regulatory scene is still changing fast, but some outcomes have come into pretty clear focus:

- The state is stronger than the company.
- Regulators drive telco decisions and not the other way around.

- Regulation is not going away.
- Regulation overall is not getting simpler.
- Enacted regulatory changes always embody two or more of the three major proposals above.
- RB/ROR remains in some form everywhere. Sometimes it is coincident with or embedded in a new regime. Sometimes it is the standard by which alternatives are monitored. Sometimes it is a safety net which can be reinvoked.
- Some efforts to change regulation have hurt telcos by alienating regulators.

In other words, by and large the effort to escape the "improving technology means shrinking earnings" equation isn't working.

Beating the Odds (I): Recognizing Some Losing Strategies

► The RBOCs, "unleashed" on 1/1/84, responded by putting much of their management effort and PR airtime into "new unregulated businesses." Every RBOC generated lists of possible new ventures. Some generated one-hundred subsidiaries, plus or minus a handful, within a couple of years.

Now if there is an unregulated business out there in which money is to be made, there are people out there making money in it. And they probably have experience, an entrepreneurial culture, a customer list, a decision-making speed suitable to the market, a reasonably-priced workforce, a tradition of selling (as opposed to order-taking), and various other advantages not at the disposal of a telco. The question is not "can we function in that business." Rather, it is "do we have advantages over the other people who can function in that business?"

This doesn't mean that the telcos can't make it eventually, but early announcements look pretty naive by now.

It also doesn't rule out areas where telcos really are advantaged. Some areas involve telco technology, networking, dealing with regulation, symbiosis, deep pockets, doing abroad what they do well at home, and so on. But by and large short-term salvation is not found in this quarter.

► When AT&T was broken up in 1984, the RBOCs were born with prohibitions from long-distance (interLATA) carriage, manufacturing, and providing information services over their own lines. They declared war on the restrictions, with limited success so far. For reasons cited above, they may be mostly asking for freedom to voluntarily avoid those businesses.

► As mentioned before, traditionally telcos have provided a few services beyond basic plain old telephone service (POTS). Why not rethink the engine of growth? "We gave everyone a telephone (universal POTS service). Now in the information age we'll give them 'universal enhanced services'." With luck, perhaps they'll even be unregulated.

Some of this is a timing question. Many technological upgrades that don't look cost-effective now, such as fiber-to-the-home, eventually will become so cheap as to be cost savers. Then the question will not be "what services can we offer?" but rather "what services may we offer and at what price?"

We don't know the bottom line on this one yet, but we do know that it doesn't fall into place the way traditional telephone growth did, for three reasons: 1) maybe the householder only wants POTS, 2) even if he wants more services, they may not pay off the development costs, and 3) competition for the prime customer is real.

► The last obvious strategy is to "get out of the game" — in other words, change or eliminate regulation.

We've already said that this hasn't worked so far. But it's worth a look at why.

First of all, the public/the governments have a deep tradition of "owning" the business. It's a vital infrastructure element. It behaves like a utility. It's been regulated from near the beginning. It's grown up in a franchised monopoly environment. It asked for a lot of the regulation itself.

Second, and more importantly, a telco has a lot of stakeholders who want to manipulate it using government machinery. The stakeholders in any business include management, investors, employers, suppliers, competitors, customers and regulators, and sometimes "the public."

The key ones here are competitors and customers. Regulatory and legislative procedures today are dominated by two kinds of interests. Some customers want cheap and suitable services (inputs). They make maybe 10 percent of the noise (my guesstimate). But competitors want a level playing field tilted in their favor. They make maybe 75 percent of the noise. Telcos make 10 percent themselves. The rest goes to public interest groups, governments, and miscellaneous.

Beating the Odds (II): Some Optimistic Observations

Local telecommunications appears to be a growth market. The question for telcos is how to translate that fact into earnings growth.

Any winning strategy must take the difficulties described above into account. It appears to this writer that there must be two components, both of which must be correctly managed:

- Recognize the inevitability and nature of government involvement. Work with it to make it work for, rather than against, the company.

- Recognize the existence of powerful competition and behave like a serious competitor.

Both components require a recognition that the environment in which telcos grew up has changed radically and therefore requires radical changes in response.

Working with Governments

Most Public Utility Commissions (PUC) were established in what might be called the "late robber baron era." They have charters which mandate them to guarantee utility benefits to the public, and to protect the public from utility abuses. By and large, that is now the minor portion of what they do.

Instead the PUCs have become the arbitrator among business interests, most notably between telcos and competitors. In this sense, they have become the tools whereby interest groups and telcos manipulate each other for their own purposes.

This game has escalated beyond the PUCs in many states and into the legislatures and the governors' offices.

The obvious conclusion is that the government affairs function inside a telco is no longer limited to cultivating PUC commissioners and staffs. It also means active involvement with legislators and state executives.

It is also critical to recognize that government in the American system is a responsive medium. It listens and responds to all the stakeholders. Telcos will not get what they want from governments unless other stakeholders also get what they want.

And that means cutting deals with potential competitors and with users (many organizations are both). And cutting deals means that the telcos have to give something in return for what they get — an alien concept in a monopoly tradition.

In recent government processes, competitors have been much more vocal than have real and potential users. It could be valuable to telcos to create a better balance of interveners. Many political heavyweights (the personal computer manufacturers, for instance) articulate among themselves the need for better public communications capabilities. They have not yet appeared in the public forums in a major way, but might if encouraged.

Competing

The extent of competition is very hard to either define or quantify. The definitions of "bypass" as used in the first triennial review, for example, do not include many categories where telcos might compete. The amount of communications infrastructure being built outside the telcos is not publicly reported. However, rumors and rumblings suggest that it might equal or exceed that being built by telcos themselves.

The bad news (for telcos) is that someone else is getting the business. The good news is that the business is there — maybe lots of it. And that part of the market is behaving like a classic competitive market.

What does it take for a telco to go after it? The same as for anyone else: quality of product/service, timing, price, salesmanship, prompt delivery, reputation for responsiveness and stability, adaptability to changing conditions, getting there the firstest with the mostest, and so on.

Some of these are virtues that evolve in a traditional monopoly environment, and some are not. Here, for what it's worth, are some observations about telco traits re competing.

Obvious telco strengths include reputation for stability, adequate financing, technical capability (though this one is losing relative ground), ability to manage large networks and structures, and congeniality with regu-

lated environments. A major rule of making money is "defend what you've got." Telcos should not ignore these seemingly well-guarded flanks.

Some obvious telco weaknesses also need to be addressed:

- "Sales" traditionally has meant "order taking." It needs to also include other traditional sales virtues, such as finding potential customers and approaching them, understanding the competitor's offerings and being able to argue for your own, negotiating about terms and conditions, and so on.
- "Marketing" traditionally has meant "demographic monitoring." It now needs the full panoply of techniques, including surveying the behavior of the market, monitoring and adjusting prices and entry timing, feeding market data in to decision-making procedures, and so on.
- Telcos make decisions on the wrong time scale. There are too many overlapping responsibilities, study functions, committees, referrals up the hierarchy, and decisions made at too high a level. The priority given to the long-range capital plan makes responsiveness difficult.
- Intelligence functions are too slim. The balance in decision-making is still dominated by "what have we got?" instead of "what's going on out there?"
- Accounting systems that use politically-generated costing methods are often adopted wholesale for management

decision-making.

- Legal departments have a "nay-saying" tradition.

Finally, it is important to recognize that John DeButt's "worst nightmare" is still true. Telcos operate in an environment of regulated competition: in some markets they are regulated and the competition isn't. It's a fact of life, and it's here to stay. This is where the regulated and competitive strategies come together.

Adjusting prices and increasing offerings is tough when the competition has the ear of your regulators. Telcos need to get the customers into the government forums as well. They probably need to offer them something for their help.

Telcos also need to strike deals with other influential stakeholders in the state economy. They probably share a mutual interest in local growth and development.

This kind of coalition building could lay the groundwork for a possible win-win-win situation. Telcos might be able to find support for overcoming their two vulnerabilities: making money, and keeping it. As demand and traffic increase, customers could get better service and lower prices, stimulating more traffic. (This approximates what has happened in the long-distance and CPE businesses.) The government would look like heroes. The telco share could be a mix of plant and earnings growth.

The laws of telco-thermodynamics may be breakable after all.

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