

First Monday, Volume 1, Number 1 - 6 May 1996

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PEER-REVIEWED JOURNAL ON THE INTERNET



## *CORPORATE METAMORPHOSIS: The Effects of the New Media*

By [SEAN MURPHY](#)

[The Virtual Corporation](#)  
[Structures and Exports](#)  
[Management Paradigm Mix and 3D](#)  
[Responsibility breeds Independence](#)  
[The Track Record](#)  
[Money from the Outside](#)  
[New Relationships](#)  
[Conclusion](#)

Our society, it seems, wraps itself up in historical patterns by which to live. We see what has worked over time. We recognise the patterns and ingrain them in our thinking. We look forward, use the patterns from the past and shape our future. We are afraid of the unknown and, most of all, change.

Enter the distribution capabilities of Internet. Exponential in terms of power. One to one, real time, synchronous and asynchronous, many to one, many to many - passive & real time. 24 hours a day, seven days a week.

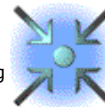
In a short time, this new medium has changed our ways of thinking in many domains. I wish to tackle the following question: What will this concept do to today's corporate structures?

In 1992 I started a company called Real Time Communications, with a mandate to offer consulting services in fiber optic communications. I figured I would open an office in Montreal, hire a few engineers and begin the process from there.

As I left the courthouse with a paper that said I owned a consulting firm I realised I had no assets. I needed brainpower - engineers. I began by leafing through the local newspaper and found a few qualified people, met them but it didn't seem adequate. I wanted more options. A new found colleague at a local university told me to 'log onto the Net'. A few phone calls later and the purchase of a modem, I was ready.

When I logged on, I did not have a clue about what I was connecting to. I checked out Usenet, found a news group dedicated to fiber optics and posted a request for interested engineers. In three days I received email from Russia. Five Russian scientists saw my idea projected from somewhere in my head to their hard drive and responded to me direct. Epiphany.

I found them, they found me, in a limitless place called Cyberspace. The concept became clearer now. I had the world at my fingertips. I eventually reached people in Thailand, Israel, Canada (home), France, the US and many others around the world. Everywhere became local. Everyone could come to my backyard. Or bring my backyard to their domain. I had leapfrogged the local and national status as a company. RTC was global.



### **The Virtual Corporation**

The medium of the Internet has in essence allowed people to create a new type of company. I have developed a new process that thrives on change and changing patterns. One where a pattern will be different every time. I own a virtual corporation or as I like to call it now, an exo-firm. The word exo implies an outside support system.

The basic premise of a virtual corporation or exo-firm is that its resources are external of its administration and are in a latent mode. These resources whether in human or material format are tapped into when needed. Our organisational structure looks like electrons orbiting a nucleus. We juggle the attributes of the atom to create a new molecule, using its protons, neutrons and electrons. This is management, not chemistry. These attributes here in the real world are made up of individuals and firms who can provide hard goods or intellectual services. These attributes, via information technology are global. This means the corporation is global. So are the clients.

A good example of a present day virtual corporations is a movie production. The word 'virtual corporation' was sitting in my consciousness, but it really made sense as I was watching the end credits during a movie in the theatre. As the credits rolled up the screen, I realised that I was watching the whole production staff - the resources of a project. Where

they were didn't matter. What mattered was that an individual with an idea created a reality using all these resources.

The producer of the film begins with a script - a blueprint, raises the money, hires more producers, a director and then moves on to production with a larger staff, finishes production which reduces the staff to editors and marketers and then sells the finished product. Toffler calls this a pulsing corporation. Small sized firms connected via the Internet can emulate this process.

These new types of organisations can build themselves up around specific projects. They can obtain financing for the project and source for the project on an international scale.

Using information technology of today the exo-firm can design a new organisation around client's needs every time. A custom company for the client. It can adapt to a client's needs and culture instead of the other way around.

*"Design is sometimes better than market forces, just like sometimes it is better than Darwinian evolution."*

- Alan Kay, Apple Fellow

## Structures and Exports

Distribution of information has in the past been kept inside corporate walls. Picture a pyramid with a hierarchical structure, with the distribution of information going up and down losing its heat as it travels through an ego based information system. This system is of course the human resources of the firm. Bureaucracy.

New communication models that have evolved through information technology are forcing this corporate structure through a metamorphosis. It is the model doing the change - the information technology is the medium. Distribution of information is now more accessible to more people inside the organisation.



This changes the human landscape of the firm.

Upper management - the visionaries of the company, tied to middle management who are tied to lower resources direct the company forward. Slow and cumbersome, this structure is based on a model that dates back to the Industrialised revolution. A pattern has been set in motion. Done once - done a hundred times.

When this type of company has grown to a certain size and its outputs of services and/or products is bounded by a geographic region, it then exports its structure to a new geographic location and begins to produce and distribute to new customers. Most multinationals duplicate their home management structure (based on successful past patterns) and export this structure to a new geographical site whether inside the state, country or around the world. They also export the company's culture. Foreign environments are expected to change and adapt in order to form a stable relationship. The rigidity of this patterned system is inherent in many large companies. They cannot operate any other way. The law of the firm dictates that change should be avoided. Fear of change and instability keeps it rigid.

The Virtual Corporation doesn't have to export - the resource are already there, all without the overhead and management costs. This provides instant mobility, flexibility and a new way to manage. The communication structure is no longer inside or even outside of the corporation - it is through it.

## Management Paradigm Mix and 3D

When I began this company I knew it did not look like the hierarchy structure. I leafed through one of my management books and came across the adhocracy concept. That seemed to fit the picture I had in mind.

To run a virtual company, a merging of the two paradigms is in order. The hierarchy represents a set control system. The adhocracy instils free flow of information. Can a big corporation use both? I believe so. Information technology will allow us to jump back and forth, to and fro. Even as management allows its people more freedom to make decisions (adhocracy) their job is still on the line and upper management still steers the company forward. One hand on the wheel. (hierarchy).

The virtual process asks you to travel to the third dimension. Picture the new corporate structure as a sphere.

Imagine an atom. The vision and steering come from the centre - where centre management, not upper, operates. That is the nucleus. The nucleus is at the helm. Surrounded by orbiting atoms to make the new molecule. Design of a new process every time. Orbiting resources with this new distribution power provide the exo-firm access to people, corporations, services and ideas on a global scale. Pool the necessary components, merge together to fulfil a mandate.



The word corporation implies to combine in one body. The word virtual implies without substance or body. A paradox is created in combining the two. Do they cancel each other out or do they complement each other?

This constant metamorphosis is what Toffler called the Flex firm. Quoting from 'Power Shift', he writes, "The units of a flex firm may draw information, people and money from one another and from outside organisations as needed. They may be next door to one another or continents apart.

"This requires freer, faster flows of information. This will mean crisscrossing, up, down and sideways conduits - neural

pathways that bust through the boxes in the table of organisation so that people can trade the ideas, data, formulae, hints, insights, facts, strategies, whispers, gestures and smiles that turn out to be essential to efficiency."

The aspect of crisscrossing, up, down and sideways through a company is best achieved in a sphere. Pyramids are hard to move - so are mountains. Spheres move easily.

## Responsibility breeds Independence - Independence breeds Responsibility

George Gilder, in a Wired interview, states, "The Internet, for instance, is an exciting kind of metaphor for spontaneous order. It shows that in order to have a very rich fabric of services you don't need a regimented system of control. When there's a lot of intelligence at the fringes everywhere, the actual network itself can be fairly simple."

Apply this concept to the virtual management structure. Here is a case where the centre management must allow control to be at the fringes. The trust factor increases - so does freedom.

Rigid management structures inhibit innovation - ask any scientist working in a government lab. Ask any engineer working for a Fortune 500 company. "I fill a slot" they would say. In fact the job has been created before they got there. The responsibilities, the salary, the expectations have already been asked for and have been established by upper management. They have set the standard.

Imagine if a company looked at their whole human resources division and saw it as a human parallel processing system. Hire the person first then ask them to design the job. What would happen. Chaos? Not enough enough to topple the company. In fact given a goal to move from A to B, a time frame and a budget - most humans can act responsibly. Give them a political and physical environment where they can innovate. Power goes with the job. I am not advocating giving up total centralised control. Authority is needed from management. I do not endorse anarchy. The power of information technology empowers individuals to a fuller capacity.

"Knowledge is becoming the one critical factor of production. It has two incarnations: Knowledge applied to existing processes, services, and products is productivity; knowledge applied to the new is innovation." - Peter Drucker from a Wired Interview

## The Track Record - Experience - The New Concept of Corporate Time

Drucker saw that success in business would not be tied to how old, large, reputable, or well-financed a company was, but how it was managed. For example:

I asked an accountant the other day, "Would you put your money into a company that had a track record of over a hundred years?" He replied enthusiastically "Yes, they have proven themselves."

I then told him they were worth billions. He smiled again. I said they were endorsed by their government. He nodded with approval. I then asked him if a year ago, knowing what he knows now, would he put all his life savings into Baring's Bank? He said no of course not. I directed him back to his previous answers and told him he would have - and he would have lost everything. I smiled.

There was a small start up company in Hollywood - three middle aged men wanted to start a new studio and change the way entertainment was produced. Far fetched? Not if the three people are Katzenberg, Geffen and Spielberg. The company is 1 year old - has not yet produced. Look at the people behind it - there is the value. And why stock traders were beating down the door to give them money.

The exo-firm needs to be looked at the same way. What human resources can be brought to the company. what are their experiences and talents - what can they bring to the client through the exo-firm, the catalyst. People can ask me how much experience does your company have - I can answer, how much do you need?

## Money from the Outside

Traditional lending institutions finance companies based on continued revenue necessary to pay off a principal and interest debt. Added security is asked for in the terms of collateral. The knowledge corporation, the virtual corporation or the exo-firm sees its most valuable asset as people. This is not what a bank calls collateral.

Thomas A. Stewart, columnist for Fortune Magazine, wrote a piece called "Trying to grasp the intangible" - "The assets that really count are the ones accountants can't count - yet". People.



Stewart mentions a report prepared by Arthur Anderson who performed a study for 11 large British companies. They found that, "In successful companies, the value of such assets [people] is growing as a proportion of total shareholder value."

Stewart also mentions a study done by the Brookings Institution that calculated in 1982 the relationship between tangible assets and total market value for US manufacturing and mining companies accounted for 62% of the company's market value. This figure was reduced 38% in 1992. Remember, these are hard atom based companies. Do they know what is happening to them?

However, as the eighties demonstrated, banks are no longer the only source of capital. In George Gilder's new book, 'Telecosm', he demonstrates this by referring to Michael Milken:

"...Milken's grasp of the information age extended well beyond Drexel's IS department. Focusing on emergent information companies responding to the tectonic and regulatory turmoil unleashed by the microchip in TV and telephony, Milken channelled a total of some \$ 26 billion into MCI, McCaw, Viacom, TCI, Time Warner, Turner, Cablevision Systems, News Corp. and other cable, telecom, wireless, publishing and entertainment companies. At the time, virtually none of these firms commanded substantial collateral acceptable to a bank, and thus they could have raised these billions nowhere else. Now, these companies are collectively worth some \$ 224 billion and comprise the foundations of a national information infrastructure unrivalled in the world."

I wonder how many bankers are banging their heads against the walls. Gilder uses MCI as an example as he points out that over a decade ago MCI had a cash shortage with billions of dollars of capital expenditures to make. They had a clear understanding of what their business was and where they wanted to go. Junk bonds supplied them with billions of dollars of capital that fuelled the spread of fiber optics throughout the country during the 1980s. Now they have \$ 3 billion in cash. Today the challenge is not capital. It is vision. Bankers need to learn fast.

Perhaps the information age will help entrepreneurs with vision find those with the capital who are looking for those with vision. A match made directly via the bits. No more investment bankers skimming their crumbs off the cake, no more bankers saying 'sorry can't help you - you have no collateral'.

## New relationships - past - present - future

Many atom based firms can use virtual corporations to their advantage by using their services as a resource. There are aspects of atom based firms that a virtual corporation cannot perform on an internal basis, such as large capital investments, extensive and long term R&D.

However, with mobility and efficiency there is much the virtual corporation can do that the big companies can't do, at a cheaper rate to the client, quicker and better. It's in the Goliath firm's best interest to work with the small Davids. Smaller companies with efficient communication systems and standards can work together and perform the same tasks the large companies do.

No new media has ever replaced 'the old media' nor will it happen with corporate structures. Complements happen. For example, remember when VCRs first came out. The Hollywood studios reacted quickly and said "That's it, we're through everyone will stay home and watch movies there - the movie theatre is dead!" Well, now they love the VCR, particularly as they control when the video tape is released after they have made a satisfactory return at the box office. The VCR opened their eyes - "we are not in the theatre business - we are in the entertainment business."


One media complements the other. The same will happen with corporate structures.

## Conclusion

It's all about relationships. Whether personal, corporate, management and customer oriented, connectivity is what the new media is doing. It is bringing people with similar ideas and mandates together. Distance is falling by the wayside. Ideas are being turned into reality.

Virtual corporations have the potential to change the way business is done from this decade on into the next century. It is only the beginning and we are all still predicting our future around technology of today. Remember, it isn't about the technology - it is what it can do to and for us. People, human beings with ideas and aspirations. Is email exciting or is it the content, or is it the person who sent it and where they are from? Is the web itself exciting or is it what people are putting on it, is it the fast search engines or is it the places you go to from your terminal?

*"Use Information technology to structure relationships, not information."  
- Michael Schrage, MIT alumnus and columnist.*

Knowledge is power. Access to knowledge gives the exo-firm a powerful foundation from which to work. This foundation, although not solid and not on the accountants' books, truly exists. It is real - not virtual. The foundation base is people, their experiences and their ideas. This also spreads to corporations who have experience, knowledge and access to atoms and materials with which to turn ideas into reality. The access to this knowledge via the Internet - a simple medium - gives the the virtual corporation the potential to be an extremely powerful player in the global marketplace. 

## The Author

**Sean Murphy**

Real Time Communications

Broadband Communication Consultants

land: 2050 Claremont, suite 25 Montreal, Quebec CANADA H3Z 2P8

tel: (514) 482-5551

fax: (514) 879-8485

email: [murphy@RTCent.com](mailto:murphy@RTCent.com)

<http://www.rtcen.com>

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Corporate Metamorphosis: The Effects of the New Media by Sean Murphy

*First Monday*, volume 1, number 1 (May 1996),

URL: [http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php?journal=fm&page=article&op=view&path\[\]=469&path\[\]=390](http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php?journal=fm&page=article&op=view&path[]=469&path[]=390)