

TOWARD A NEW EMPLOYMENT CONTRACT FOR THE KNOWLEDGE ECONOMY

BY

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The endless grousing about brains draining and skills shortages is curious in a typically Canadian way. The complaints are no doubt sincere, and probably valid. But, why they are separated into two discrete issues has to cause wonder. The decoupling almost guarantees that solutions for the skills shortage will feed the “brain drain,” leaving both problems to grow not diminish. Turning them into national crises focuses the search for solution on government. A misplacement at best. Moreover, the prevailing approach to these complementary and symptomatic issues inhibits the new thinking needed to address the underlying socio-commercial evolution created by the information economy.

Of one of two things we can be certain. Maybe these issues, including the so-called information economy “paradigm shift,” are bunk, a mere hiccup of *fin de siecle* exuberance in an otherwise orderly industrial system. Or, perhaps they are genuine problems, foreshadowing structural changes coming as a result of the paradigm shift. In the event that it’s all bunk, then it is business as usual and complaining academics, business leaders, and legislators need only to ride this cycle until things return to normal. If not, then treating these symptoms will do little more than delay the inevitable. A more prudent course of action would be to address the source of this

systemic problem from outside the existing, comfortable conceptions of dealing with labour.

There is an historical precedent to suggest that this change is not dissimilar from the opening of the industrial revolution. The new economic reality of industrialization created a period of uncertainty in the relationship between labour and the capitalist. The labourer attempted to fit into the new paradigm with the established approach and mindset of the pre-industrial period. A period of stability in the Employment Contract evolved and lasted two centuries. The information age shift may be creating a similar confusion and instability that both parties—the owners and their knowledge worker/managerial employees—are addressing with conduct that will not work. The measures being taken are incompatible with the evolving commercial structure.

We’ll start by dealing with the immediate problems, beginning with the brain drain. An excess of Canadians with special knowledge are leaving to work outside the country. Statistics Canada sets the number of Canadian emigrants (mostly to the U.S.A., they think) at 62,131 for the year ended 1 July 2000, up from 58,787 in 1998/99, and 24,206 in 1995/96. Ominous numbers, but certainly offset by imports. Canada took in 147,281 immigrants in 1999 alone. Many are well educated and prepared for the knowledge economy: 13,130

with Masters degrees and 2,930 with PhDs in 1999.

If we accept the argument that Canadian brains are draining south, that by itself concedes that globally adequate or superior skills are being developed in Canada. Suggesting that Canadians are inadequate in the same breath as complaining about a talent migration is defiantly illogical. Obviously, a flight of talented people would contribute to a reduced supply for Canadian firms. But the issue is really neither about the volume nor the quality of talent produced, but where it ends up in the labour market. If Canada is, in fact, currently experiencing a workforce skill shortfall *because* talent is migrating out, could upgrading or developing a more specifically-skilled Canadian population solve the local talent shortage problem? Probably not. In the prevailing global, labour/skills-bereft knowledge economy, without systemic change the leakage is practically unstoppable.

The first result of increased Canadian technical education would be a possibly proportional increase in emigrating Canadian knowledge workers. With an established quality of talent to be hired out of certain places in Canada, why would foreign recruiters not take more of those people were they available? Yet the Canadian Federation of Independent Business, as one example, would tempt this fate.

The U.S. has a shortage of qualified labour, only they are doing something about it. *They are making access better, they are reviewing their immigration policy . . .*" Mr. Whyte said, adding that *Canada needs to heed the calls for a national effort directed at skills upgrading.* (NP, 30 Sep 00, D2) Emphasis mine.

It may be enviable to have Canadian knowledge workers deployed globally, but should it be a national initiative? Emigrants working for extra-national businesses do nothing meaningful for the Canadian economy. So, one has to question why more technically-oriented education should need state sanction and funding as opposed to individual or corporate support. Each of these two

latter-named parties benefits directly; the nation as a collective does not.

Knowledge workers seem to be leaving Canada for many reasons, among which are compensation and opportunity. To keep knowledge workers in Canada, their needed skills and talents must be valued and compensated by total reward at a level equal to the alternatives. To do less precludes the employer from holding "A"-level talent. When talent can move to the United States, or anywhere else in the world, for higher U.S.-dollar compensation, it means that Canadian firms have to compete in relative terms that include not only tax considerations but the currency exchange. Yet, they don't. Data generated by *Personnel Systems and Software Human Resource Council* for 1999 show that even when adjusted for purchasing power parity, Canadian employers were paying 75–80% of what American companies were paying for high-tech positions on average.

The magnitude of the total cash cost to the employer and the net salary to the employee is affected by taxes, the cost of living, and the relative standard of living offered. Obviously these are important matters, the most readily addressed being taxation since achieving tax cuts may benefit Canadian employers in the international competition for skilled people. Taxation, however, has a wider-reaching social impact than this narrow objective. The cascading effect of lower tax revenue could have fundamental effects on the standard of living and the nature of Canadian society. Moreover, some international economic data suggest less correlation between lower taxes and growth than one might be led to believe. But I digress.

In terms of the other apparent reason for talent leaving—opportunity—Canadian business is on level ground with foreign companies to interest, acquire, and retain knowledge workers. Many people are driven by more than wealth accumulation alone. As the force behind talented people leaving unvested stock options, *opportunity* must also be a powerful motivator. Canadian companies unable or unwilling to compete at market-set cash compensation levels are obliged to find, foster, and promote other value-generating

opportunities associated with their employment offering. Today, given the market retraction and uncertainty in the high tech sector, employment stability and security are sure to develop into attractive propositions—even as a trade off for less cash.

Ultimately the brain drain, the skills shortfall, and the nature of how and why the knowledge worker employment market is as it is, starts and ends with employers. After all, the capitalist theoretically bears the burden of the business input costs, including the human resource. Employees have little incentive to support the capitalist by underpricing their labour or taking on the cost of their own training without it being reflected in the return they receive from their compensation. Leaving aside government and its responsibility to upgrade the basic academic curricula for the moment, let's consider some of what business might do to actively address the brain drain and skills shortage situations.

First, and foremost, the free market economy can not be invoked only when convenient. Just as when in a buyer's market salaries tend to stay down, so in a seller's market salaries tend upward. If Canadian business wants employees of the highest quality in this now globalized labour marketplace, it has to pay global market prices. That may mean a larger gross cash portion to offset the implications of the Canadian personal tax impact. It may mean becoming more creative in the comprehensive offering. Of course these things are cyclical and if the American economy starts to recede, the shoe may be on the other foot. One way or the other the business has to work within the prevailing market circumstance.

Staying with free market dynamics: without interference the law of supply and demand should push people and educational institutions toward the types of training where there is a return on investment. That, however, implies returns (i.e., compensation) have gone up with demand. To deny this fundamental truism by keeping salary levels down artificially is myopic. Not only will stunted salaries preclude securing high quality talent immediately, it will disincent the labour force

from filling the need by training for those skills. Thus, meeting the increased (global) market rate of pay for the labour in question initiates two benefits leading to a viable, long-term solution. First, it will slow or stop the talent leakage by neutralizing the economic reason to leave. Second, it will provide a demand-based incentive to increase the supply.

More importantly, business has to develop skills and experience *internally*. Since we must accept that the raw talent exists here, and that getting experienced talent is too costly, the next best and always-acceptable solution is to develop workplace skills and experience internally through training programs, apprenticeships, and so forth. This specific type of education is rightfully the responsibility of the employer and the individual. The only argument against it is the spectre of dramatic ROI reductions should trainees leave for other opportunities. This argument presumes that trained employees will leave. Moreover, it implies that employers would rather poach the graduates of others' development programs. Given the pervasiveness of this strategy, it's no wonder there's a skills shortfall.

One obstacle on the road to a solution for this training conundrum is the increasing difficulty in specifying who should be responsible for what training: the employer (capitalist), the knowledge worker (labour), or the government. It's a muddy problem of definition that engenders finger-pointing and denial. But it's perfectly understandable if we accept that the knowledge economy is the post-industrial paradigm shift as predicted by so many. We are all attempting to solve new problems by outmoded means.

To clarify the training responsibility issue a little, I've devised a skills portability plane as shown in Figure 1.¹ The chart depicts a fairly traditional delineation of skills as relatively ranked against the variables "Skill Type" and "Portability." The further to the northwest on the chart, the higher the ROI from and incentive for business to train

¹ Based on an Adult Literacy and Lifestyles skills triangle, itself adapted from the Premier's Council

internally because skills are less portable and more workplace specific. To the lower right are foundational skills and the basic social literacy that a modern state such as Canada must—and does—provide its citizens. Skills development in the area between these two poles of responsibility is usually attributed to and undertaken voluntarily by the individual, with the financial support of government and/or business (e.g., university, trade schooling, private on-going skills training, etc.).

from the country driving down the general education ROI anyway.

On the other hand, businesses would like to avoid or offload the direct costs of training employees. In the days when commercial entities could effectively isolate themselves in an oligopsonistic labour market, and their competitively necessary skillsets were practically valueless elsewhere, a training ROI calculation was simple. Employees, once trained, were gently tethered locally to their employer because their accumulated knowledge and skills had greater value with the current employer than anywhere else. Credentials and seniority could be downgraded or even lost by a move to another employer.

But the knowledge economy changed all that by broadening and significantly commoditizing skilled labour. Soft skills are applicable everywhere; software and technology engineering skills are seamlessly useful in all corners of the new economy as technological platforms are standardized and integrated. The days of businesses standing alone geographically or otherwise, like medieval principalities, is gone. In the post-industrial knowledge economy, skills and moreso knowledge are totally portable. Thus everything in the upper half of the chart shifts to the right—outside business’s traditional locus of responsibility—reducing the employer’s expected payback on direct training costs (Figure 2). The traditionalist corporate thinker, clinging to old measures and ways, might feel cause to celebrate; but I suspect that sense will be fleeting. The new paradigm does not leave the capitalist-employer in the clear by any measure.

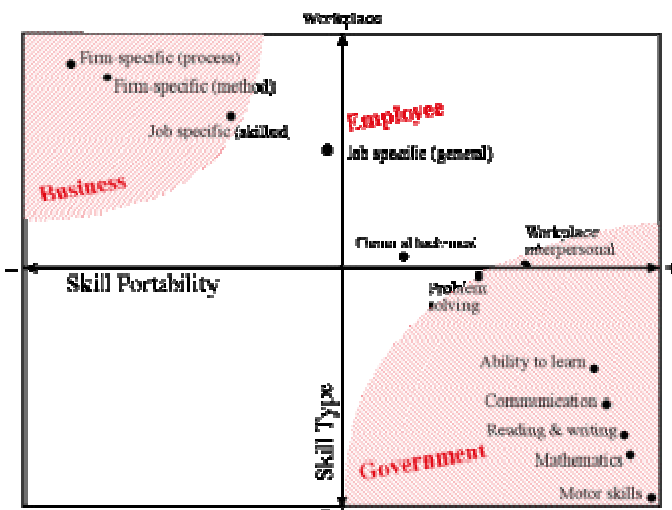


Figure 1

Everyone would like the government to expand its locus of responsibility further to the north and the northwest by directing, developing, and funding ever-more workplace specific training programs. But that puts the government beyond its mandate to provide basic literacy and skills, and to be an *agent* of economic development. What’s more, it costs money: money available only by taxation. And nobody wants higher taxes, as evidenced by demands to reduce personal taxes (so that gross salary costs are lower for employers), to reduce capital gains tax, and to reduce corporate taxes. It also raises and justifies the question, “Why should all taxpayers contribute to workplace-specific skills development?” Even those who understand the broad economic value of a skilled workforce are loathe to be taxed so that others’ employee pools might be educated and trained. As well they should be, especially with proven people -leakage

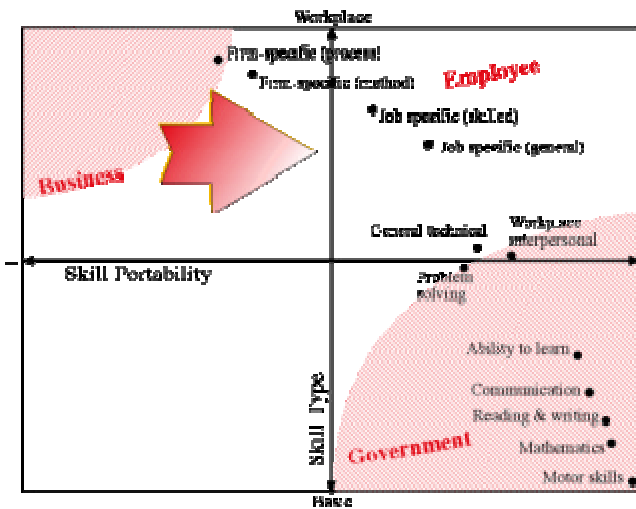


Figure 2

The obvious outcome of the eastward shift on the chart is more skills falling into the workers’ purview. The knowledge labourer is obliged to secure these skills to be of value. Ironically, the root of this circumstance can at least be partly traced back to the radical “downsizing” in the 1980s that unilaterally changed the understood Employment Contract. The ultimate effect was the forcible creation of independent “labourists” of many (primarily) knowledge workers, with a corresponding massive increase in workplace skills portability.

Thus this “business-of-one” labourer also has an eye on training ROI, and approaches the skill development issue using business logic. The knowledge worker has “paid,” either by restricted income from his/her labour offering or cash outlay, to obtain certain desirable skills. Traditional business would amortize the cost and return over a number of customers/clients for a reasonable time, say 2–3 years. But even knowledge workers generally obtain income from a single “employer” at any given time. So that “employer,” which needs the knowledge workers’ skills to create the value by which it will compete and profit, must sustain the cost. At least for now, the knowledge economy is a skills-seller’s market, so the demand-driven price is high.

In short, the employer-capitalist ultimately pays the training part of the labour input cost one way or another, either by investing in actually training

employees or by paying a higher price for already skilled professionals. In a closed market environment there should be a payback indifference equilibrium between (a) paying a high labour expense for pre-trained labour, and (b) paying a lower labour expense while making a training investment. Employee attrition resulting from the absence of loyalty and a globalized labour market, however, naturally pushes business toward option (a).

Perhaps the real solution for commercial enterprise is to rethink the Employment Contract for knowledge workers within the context of these new structures and conducts. Assume or accept that knowledge workers do not fit the traditional industrial model for labour, and think about the bargain *de novo*, aware that training and skills development is only one aspect of the systemic change to the knowledge economy’s Employment Contract. We also have to recognize that despite there having been knowledge workers throughout the industrial period, the situation has changed. One example is research scientists, whose knowledge drives R&D. The difference is that in the new world knowledge employees are a larger portion of any business and are the core of the company’s overall commercial competence. Another example is the advertising business in which the organization’s assets go home each night. The skills of the knowledge economy are similarly portable, but not innate or once-learned like creativity; they require continual on-the-job upgrade and refinement. These two factors alone warrant revisionary thinking about the labour deal.

Modern militaries require highly skilled employees such as pilots, lawyers, engineers, doctors, programmers, and so forth. Without conscription they can not compete for these employees because the military can and will not pay the market rate for the skills. So the military underpays and trains its skilled professionals. Knowing that the employees will have valuable and portable skills once trained, the military makes the bargain by compelling each trained person to commit to a period of post-training, low-paid service in exchange for the paid professional development.

Far be it from me to recommend something so retrograde to modern industry as the military model. But at its core the military education/training bargain with its personnel is the formalization of what business seems to desire of its own internal training. At the very least, the model has merit as an analytical departure point for examination of knowledge worker employment because it creates a manageable, possibly even fixed financial cost and return on employment/training.

A new social contract of employment for knowledge workers is a particularly relevant matter to consider today because of the quantum change to the nature of labour and the work environment in the post-industrial knowledge economy. The mix of an economy founded on highly technical knowledge skills and a set of players all with their eyes on payback and return created a volatile cocktail that will probably benefit those with the skills at the expense of those who need them. But there are larger issues at hand than the choice of how business pays to rent and prepare skilled labour.

Some fear that Canadian (and other) businesses do not have inexhaustible money supplies, and wonder at what point businesses have to say “We can’t [or won’t] pay any more.” Valid concern. One could speculate that Canadian (high-tech) business is facing the same situation as the Canadian hockey team owners did in Winnipeg and Quebec City a few years ago. They couldn’t afford to stay in the game because of high labour costs. In more direct and concrete terms, the global opportunities to: exploit unskilled labour by moving work to locations where the cost is the lowest; reach larger markets through open trade thereby increasing revenues and global competitive bulk; and, structure internationally for tax advantage is now met and maybe offset by the global competition for skilled labour and other crucial resource inputs. While the situation may change as national economic fortunes cyclically reverse themselves, so long as there is demand somewhere in the world for knowledge-based skills, the market will remain fundamentally consistent. So, when does Canadian business no

longer ante up to the other players at the table? Obviously when it no longer wants to stay in the game, to succeed, and to win.

Government’s role can be only to help guide these principal parties to successful ends as an agent rather than an actor. It is government’s responsibility to support national interests by all means at its disposal. Which may require a serious, but careful, re-evaluation of the total tax regime to help everyone achieve the benefits and goals identified. It might require it to get smaller and out of everyone’s pockets. It might require aggressive assistance for its commercial interests. Most certainly, it is not government’s responsibility to take on more, job-specific education and training. Among other reasons, it is antithetical to the capitalist philosophy for government to further interfere in commercial matters. Moreover, the knowledge economy has created too great a degree of globalization for Canadian business and government to hide inside our borders and raise protectionist walls to keep the people in. That ended quite ceremoniously about a decade ago in northern Germany.

At the end, the question has to be whether Canada wishes to join the global new economy, or not. Presuming we would choose the former, to benefit the Canadian new economy our people have to be well trained and kept at home. It is incumbent upon the nation—not the government of the nation, but its capitalist enterprise and labour—to keep this human intellectual talent here. That entails paying for it and providing it with better opportunities and alternatives than exist outside Canada. To lead, if we so choose, Canadian business, political, and economic thinkers will address and resolve the discrepancy between the new economy and the 20th-century commercial *ancien regime*.

XXX

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