Jaques and the Early Years in Australia

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ABSTRACT

The Chief Executive Officer (CEO) of any organization, by the nature of his or her title and role, sets the culture (the “how we do things around here”) which becomes either paranoiac or trust-inducing to greater or lesser extremes. This account of one CEO emphasizes the relationships between past managerial experiences, the business requirements of a highly competitive industry, the nature of the impact of local government on globally dispersed installations, and an intense interest in bringing together a better understanding of trust-inducing top-down managerial leadership. Thus follows an examination of one CEO’s journey with a nascent body of research and the researcher as, together, they struggle with understanding what requirements and actions will be interpreted as not only “good for the company” but also “good for me” as an employee. The paper describes the added value of a CEO’s systematic organizational analysis and structural design of a managerial work system focused on the employment of the discretion and judgment of each employee within appropriate role boundaries, thereby inserting a large amount of psychologically sound, creative problem-solving focused on competitive business outcomes. It develops understanding of the business reasons for fair pay for levels of work assigned, and the recognition of current potential capability and development of individuals as they naturally mature in future potential capability to handle more complex assignments. Copyright © 2005 John Wiley & Sons, Ltd.

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INTRODUCTION

This paper will cover four items: first, to tell you something about Conzinc Rio Tinto of Australia (CRA) and the objectives and the challenges it faced as a
business in Australia in the mid-1970s. It is now history, but in order to understand what work was done, you have to start with CRA's aims. In 1972 the CRA Group had consolidated revenues of $338.7 million and approximately 18,000 employees. It produced a wide range of minerals, including iron ore, coking coal, steaming coal, copper concentrates and metals, zinc and lead concentrates and metal, bauxite alumina, aluminium and aluminium products, gold, silver and uranium oxides (and later diamonds in 1980).

At the time I started with the company, Rio Tinto Zinc (RTZ) of London owned 80% of CRA but the companies operated as two separate entities. Because of the level of foreign ownership CRA was treated as a foreign corporate, and the Australian government imposed restrictions on its business to help locally owned companies. This happened despite the long tradition of contribution the CRA Group had to Australia, despite its Australian employees and Australian shareholding, and its corporate Australian leadership.

Second, this paper covers my search for help to ensure that CRA adopted the world's best practice in its organization and people management policies. That led me to Elliott Jaques.

Third, the organization development project at CRA is examined.

Fourth, we have a few words on the relationship between Elliott Jaques and myself.

**ITEM 1: CRA GROUP AIMS**

In the mid-1970s the Australian community seemed very anti-CRA. The Group was foreign-owned and the profitability of the mining industry was high. It all looked so easy. Local competitors, such as the Colonial Sugar Refining Company (CSR) and Broken Hill Proprietary (BHP) thought it was a good idea to be critical of the foreign-owned companies because that would improve their competitive position. The general community thought mining was exploitative and had environmental risks.

The entire community forgot the important contribution that mining had made historically to the economic development of Australia. This contribution included the beginning of gold mining in Victoria in the 1850s and continued right through the mineral developments in the 1960s.

The CRA Group had business issues. However, it also had industrial relations problems. Strikes, and threats of strikes, were defeating Australia’s reputation as a reliable supplier. The whole industry faced this challenge. The community relations problems of the mining industries did not help CRA to solve the industrial relations warfare. The international competition was getting tougher. The Group faced two broad categories of competitors:

- competitors producing in low-wage countries, such as South African or South American companies
• competitors producing in the major world markets where they were closer to major customers, such as German, Canadian, or American companies.

What were CRA’s aims? The Group had some external and some internal goals. However, since this paper is not about CRA, I have not categorized these aims very clearly, but let me list some of them below.

First, CRA wanted to get the principle accepted in Australia that it had the right to explore on a competitive basis. CRA and RTZ reached an Australianization agreement with the Federal Government in 1977. Before that the Group had a pretty tough four years, including difficulties with Minister Rex Connor.

Second, a major problem was the way the 30,000 people who worked in the CRA Group felt about themselves. I wanted to get every CRA team member feeling better about working in the mining industry. When they went home to their wives and families I hoped they all felt good about their work. The Group did a number of things to help achieve this result. It sponsored the film series on “Minerals and Mankind,” which aimed to show the general public the importance of minerals in the development of the modern global society. Separately, CRA sponsored the wonderful Fred Williams series of paintings of the Pilbara. I attempted to make all CRA people feel better about what the Group did.

Third, CRA followed a different path from BHP because the Group gave each individual project and related corporate entity its own name: an entity was not called “CRA Iron Ore,” it was called “Hamersley.” This naming policy did change the feeling of accountability and assisted the decentralization of authority and power.

Fourth, Australia was going through a long period of inflation. The Group had to get recognition of the real assets that CRA employed. CRA wanted the whole community to understand that as a high capital-investment industry, returns had to produce a real return on the real value of assets. CRA made an inflation adjustment in its accounts.

Fifth, the Group made a more public commitment to what had been a long tradition – since 1905 – of CRA and its predecessor companies, of organic growth via successful exploration and technological innovation. The exploration policy aim was to sustain exploration at a level so that CRA would discover 50% more resources than it mined each year. This was a very fundamental commitment. It was one of the major tensions between CRA and its major shareholder, RTZ, in England. The commitment to exploration was, I believed, part of the responsibility of a leading mining group. However, RTZ thought that financial results were more important, and exploration was not a high priority to commit to spend money on.

Sixth, the Group tried to maintain the world’s best mining practices. CRA’s policy was that it should mine ore bodies down to the lowest cut-off grade that anybody was mining in that kind of deposit in the world. This meant that, at
the margin, more of the material was treated as ore even if it only recovered the lowest grade of mineral, rather than classifying this low-grade material as waste. It is important to remember that you can always improve the profitability of a mining company in the short term simply by raising the cut-off grade. However, ultimately, that is not the right way to handle the resources of the globe.

Seventh, CRA made a major commitment to technology and to technological development. The Group was always looking for ways in which it could extend the lives of its ore bodies.

Eighth, and I suppose most important, I was emotionally committed to the decentralization of power in the organization. CRA needed an organization structure to make this notion work effectively.

In order to achieve any of these objectives CRA had to get the whole of the mining industry committed to a policy framework which would create a more competitive Australia. The Australian Mineral Industry Council (AMIC) was the body in which major companies came together to discuss public policy issues. Originally, AMIC members agreed that, as a condition for some of the more manufacturing industry-focused members joining, there would be no discussion or position taken against maintaining a high level of protection tariffs. It took CRA some time to open up the possibility that the mining industry had to talk about its need for a more competitive Australia. The industry needed to join the farmers in making policy suggestions to achieve an Australia whose markets were more open to the world’s suppliers. You may remember, about 1979, that a gang of four (MIM, WMC, CRA, and Peko Wallsend) recommended lower tariffs to a government inquiry into tariff protection.

CRA set as its objective ensuring sufficient profitable growth so that it should become one of the top five mineral companies in the world. The Group wanted to join the company of BHP, Anglo-American, Alcoa, RTZ, and Alcan. Even though RTZ still owned more than half of CRA in Australia, both in England and in Australia, the management thought of the two groups as two separately managed entities. CRA started at about Number 14 in the world in 1970: it aimed to be in the top five by 2000.

Purely personally, the final objective I had was to uphold and build soundly on the traditions that the leaders of CRA had created in Australia. I think this was best summarized in Maurie Mawby’s phrase, “to create mines where other people couldn’t see them.”

In the 1930s WS Robinson had led a lot of members of the Australian business community to feel more deeply their responsibility to help uplift the community. He was regarded then, and I inherited this title a little, as a “dangerous socialist.” LB Robinson, his son, carried on the tradition of sharing the good times with the many people who contributed to the mining industry. Maurie Mawby was a great Australian who was deeply committed to building a stronger Australia. Arthur Rew, his colleague and successor, was a very committed, hard worker. In order to do his best to protect the Australian operators from external control, Arthur used to work to 9 pm every night so
that the documents which went to London overnight were in first-class shape. This outstanding standard of performance kept London off CRA’s back.

Then there were the great people who worked with me. Initially, Haddon King, in exploration, Struan Anderson, Don Hibberd, and Syd Christie. Then, and for longer, Frank Espie, Russ Madigan, John Ralph, Jack Brady, Tom Barlow, Mark Rayner, and many others. A whole range of people were fundamental to the way that the CRA Group operated. Some of that commitment has carried on today; Leon Davis and Leigh Clifford, for example, strengthened the Group focus on continuous improvement.

ITEM 2: LOOKING FOR HELP

CRA had some business issues. However, when the Group reached the Australianization agreement with the Federal Government in 1977, it was felt to be accepted as an Australian company. The new aim was to become one of the best four or five mining companies in the world. The question was, “How are we going to do that in competition with companies with a low wage base and with companies who are closer to the market?”

I had spent 12 years working with McKinsey, seeing how the best enterprises in the world operated. But when I became CEO of CRA in 1972, and later, in 1977, when the Group overcame the foreign ownership hurdle, CRA had to rethink its strategy and structure. My time with McKinsey had showed me that having sound objectives, well-executed personnel practices, and well-implemented management practices could really enthuse high talent people. During my work with McKinsey I consulted to Fred Borsch, then the Chief Executive of General Electric (GE). During this work we recommended, established, and implemented strategic business units in GE. This was the first time that this organizational logic had ever been introduced to such a large company. This work built on earlier work I had done in Australia with ICIANZ. All this work showed that simplified management structures were possible and would lead to a big improvement in managerial effectiveness.

What I did was to try and review the work of all the organizational theorists and the major consulting firms to see where CRA could get help. The major consulting firms were employed on specific projects as trials, but the Group was not making a lot of progress. Members of the CRA management all felt they could do better. In the mid-1970s the Group started international benchmarking. CRA benchmarked itself against Canada. The comparisons showed that CRA was behind the Canadian productivity, and that was worrying. The Group was worse than the Canadians – so something had to be done better. Now, CRA was pretty sceptical of professional consultants and all the comments made about consultants in these symposium sessions are going to add to that scepticism. Unfortunately, I can echo it.

Now, the difficulty for me was, of course, I wasn’t part of the Broken Hill Mining Managers Club. I had not grown up in Broken Hill. I had been there...
quite a lot, but I hadn’t got “the ticket.” So, I could only move at the pace that the “Broken Hill Club” agreed that specific steps would make an improvement. This is an important limitation on any chief executive’s power. CEO power is always limited by the willing consent of his or her management team.

I found Elliott Jaques, and we started to work together in 1978. In order to be certain that I am being as honest as I can be today about where we were in 1978, I went back and re-read Elliott’s book *The General Theory of Bureaucracy* (Jaques, 1976). It wasn’t an easy read then; it isn’t an easy read now. I am going to tell you why I was interested in it even before I met Elliott. There is a graph on page 173. When I reached that page I said, “That is very unusual.” I hadn’t seen any graphs like this one in any other writings of any sociologists or organizational theorists. The graph looked like one from physics, illustrating the energy levels of electrons going around a nucleus. It looked to me as though Jaques believed he has got on to something which had a scientific basis. That was unusual. “Anyway,” I said, “I’d better meet this man Elliott Jaques.”

We reached Elliott via Sir Mark Turner and Lord Wilfred Brown. I met him in London and brought him out to have a look at Hamersley. Elliott wandered around Hamersley. He came back and said, “You can’t solve the Hamersley problem alone. You need to have a management policy framework that goes right to the top of CRA, and you better get started developing it.”

We then had to select where we could get started. We looked for a major mine site to see if we could introduce a higher level of organizational effectiveness. We started with a man called Mike Blackwell, at Woodlawn Mine, near Canberra. Mike Blackwell was a Rhodes Scholar who had worked in the CRA Group for about 10 years. He was very committed to working within the framework of decentralized power. He was very talented and good person for us to start to work with. Later, when I describe the organizational development project, I will talk more about Mike and Woodlawn.

What Elliott bought to this work were five basic beliefs.

- First, the belief that management practices were like the state of medicine in the fifteenth century, a vast opportunity for improvement.
- Second, a belief that he had discovered the equivalent of the basic measuring device in medicine, namely, the thermometer. Elliott’s use of time-span was, he believed, an equivalent measuring device for assessing objectively the size of a job. He thought that was a necessary first step in developing a more scientific approach to management and organization – namely, having a tool to determine the size of a job. Jaques believed that this would be the start of the introduction of real scientific methods into the management of large-scale organizations. Time-span was his key belief.
- Third, that in the period of 100 or 200 years, a set of universal principles would be discovered. In his work with Glacier (Brown and Jaques, 1965), Jaques believed he had made a start towards that discovery.
• Fourth, that the people who had to make it happen were line managers from the CEO down. Managers must take the actions needed to make better working arrangements happen.
• Fifth, a commitment to getting the work done better had to be the basis for improvement. Jaques was passionately against adopting any “feel-good” public relations short-cuts that were not soundly based and which would not stand the test of time.

Now, what did those beliefs give me? Even today I don’t say that I agree with all of Elliott’s beliefs or would use the same terms. However, his belief gave me confidence that CRA could do better. He gave me confidence that, in wanting to do better, I wasn’t “Robinson Crusoe on a desert island.” There were some other people who were interested in helping.

Elliott was, in a very real sense, a conviction politician. Elliott in his work encompassed a persuader and a clarifier and conviction politician. He did a lot to convince the Broken Hill Mining Managers Club that it could do better.

**ITEM 3: THE ORGANIZATION DEVELOPMENT PROJECT**

From about 1978 until about 1985 CRA ran a full-time organizational development project. Jack Brady would probably be able to correct these dates. After 1985 the organizational work became just part of the ordinary “way of doing” work at CRA.

Work started at Woodlawn, with Mike Blackwell. Mike was a first-class manager who believed the old command and control methods were obsolete. He wanted to do better, and he wanted to remove the hierarchy. However, Mike did not quite know how to make people feel good and still get the work done. So we thought he was a good place to start.

In the organizational development (OD) team we put together four groups of people.

• In the first group were some high-class, younger executives, such as Leigh Clifford and Terry Palmer, who rotated through the organizational development project as a two-year broadening step in their careers
• The second group were very experienced mining engineers who were very capable, Jack Brady in particular. There were very many people who made contributions to this effort. They were great in sharing their experience and making helpful and critical comments.
• The third group comprised McKinsey & Company, providing consulting services and ensuring clear documentation. Fred Hilmer, Helen Nugent, and others worked on the project. They were not asked to make independent recommendations in their normal way, but to contribute to the work of the team and to make certain that nothing had been missed. And, of course, they had the right of independent comment to me as the client.
The fourth group was a single individual, Elliott Jaques, who was a codifier, a clarifier, a questioner, etc.

I acted as a project director to show that the company CEO really cared about the success of the project. One of the major setbacks we had was that Mike Blackwell became sick and died early, and we missed him – that created a lot of sadness.

We started on how to improve the productivity of the truck drivers and the shovel operators at Woodlawn Mine. Beginning with the principle that the work of all levels of management had to add value to that of the truck drivers and the operators. We tried to analyze how managers and staff really added value. I remember we had almost endless arguments about the role of the supervisor – was a supervisor a manager or wasn’t he? Backwards and forwards the arguments went. It took a very long time before we finally codified the four authorities that a manager had to have over his subordinates if the manager was going to be held accountable to his superior for the work of his subordinates. This codification was finally agreed by everyone.

We developed a lot of policies; we put them into use at Woodlawn, and we trialled them. We saw that they would lead CRA to achieve better results. Then we tackled Broken Hill. We went to Broken Hill because it was the home of the “Mine Managers Club.” All the senior managers at CRA had been trained there. Simultaneously, we also went to the Sulphide Corporation, which operated for 24 hours a day, 365 days of the year. I wanted to make the policies work in those two places before we could be sure that we really had something. We had to build improvements into our agreed method of working, into our daily life. Everybody had to accept these practices for them to become part of the culture of CRA.

Because we were changing the work and the accountabilities of management we did not have any negative reactions from the unions at all. No discussion – not even an argument. At Broken Hill we reduced the number of levels of management from 14 to four. Why were there 14 levels of management when we started? There were 14 because, over time, CRA had done what a lot of institutions do. It had confused pay grades and seniority levels with unclear thinking about levels of work. When we actually analyzed how various levels of management added value, we came back to four. Gradually, the organization development coverage was extended to the whole CRA Group. This meant the clear separation of the “general manager” level or, in Elliott’s terminology, Level IV managers. Then there were their direct subordinates, “mutual recognition unit (MRU) managers” (Level III). The MRU managers had superintendents (Level II), managers working for them. These superintendents directed the work of the operators (Level I). The general manager (Level IV) reported to the managing director of the business unit (Level V). The Level V Managing Director was the key organizational rank in the Profit and Loss focus of the CRA Group.
I have to tell you there were long periods of argument. Some people said, “Don’t use number levels I, II, III, give them names,” so I tried to do that. At Level V, I had a big clash. Russ Madigan felt that the business unit person should be called a “Managing Director.” John Ralph thought that he should be called a “General Manager.” Russ Madigan was basically in favour of acknowledging the continuity of the decentralization of power. John Ralph felt that there should be more co-ordination, and that would be easier to achieve if Level V managers were not called managing directors.

We had long debates. Ultimately, it was decided that CRA was not going to be a BHP. When I got to the point where everybody would agree, provided I gave a clear decision, we settled on the title “Business Unit Managing Director.”

All this took time because we had to carry the members of the Mine Managers Club with us. The key was to combine CRA’s experience, leadership by the line management, and the input of the mining industry’s best practice, plus inputs from McKinsey about how to document it clearly and, ultimately, checking that Elliott Jaques wasn not against the move.

As soon as I believed, as CEO, that CRA had a policy step that would improve its productivity, and which all of my colleagues would go along with, it was implemented. Notice that I did not say, “agree with,” I said, “go along with.” Changes were implemented as soon as possible on the correct assumption that the improved performance would convince any of our colleagues who wavered. The accountability of each level of manager, the unit manager, the general manager, and the business unit managing director, was put into practice. It was agreed to make a major commitment to run the CRA General Manager training course – a two-week residential course for all the general manager-level executives across the CRA Group. A big commitment.

The Human Resources Chart Room was developed. Jack Brady led this. This was the room where all the senior executives met and discussed promotion possibilities. We considered how CRA was going to manage the career needs of all of its people, from general manager and upwards.

The Group worked to reduce the number of unions in a workplace. CRA was not anti-union – Elliott was never anti-union. But, the Group was opposed to having multiple unions in a single workplace. Multiple unions tend to destroy the loyalties of employees to the performance of the entire institution. It was felt that multiple unions tended to cut across the idea of multi-skilling. They limited efforts to provide the maximum development of the capabilities of all of the human beings that worked with us. Mick O’Leary, for instance, was able to reduce the coverage of unions in Argyle to three, from what, traditionally, had been eight or ten. In some places CRA was able to get down to a single union.

Fundamental to progress was probably me, doing two jobs, first as CEO – trying to improve the effectiveness of the organization – and second, as Project Director – ensuring that thinking continued to advance. Ideas were trialled and
tested before being installed. CRA built up a shared language and a set of convictions throughout all the members of the Group as it proceeded.

With hindsight, I became too committed. I became too committed to CRA. I worked 100 hours a week for seven or eight years. I was committed to long-term value-adding. I always recognized intellectually and said, “I am only the temporary incumbent of the Chief Executive position.” However, I did not really recognize the growing resentment in the UK to the progress at CRA. Since I personified that progress, and an independent mindset, at the end of the day I was sacked. That was an interesting experience. It was a bit of a shock to me in 1986.

What Elliott Jaques brought to the organizational development project was not, at the time, a practical, developed theory, but a set of deep concepts and hypotheses which helped all of us to progress faster.

**ITEM 4: THE PARTNERSHIP BETWEEN ELLIOTT JAQUES AND ROD CARNEGIE**

Now, what about the partnership between Elliott and myself? We had some great advantages – Elliott was a research-based social scientist. I was an improvement-oriented management practitioner. Neither of us was trying to do the work of the other. We were lucky that we were both reasonably experienced over a wide range of industries and situations.

We shared some beliefs in common. First, a better way could be found. The better way would be based on reproducible evidence. Five levels of management would be required in the sort of business units of the size we were dealing with. Each management level ought to add value to the work of subordinates rather than doing the work of subordinates again. A clear language had to be developed.

People felt satisfaction in doing their work well, at all levels. The decision-making about people, critically, who was paid what or who was promoted, had to be based on the exercise of managerial judgment. The aim was to ensure that this was done across the whole of the Group in a reasonably fair manner.

My view was that, in any situation in which human beings make decisions, there is a normal distribution. Within a band at the broad centre of that distribution, broadly, you would find what I called “rough justice.” If the decision-making veers to the extreme of one side or the other, it falls outside that acceptable band. All any human institution could hope to do was to have a framework that tried to ensure rough justice. This term is my verbal shorthand to explain what we were trying to achieve.

I didn’t, and CRA didn’t adopt Jaques’ theory in 1978. He did not have a developed theory. What Elliott had was deeply held hypotheses. He didn’t really have a worked-out theory. After the eight or 10 years’ work with us, and with the parallel work with the US Army, these hypotheses have been solidified into Jaques’ practical theory, written as *Requisite Organization* (Jaques, 1996).
It is true to say that, all the way up to Level V, Jaques has made what can only be described as a profoundly important contribution to international managerial thinking. This is my belief. I think it has been confirmed by experience at other institutions that have done sustained high-performance work. I will mention just two – the North Vietnamese Army, which fought against the might of America in South Vietnam and did very well – and the Japanese management system – which built up from the experience that led to the Tokugawa victory in the seventeenth century. Before that victory Japan had lived through 1000 years of fierce fighting; the Japanese codified the best military practices and the optimum fighting organizational ranks after the Tokugawa victory. Japanese companies took these principles and policies and adopted them into the management practices of the best international companies.

What Elliott did in his *Requisite Organization* (1996) was to codify a lot of work that built on, and was confirmed by, the best practices from around the world. I think CRA contributed something to this development.

Some parts of Elliott’s theories, I believed, were too risky in practice for CRA to use. For example, I tried not to permit the CRA executives to use Elliott’s progression charts. We never built them into any of our organizational work because I felt that they looked too much like “pre-destination.” What we did was to say, let us document the judgment of the manager once removed about the level of work that the subordinates could do now or could do in three years’ time. This judgment could be reviewed and changed every year if appropriate. I felt that was an acceptable management question which did not carry intolerable human relation assumption risks.

I think that the personal development curves, which were great for use as a social scientist, should not be accepted and used formally by an institution. If you used a chart it looked too much like the company agreeing to pre-destination. People could interpret that you had committed your institution to say the best that that person could ever be would be this. I thought that was potentially a wrong message to send. As a CEO you have to do what is acceptable within the culture at the time.

(As an aside, I should explain my first career decision in CRA. I was Finance Director in 1970; Struan Anderson ran into my room said, “You’ve got to do something. Go down to the fourth level, there is a girl wearing pants.” I said I would investigate. I walked down, and the girl looked very smart so I did nothing. I went up to the executive directors’ lunch and said, “Wearing pants seems OK.” Well, you would have thought I was in favor of establishing a brothel on the bottom floor. My colleagues were upset. I said, “If everybody wants to make a policy statement, and sign it with their name, saying ‘in future no woman can come in except in a dress,’ I’ll implement it. I have no problem in carrying out whatever you wish to sign your name to.” The air came out of that tire very quickly and pants continued to be worn. I have to repeat, there is a set of cultural assumptions about what an organization can require at a certain
point in time. You have to work within those assumptions. You can only modify them at a certain rate.)

One of the tasks of a CEO is to feel what is acceptable to the culture, and when something feels right to make a change to act on it. Sometimes I made mistakes. For a moment, after more than a year of debate I became impatient with all the argument about managerial names. I said that Level III would be called “managers.” No one objected very much. But, with hindsight, I should have called that level the “Unit Manager” or the “MRU Manager” because the shorter term, “Manager,” is a generic form. So I got that wrong and, ultimately, I had to correct it.

Now just to show you that the work was worthwhile, I have put together a chart, which was used by Leigh Clifford recently. This is a graph of the productivity of Hamersley (Figure 1). I cannot vouch for how it has been calculated but it is roughly right. The graph shows the way in which labor productivity went up over a period. I want to draw attention to two quite different periods: for 15 years – from 1970 to 1985 – no real change or improvement. For the next 15 years – from 1985 to 2000 – a really spectacular and continuing improvement in productivity.

I believe that rate of productivity improvement is available to any CEO who involves the human beings in his organization in getting the work done better. We want CEOs to say, “I’m not discharging my responsibility to my successor if I don’t get us started on that programme.”

Employment harmony leads to higher productivity

![Graph of productivity at Hamersley.](image)
Clearly, a ten-year program is a long time horizon for any CEO to hope to remain in office. CEOs have to accept that they are going to commit the sweat and effort to implement a requisite organization program. However, if CEOs make this commitment you can see the potential improvement which could take place in competitive performance.

CONCLUSION

In 1988 I had a car accident in which I was hit by a drunk driver. I was unconscious for a couple of months, and then physically and emotionally recovering for a couple of years. Then I had to work fairly urgently to rebuild my financial position. As a result of all that I did not really re-establish my links with Elliott Jaques until about 1993. I think it was also important for Elliott's work with CRA to be carried on after I left. As far as possible, I did not communicate with him after I left the Group because already I sensed there was some resentment from the UK about Elliott's work.

Elliott had stopped working with CRA by 1993. So, after 1996, we talked regularly each month. We discussed a number of other projects we wanted to work on together. One of our fundamental aims was working out what should you do to build a mutual trust-creating environment in a company. A second aim was to clarify the work that could be done to develop people with modes VI, VII, and VIII capabilities. Another potential project was how to develop a career path to bring highly talented people into your company and then develop them through your organization in a sensible way. This career development process has to be done in a way which does not weaken the trust relationships of everybody else. When considering all these questions, I miss him. I miss him being at the end of the telephone.

REFERENCES


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