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## ***Introduction***

Butler Group is, as we speak, working on the launch of a portfolio of consulting products aimed at the quantitative assessment of IT spending. Our consultancy will be based on the Strassmann methodology which we believe is unique in this field. Paul Strassmann is an eminent voice in the US and his original ideas as a leading economist specialising in the area of IT have had an important effect on the way companies budget and plan their IT. For the next three months, we will be publishing a series of Journals which should prepare you for what we believe to be a ground-breaking project.

In this month's Journal he sets the scene by highlighting the confused approach adopted currently in the IT budget and planning process. Butler Group has a long history of working with clients to measure and assess their IT strategy; driven in the main by hard-pressed Chief Information Officers (CIOs) who are daunted by the budget process. Just as Paul Strassmann in this Journal, we are often asked to produce return on investment figures from within a vacuum.

Using a quantitative methodology developed over 25 years, Strassmann has discovered new economic indicators such as Information Productivity and Knowledge Capital, which start to really shed light on the impact IT can have on a company's fortunes. His work goes much further than just IT budgeting and he has produced indicators that track stock market valuations much more closely than any of the traditional measures. In this Journal we take the first step in our introduction of the concepts. We are extremely proud to be able to bring these techniques to our clients, and trust you will find that this first Journal will whet your appetite for what is set to follow.

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## ***The Value of Computers***

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I am grateful to Butler Group for lending these pages for writing about a topic that has occupied me for 25 years. This is the first in a series of Journals. I hope these epistles would improve a computer executive's chances of continued employment when confronted with the challenge to prove that the expenditure on computers is money well spent.

A few disclosures are in order. My idea of justifying spending on anything in business calls for valuations in hard cash terms. Ephemeral intangibles or other euphoric visions on artful colour slides do not qualify for that. I also insist on generating evidence that is reproducible and independently verifiable. This means that what is actually delivered can be compared with what was promised.

If you are lucky enough to work for an organisation that does not believe in demonstrable hard cash paybacks, and if your cohorts do not like anything that smells of auditing, you may find my writings unrewarding. Reading up on the latest buzzwords and keeping track of stories about your competitor's alleged computer-propelled conspiracies (floated to the press by vendors and consultants who accept payments only in cash) would perhaps serve you better. You may also choose to continue reading just in case someday, somebody will switch the rules and ask for an explanation on how computers improve profits.

This brings me to a confession. I have pursued the topic of computer payoffs, also known as the computer paradox, for a long time. I described how that happened in the opening chapter of my book, *The Business Value of Computers* (1990). In April of 1974 I was politely thrown out of a corporate level budget review. Our microscope-vision Chief Financial Officer took apart my exquisitely crafted proposal for the customary healthy infusion of a 25 per cent increase in my IT spending. All my projects carried ecstatic endorsements from clients who figured that during the coming budget crunch computer investments were as good a camouflage as anything they could conjure. Unhappily, in the week prior to the budget review the firm's latest quarterly profit report was a disaster. The executive bonuses were in jeopardy. That explained why the comments from the budget reviewers seemed to have a tinge of personal anxiety. I was told to come back only after I could prove that my entire IT budget contributed to corporate profits. Otherwise, last year's spending would be cut by a capricious eight per cent!

### **Lessons Learned**

My traumatic experience with the IT budget proposal 25 years ago seems to be repeated every day, anywhere. It offers perhaps the best explanation why the US survival rate of CIOs is not much better than that of a lieutenant in Verdun in 1916. The reason for their fatality rate is the computer executives' persistent adherence to the fallacy that IT can be justified, measured, and verified as something that can be addressed separately from marketing, manufacturing, distribution, suppliers, and customers. I come across such views in my consulting engagements. The IT plans do not recognise that the benefits of IT always show up outside of IT. IT management cannot be held accountable for benefits, start-up costs, employee training, and bureaucratic resistance, but only for IT costs and schedules.

A few years ago I was asked by the Chairman of one of the largest international banks to examine the quality of its IT. I asked for the Operating Plans of the 43 Strategic Business Units (SBUs) as well as a copy of its respective IT Plans. There was no discernible relationship between what the SBUs were promising and what the IT people were talking about. The discussion by the SBUs was about profits, taxes, market share, acquisitions, product-line enhancements, and staffing problems. The narrative of IT was about hardware capacity, telecommunications plans, software conversion, outsourcing, and technology innovation. This leads to **Lesson #1**:

**There is no such thing as an IT Plan that also claims benefits as a justification for spending. There are only Business Plans that relate all parts as an inter-connected, organic, and inseparable whole. As in any biological organism, every organ affects every other, especially when conditions are pathological. IT is only an amplifier of the firm's brains, not the nervous system itself. A corporate system functions primarily by reliance on relationships among human beings, using methods that have not changed fundamentally over thousands of years.**

The claims of IT proponents for a more aggrandizing role in affairs is usually reflected in the disconnection between IT plans and what people act on in the real world. IT is only a supporting expense. It cannot and should not receive a separate and privileged treatment from any of the other elements such as revenues, compensation, capital, depreciation, and taxes.

One must recognise that IT nowadays represents a hefty chunk of business spending. It grows faster than revenues or profits. It represents 11-15 per cent of wages and salaries paid to a firm's information workers defined as executives, managers, professionals, and clerical and sales personnel. In the case of banks and financial services, that number is 25-35 per cent of all salaries. Because of IT's penetration into just about everything that happens in an organisation, the time has come to view IT as the extension of marketing, production, logistics, finance, and personnel by other means. The separation of IT plans from the plans of those it supports must end.

The most important distinction of IT spending is its persistent longevity. Data elements, such as date formats enshrined in punched cards in the 1950s, have the propensity of staying in place longer than anyone would anticipate. In the early 1960s I put in place an inventory system at General Foods that did not get a recognizable burial until 30 years later. It was replaced because there was nobody left who could understand the layers upon layers of patches and conversions that have been bandaged around it to keep it from collapsing. This leads to **Lesson #2**:

**There is no such thing as a viable short-term IT Plan. There are only estimates of long-term costs and gambles on expected benefits. The best IT expenses are investments with ample flexibility to adapt to rapidly changing business conditions. Some of the best IT Plans I have seen have been developed as a result of IT executives' participation in 'war-gaming' encounters in which top management set out to explore options on how to cope with a wide range of plausible futures.**

When I examine IT plans – most often committing only one year ahead – I despair about the consequential waste. I find that a firm is lucky if it can find 10 per cent of the total budget as possessing the qualities of a truly innovative investment. The entire computing profession has been plagued by the compulsive chase after technology for technology sake. After consuming trillions for technology reshuffling, the ways how organisations make money have not changed much, though everything is now moving faster and competitive confrontations are more lethal. What costs used to be counted in millions is now spent in billions. At least one third of all IT spending should have a demonstrable effect on the ways how an organisation serves its customers, how it makes it easier to cooperate with suppliers, and most importantly, how to create new sources of Economic Value-Added. This leads to **Lesson #3**:

**There is no such thing as a stand-alone Return-on-Investment for IT. Computers do not make money except when mechanizing routine tasks. It is the sales people who bring in the revenues. Hopefully everyone else delivers the goods and services for less money. Therefore, the only way to measure the incremental contribution of IT is to compare the firm's planned Economic Value-Added with added IT spending, as compared with Economic Value-Added without additional IT spending. If it happens that IT improves quality of products or services (intangibles) that ought to show up as a gain in the Economic Value-Added, provided the customers are willing to pay for that.**

The financial analysis of a proposed IT project must start with a 'base case' defined as continuation of operations without changing IT. The organisation can then explore all of the available options, each with an expectation of probable cash flows. The value of an IT project is then simply the cash difference. Technically speaking, it is the net risk-adjusted discounted cash flow between the 'base case' and whatever is the best option the firm can implement without incurring unacceptable risks.

### ***Management Implications***

If the above three initial lessons offer useful advice, what should an IT executive do? How does one extract the proof about the Economic Value-Added of a proposed IT plan?

Lesson #1 dictates that you sit down with your planning and budget and people to reach agreement on how to start migrating IT requirements, benefits, and costs to become an integral part of the existing planning and budgeting processes.

Lesson #2 suggests that you shift a substantial part of your annual commitments into multi-year program funding. Individual projects would still be triggered as short-term implementation efforts, but only as tactical enhancements to measurable longer-term objectives.

Lesson #3 would mandate that much of the responsibility for submitting and justifying IT proposals would come from the executives responsible for Economic Value-Added. The frequently used rationale that IT costs can be managed only by those who are responsible for the computing 'infrastructure' or for the 'network architectures' is misplaced. Those technical matters certainly deserve corporate-wide coordination and integration. However, they do not warrant the computer executive's assumption of the accountability for all of IT benefits and costs. As wholesale defections to outsourcing contractors and increased reliance on off-the-shelf software demonstrate, business executives will be taking IT over anyway. You might as well paddle with the tide, not against it!

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## ***Coming Soon***

Over the next two months, Butler Group will be completing the details of its Strassmann consultancy products. The first phase of this will offer your company a Report, giving a quantitative assessment of how your Information Productivity, IT Investment, and Knowledge Capital compares with similar companies. Don't miss our Information Productivity Ranking Tables for the UK which will be included in the November edition. We currently have over 1000 companies in our database that publish sufficient detail in their annual accounts to enable us to calculate an Information Productivity rating. If you are one of these companies, you will be fascinated to compare your company not just with the UK competition, but also with the US, and in the future with the European league table. If you welcome the opportunity to weigh your company against others in the same industry, then don't miss the next two issues of this Journal!

If you would like to register interest in our Strassmann Reports or register colleagues for additional copies, please e-mail Nicole Billington at: [nicole.billington@butlergroup.com](mailto:nicole.billington@butlergroup.com). Alternatively, you can visit our Web site at [www.butlergroup.com](http://www.butlergroup.com).

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