Speed in M&A Integration:
The First 100 Days

DUNCAN ANGWIN, University of Warwick

Speed has become the new mantra in business promising advantage, prosperity and success. It is now de rigueur in the domain of Mergers and Acquisitions (M&A) with a rising tide of practitioners and consultants extolling the virtues of acting rapidly post-deal and the first 100 days, as critical for acquisition success. This symbolic period has become something of an urban myth but along with its underlying concept of speed as advantage, has not received critical treatment. Why has speed, as ethos, been so readily adopted in the M&A arena? What does speed really mean and does it deliver what it promises? This paper is the first to examine critically, speed and performance in M&A. The empirical evidence presented suggests we should be careful of an uncritical acceptance of the benefits of speed in post-acquisition integration.

The paper begins by examining what ‘speed’ is and its implications for business and M&A. It then explores why the first 100 days in post-acquisition integration has gained currency and puts forward a number of propositions upon which key assumptions around the importance of speed and an early time period for assessment are subsequently tested.

**Speed**

Speed is traditionally about the rate of change of distance with time such as used in the context of transportation. It is measurable and in this context is a distance/time equation. However it is both an absolute and relative concept. As a relative concept, it requires comparison with other variables. For instance, whilst an athlete running 100 yards under 10 seconds gives an absolute rate of movement over distance, or speed, which equates to 20.5 mph, we cannot say whether this is exhibiting speed without comparison with other athletes, simultaneously or in the past. As this time is faster than most athletes can manage we say this performance does exhibit speed. The term ‘speed’ then, has strong connotations of rapidity,
hence speedboat, speedway, speed merchant, as well as phrases such as ‘with all speed’, referring to increasing a work rate or rate of progress over time.

Speed is deeply embedded in the English language with strong positive associations with success, good fortune, advancement, furtherance and progress. ‘For Slowehe is mihhti to confounde The speed of every manes werk’ [5] (1390), ‘God send you speed’ [6] (1786), ‘Guid-bye then, Janie: and I wish ye a ‘speed and forder’ [7] (1899), ‘For boldest men Speed ever best’ [8] (1791). Speed here is associated with decisiveness, advantage and time saving. The positive attributes of speed can also be discerned in the phrase ‘You give way to difficulties with more haste than good speed’ [9] (1809), meaning the more you try to hurry, the less real progress you make, painting the virtue of speed as progress over pace. Perhaps the strong positive connotations of speed are a reason for the ease with which it has become adopted in business, and also perhaps, why it is rarely questioned in practice.

More recently in the English language, speed as progress has remained as a consistent advantage, but the positive aspects of speed as pace have begun to be qualified. The roadside poster, ‘Speed Kills’, expands to ‘excessive speed, or inappropriately high speed, can result in your death and that of others’. This acknowledges the desirability of speed as well as warning of the dangers in applying the principle beyond what is productive. The pace of speed then is a basic good but does contain increasing costs. This law of diminishing returns can, in transportation terms, be in fuel consumption, tyre wear, physical and mental exhaustion. In broader terms it can greatly reduce the richness of experience; ‘A poor life this if, full of care, We have no time to stand and stare’ [10]. In other words in travelling on a TGV for example, you remove the richness that captivated early chroniclers of pilgrimages by foot, on horseback, or by boat. Speed then may equate to progress, and both language and business experience support this interpretation. However, it also has a dark side, that speed of pace has costs, which are often ignored.

Speed in M&A

In M&A, speed is the current mantra, with consultants and practitioners extolling its virtues. In abstract terms to assess speed, the object of the study needs to be framed in terms of:

(1) time to completion
(2) progress over a given or set period of time.

The difficulty in defining when M&A integration is complete is probably the reason why studies on speed have concentrated upon the second category. This is manifest in the recent rise of what may be described as first 100 days studies.

First 100 days Studies

Whilst the importance of the immediate post-acquisition period for setting the stage for subsequent integration is well documented [11], the first study to suggest how long such a period may be, suggested the first 90 days [12]. This provided some empirical support for the importance of the first 90 days in stage setting and ultimately suggested that there may be links with successful post-acquisition outcome. Other studies followed, identifying other early time frames upon which subsequent integration success was argued to hang. At GE Capital the first 100-days for creating a post-acquisition integration plan was held to be critical [13]. Feldman and Spratt (1999) argue that the first 100 days is when all the critical actions should be launched, as this is the outer limit of employee enthusiasm, customer tolerance and Wall Street patience. ‘If your transition is not progressing along a hundred-day critical path, you are behind the power curve’ [14] PriceWaterhouseCoopers is reported to go further in suggesting a 100-day target for the entire integration process! [15] ‘Speed’ has become a central message from consultants for post-acquisition integration [16], and focusing upon the First 100-Days has become de rigueur.

The Advantages of Speed

There are a number of compelling reasons why speed may be perceived to be an imperative.

From a financial perspective, time costs money. The faster post-acquisition integration is completed, the faster returns on investment are realised [17]. Evidence that this may be widely perceived and perhaps even ‘enforced’, is in the reaction of the financial institutions to the way in which SmithKline merged with Beechams. This event was contemporaneous with the Bristol Myers Squibb merger in the US. Despite strong protestation from SmithKline Beecham that they were seeking a more complex integration path than Bristol Myers Squibb, the City marked down their share price as their integration was proceeding at a slower pace [18]. This suggests companies integrating faster than comparators are winners.

From a behavioural psychology perspective, sustained uncertainty amongst workforces is seen as one of the most corrosive elements of the soundness of post-acquisition integration [19]. This uncertainty is compounded as time elapses due to the cumulative network effect of rumour mills. Faster integration then may reduce the length of time for employees to experience uncertainty, as well as reduce the exponential effect of the rumour mill.
The reverse side of the coin is stakeholder enthusiasm. This enthusiasm is at its highest on the wave of euphoria and heightened expectations that surround a successfully completed deal [20]. Both acquirers and acquirees have an expectation of change and anticipate change actions. Post-deal this climate of expectation and enthusiasm for change is subject to entropy, where elapsing time seeps support. Acting rapidly therefore takes advantage of early enthusiasms for change. Early actions achieving quick post-deal wins helps delay the onset of entropy and therefore seems an attractive course of action.

From an organisational change perspective, speed as shorter integration periods than before or against comparators would seem to promise benefits for the organisation spending less time in a sub-optimal condition. There would be less instability for the organisations involved and less costly readjustments, such as incurring expense through internal rationalisations and inefficient operations, as well as a potentially poorly coordinated market interface. There is also an argument that the shorter the time period, the more controllable the events.

Implicit with the focus upon early short time periods is the assumption that early actions have bigger effects upon outcomes than later actions. This path dependency perspective suggests decreasing latitude of action for acquirers as time progresses. The creation of new configurations and capabilities constrain later ability to make substantial differences [21]. This myopic effect assumes that firms have limited ability to learn and anticipate from later feedback in the post-acquisition process.

Rapid integration may also serve to reduce exposure to the uncertainties of the external environment. This can be of immense consequence as the difficulties experienced by Corus, the merger of British Steel and Hoogovens, showed. The newspaper headline, ‘Corus at war with itself’ [22] illustrates the deeply embedded internal difficulties, which persisted during four years of post-acquisition integration.

These hampered the company severely in its attempts to respond effectively to significant macro-economic, political and competitive pressures.

Speed of integration is also attractive in terms of competitive strategy. The deal itself and the speed of integration reduce the time available for competitors to respond to the new organisation. This can give substantial immediate positional advantage as well as presenting competitors with a barrier to imitation.

Summary

On the surface then, the arguments for rapid integration, or speed, seems compelling and explain the rise of 100 days prescriptions, which focus upon the rate of action in the very early part of post-acquisition integration. However as the phrase ‘more haste less speed’ suggests, speed of actions may not be synonymous with progress or outcome. Indeed speed has consequences, which are rarely articulated, in the business domain and it is germane to raise the question of what is sacrificed on the altar of speed? [23]. In many cases there will be a subtle loss of richness that comes through iteration. As it is hard to perceive what this might have been, its loss is hard to detect. In extremis, speed of action can destroy the very fabric of what is being purchased. Extreme cases of conquering hero syndrome abound in rapidly imposed acquirer procedures and policies with disastrous outcomes [24].

The relationship between ‘speed’ and success may therefore not be as straightforward as it seems. For these reasons we ought to be cautious of the predictive power of the first 100 days.

Propositions

There are compelling reasons for focusing upon speed in post-acquisition integration. The arguments that speed is beneficial rests upon the assumption that success is negatively associated with the amount of time elapsed post-deal. On this basis our first proposition is that:

1. Top executive perceptions of post-acquisition success will diminish over time.

   The argument for speed in the early days of integration focuses upon the amount of change carried out in the first 100 days. It is assumed that those acquisitions exhibiting higher levels of change in this early period will be more successful than those showing lower levels of change.

2. Those acquisitions making more changes in the first 100 days are more likely to be associated with successful perceived outcomes.

The Survey

We surveyed the population of acquisitions, contained on the Acquisitions Monthly database, which took place in the UK between April 1991 and March 1994 [25]. Many of these deals were not the acquisition of one company by another, such as MBOs, MBIs, asset purchases, and so did not give rise to any integration opportunities, which are the focus of this paper. As a consequence, these were removed, as were deals smaller than £8m in consideration, where data is decidedly patchy. This left a final population of 232 corporate acquisitions.
The questionnaire was posted to the top executive of each these 232 target companies. These top executives were solely responsible for the acquired company and the changes that took place there in the post-acquisition period.

Top executive, or key informant research is common in strategic management research [26], and is appropriate for investigating strategic issues. The initial mailing was followed up by a telephone call ten days later to encourage response. Seventy usable questionnaires were returned; a response rate of 30.17% which is good for surveys in the acquisition field [27].

Change Measures

Despite the wealth of post-acquisition literature, there is little systematic coverage of the changes that take place in the post-acquisition period. A study examining strategic assets, observes that most organisations are so divided and the format like the manager, must use the function as the primary unit of analysis [28]. We adopted this approach as most organisations are so divided and the format would strike a chord with most respondents.

To assess ‘changes’ post closure we drew upon the turnaround literature and, in particular, the ‘Sharpbender study’ [29]. Possibly the most rigorous of its type, the study examined 1,200 of the UKs largest companies, which had exhibited a substantial and marked improvement in performance after sustained decline, to assess which distinctive organisational changes were made during the uplift. This study offers a comprehensive guide to changes that take place in achieving improved performance during a crisis. The actions examined in the Sharpbender’s study, and which were examined in our questionnaire, are contained in Table 1.

The actions taken by Sharpbenders seem to resonate with acquired companies striving to restructure in adjusting to a new owner.

Two questions were designed for each change variable. The first asked whether there had been a change in that variable since the acquisition completion date. The second asked how many months after completion date the change was started. This gives an indication of the rapidity with which a change begins.

In order to give a high level picture of organisational change, all changes were initially assumed to be equal.

Success Measures

Respondents were asked to indicate their view of how the acquisition had fared in terms of eleven criteria: overall success, recovering the cost of capital, contribution to group profitability, achieving strategic objectives, technological synergies, operational integration, cultural integration, I.T. integration, gaining market share, increasing sales volume, new product development. Data came from top executive perceptions only. A Likert type scale was used with a score of one indicating a very high level of perceived success, and a score of four indicating a low level of perceived success.

Post-hoc Rationalisation

In looking back at whether acquisitions have worked out and whether the first 100 days is of as critical importance as widely held, there is an issue of the extent to which executive perceptions of prior actions are influenced by later perceptions of outcomes and elapsed time. It is likely that as time passes, memories of complex actions will fade to some extent, although this will be mitigated by the uniqueness and importance of the action, the person’s depth of experience and the extent to which the actions have been codified.

Psychologists have recognised for some time that people do not ignore outcomes when judging decisions, even when specifically instructed to do so. This phenomenon has become known as hindsight bias [30]. The bias comes about because of cognitive factors relating to information retrieval, particularly in complex situations and the degree of consistency between old and new information. Where there is inconsistency there are greater efforts to generate reasons and explanations to account for such inconsistency. Where the outcome is surprising and it is hard to recall expectations for complex events, people may reconstruct their memories [31]. There may also be motivational factors related to a person’s desire to impress others or save face for themselves [32]. However, in a meta-analysis of hindsight bias, Christensen-Szalanski and Willham (1991) conclude that cognitive bias is a more likely factor. They also examine the magnitude of hindsight bias and conclude the overall effect is not large and ‘its effect is likely to be washed out by the random error of the real world’ [33]. Effects of bias are also reduced when the subject is familiar with the task.

In the case of our respondents, all are managing executives of the acquired company and so have first hand experience of the post acquisition period. Running a newly acquired company is not an every-day occurrence and for the most part can be characterised as an organisational crisis. In this situation of extremity, it is highly likely that these executives will have good recall of events. In addition, the changes to which they refer are most likely to be codified in some way. However, we cannot completely rule out some form of hindsight bias.
### Table 1 Sharpbender Actions

<table>
<thead>
<tr>
<th>Sharpbenders Actions</th>
<th>Our survey question(s)</th>
<th>Nos</th>
</tr>
</thead>
</table>

#### 4.1 Changes in management
- **Was the CEO/MD changed?**
  - **Was the CEO/MD changed?**
  - **Was the CEO/MD changed?**
- **Appoint new senior executives**
  - **Appoint new senior executives**
  - **Appoint new senior executives**
- **Appoint new marketing/sales director**
  - **Appoint new marketing/sales director**
  - **Appoint new marketing/sales director**
- **Appoint new finance director**
  - **Appoint new finance director**
  - **Appoint new finance director**
- **Top team is more action oriented**
  - **Top team is more action oriented**
  - **Top team is more action oriented**
- **Communicating with the acquired company staff**
  - **Communicating with the acquired company staff**
  - **Communicating with the acquired company staff**

#### 4.2 Changes in organisation
- **(Contained beneath)**
  - **(Contained beneath)**
  - **(Contained beneath)**
- **Remove senior executives**
  - **Remove senior executives**
  - **Remove senior executives**
- **Control expenditure**
  - **Control expenditure**
  - **Control expenditure**
- **Change planning system**
  - **Change planning system**
  - **Change planning system**

#### 4.3 Strong central financial control
- **Develop cash flow forecasts**
  - **Develop cash flow forecasts**
  - **Develop cash flow forecasts**
- **Broaden scope of annual profit plans/ budgeting systems**
  - **Broaden scope of annual profit plans/ budgeting systems**
  - **Broaden scope of annual profit plans/ budgeting systems**
- **Control expenditure (all capital and revenue expenditure needs CEO approval)**
  - **Control expenditure (all capital and revenue expenditure needs CEO approval)**
  - **Control expenditure (all capital and revenue expenditure needs CEO approval)**
- **Adopt parent financial reporting systems**
  - **Adopt parent financial reporting systems**
  - **Adopt parent financial reporting systems**

#### 4.4 New product market focus
- **Review marketing plan**
  - **Review marketing plan**
  - **Review marketing plan**
- **Sale or closure of businesses**
  - **Sale or closure of businesses**
  - **Sale or closure of businesses**
- **Focus on a particular market segment**
  - **Focus on a particular market segment**
  - **Focus on a particular market segment**
- **Implement new marketing initiative**
  - **Implement new marketing initiative**
  - **Implement new marketing initiative**
- **Intensive effort to reduce production costs**
  - **Intensive effort to reduce production costs**
  - **Intensive effort to reduce production costs**
- **Introduce or improve after sales service**
  - **Introduce or improve after sales service**
  - **Introduce or improve after sales service**
- **Purchase of new equipment**
  - **Purchase of new equipment**
  - **Purchase of new equipment**

#### 4.5 Improved product quality and service
- **Improve product design**
  - **Improve product design**
  - **Improve product design**
- **Introduce or improve quality control system**
  - **Introduce or improve quality control system**
  - **Introduce or improve quality control system**
- **Improve delivery times**
  - **Improve delivery times**
  - **Improve delivery times**
- **Introduce or improve after-sales service**
  - **Introduce or improve after-sales service**
  - **Introduce or improve after-sales service**

#### 4.6 Improved marketing
- **Improve distribution channels**
  - **Improve distribution channels**
  - **Improve distribution channels**
- **Focus on particular market segment**
  - **Focus on particular market segment**
  - **Focus on particular market segment**
- **Introduce or improve after sales service**
  - **Introduce or improve after sales service**
  - **Introduce or improve after sales service**
- **Marketing information to the CEO**
  - **Marketing information to the CEO**
  - **Marketing information to the CEO**
- **Stress getting closer to the customer**
  - **Stress getting closer to the customer**
  - **Stress getting closer to the customer**

#### 4.7 Cost reduction strategies
- **(Remove senior executives)**
  - **(Remove senior executives)**
  - **(Remove senior executives)**
Respondent Data

In the context of M&A activity over a five year time period, the time frame containing our respondents, April 1991 to March 1994 can be seen in Figure 1 to represent the beginnings of the large 1990s M&A boom.

Against this background of rapidly increasing numbers of M&A deals, it is reasonable to suggest that the context for M&A activity was optimistic.

Respondents

Our 70 responses were evenly distributed across SIC codes and equally split between private and public deals. These acquired companies had turnovers ranging from £1m to £230m with a mean of just under £50m and employed up to 3,829 employees with a mean of 585. We had no examples of multiple acquirers in our responses, so all acquired companies were acquired by different parents.

To test whether our respondents differed from the population of acquisitions, we transformed our data using a log normal approach and ran t-tests which established that there were no significant differences between our responding sample and the population based upon bid value and sales. We also compared quintiles for bid value, target sales and numbers of target employees and found that our respondents did not differ significantly from the population. We should also remember that with 30.17% of the population we do have low standard errors. However we cannot rule out the issue of systematic non-response bias.

The respondents were distributed equally over the three years in question. The survey, dated 1995, therefore collected data on acquisitions where between one and four years of time had elapsed since completion date. This enabled the testing of perceptions of acquisition success over different time periods.

Results

Proposition 1

Our first proposition is that top executive perceptions of post-acquisition success will diminish over time. As the respondent data is not normally distributed, a non-parametric technique, Kendall’s tau-b bivariate
correlation, was used to identify whether there is a significant relationship between success and time. The results are reported in Table 2.

Table 2 shows that for over half of the items there are significant positive correlations (significance set at <0.05) between the lengths of time elapsed since transaction and perceived levels of success. In particular the significant correlations with elapsed time are with both overall success variables, both financial success variables, culture and I.T. integration. For these positive correlations the longer the amount of time that has elapsed since acquisition the less successful the acquisitions are perceived to be [34].

### Overall Success Items

Both the items for overall success were modestly and positively correlated against the length of time elapsed. A regression analysis of overall success as a dependent variable of elapsed time gives a Beta value of $-1.79E-02$, significant at 0.034. By percentagizing the overall success scale, with 100% being complete success and 0% being complete failure, the initial level of 83% overall success in the first year declines to 73% end of year two, 68% end of year three, to 60% after four years.

### Financial Benefits

For financial benefits there are significant moderate correlations with time elapsed and perceptions of success, so that as time passes, perceptions of success decrease. Table 3 shows this relationship is consistent across all years surveyed for both items.

### Integration Benefits

In overall terms, Table 2 shows significant positive correlations between cultural and I.T integration success and elapsed time. However for all the integration items there is a significant curvilinear relationship. Table 4 shows the mean success scores by year for each integration variable.

Integration variables show decreasing levels of perceived success for the first three years with a reversal in year four. This reversal is statistically significant for three integration items as shown in Table 5.

### Market Success

There are no significant correlations between perceptions of success in the marketing category and elapsed time, overall or year-by-year.
New Product Development

There is no correlation between perceptions of new product development success and time elapsed, overall. However, a moderate significant negative correlation is noted for year three, indicating that older acquisitions perceive greater success in this area than younger acquisitions. See Table 6.

Summary

Proposition 1, that top executives’ perceptions of post-acquisition success will diminish over time is supported in our strategic and financial categories, as well as for IT integration. However, in areas of integration, and new product development, there is a curvilinear relationship, of diminishing perceptions of success early on, which is then reversed after three years. By year four, the increasing perceptions of success in internal integration are marked. There is no significant correlation between elapsed time and external market success measures.

Proposition 2

Proposition 2 proposed that carrying out more change in the first 100 days is associated with perceptions of higher levels of success. Table 7 shows the results of a partial correlation analysis controlling for time elapsed.

The overall levels of correlation are low and no results are significant at the 0.05 level.

When acquisitions were examined on a year-by-year basis for correlation between changes made in the first 100 days and perceptions of success, there is no significant correlation for one-year and two-year old acquisitions. However, after three and four years post acquisition, the results of a partial correlation analysis in Table 8 show significant moderate negative correlations between changes started in the first 100 days and perceived success.

All of the correlations are negative indicating that higher levels of change in the first 100 days are associated with higher perceived levels of success after 3 years. This is significant for integration issues and market measures of success see Table 8.

Amongst the integration success measures, technological synergies ($-0.6400, \text{sig } 0.007$) and IT integration ($-0.7399, \text{sig } 0.001$) show modest/strong levels of correlation with early levels of change. Cultural

### Table 3 Mean Scores for Recovering Cost of Capital and Group Profitability Against Elapsed Time

<table>
<thead>
<tr>
<th>Year</th>
<th>Recovering cost of capital</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>1.571</td>
<td>2.059</td>
<td>2.563</td>
<td>2.625</td>
</tr>
<tr>
<td>Year 2</td>
<td>1.438</td>
<td>1.737</td>
<td>2.375</td>
<td>2.375</td>
</tr>
</tbody>
</table>

### Table 4 Mean Scores for Integration Benefits Against Elapsed Time

<table>
<thead>
<tr>
<th>Year</th>
<th>Technological benefits</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>2.500</td>
<td>2.846</td>
<td>2.933</td>
<td>2.200</td>
</tr>
<tr>
<td>Year 2</td>
<td>2.000</td>
<td>2.286</td>
<td>2.313</td>
<td>2.000</td>
</tr>
<tr>
<td>Year 3</td>
<td>2.200</td>
<td>2.688</td>
<td>2.882</td>
<td>2.571</td>
</tr>
<tr>
<td>Year 4</td>
<td>1.889</td>
<td>2.727</td>
<td>3.273</td>
<td>3.167</td>
</tr>
</tbody>
</table>

### Table 5 Perceptions of Integration Success for Four-year-old Acquisitions Kendall’s tau-b Bivariate Correlation Coefficients

<table>
<thead>
<tr>
<th>Time elapsed</th>
<th>Technological synergies</th>
<th>Operational integration</th>
<th>Cultural integration</th>
<th>I.T. Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three years</td>
<td>–0.8944</td>
<td>–0.8729</td>
<td>–0.7939</td>
<td>–0.3892</td>
</tr>
<tr>
<td></td>
<td>0.018*</td>
<td>0.005**</td>
<td>0.009**</td>
<td>0.152</td>
</tr>
</tbody>
</table>

Key: Correlation coefficient Significance
*sig < 0.05
**sig < 0.01

### Table 6 Perceptions of New Product Development Success Kendall’s tau-b Bivariate Correlation Coefficients

<table>
<thead>
<tr>
<th>Time elapsed</th>
<th>New product development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three years</td>
<td>–0.5850</td>
</tr>
<tr>
<td></td>
<td>0.004**</td>
</tr>
</tbody>
</table>

Key: Correlation coefficient Significance
*sig < 0.05
**sig < 0.01
| Table 7  Perceived Levels of Success Against Volume of Changes Started Within 100 Days for All Acquisitions Partial Correlation Analysis Controlling for Elapsed Time |
|------------------|------------------|------------------|------------------|------------------|
| Success Items:   | Overall           | Financial         | Integration       | Market R & D      |
|                  | Overall success   | Achieving strategic objectives | Recovering the cost of capital | Contributing to group profitability | Technological synergies | Operational integration | Cultural integration | I.T. integration | Gaining market share | Increasing sales volume | New product development |
| Overall success  | 0.0300            | 0.1014            | 0.1098            | −0.0604          | −0.0941          | −0.2325          | −0.2063          | −0.2083          | −0.3177          | −0.2408          | 0.1075           |
| Achieving strategic objectives | 0.449            | 0.331             | 0.318             | 0.397            | 0.342            | 0.155            | 0.185            | 0.182            | 0.080            | 0.147            | 0.321            |
| Number of changes started within 100 days | 0.449            | 0.331             | 0.318             | 0.397            | 0.342            | 0.155            | 0.185            | 0.182            | 0.080            | 0.147            | 0.321            |

Note: 1 tailed test
Key: Correlation coefficient
Significance

| Table 8  Perceived Levels of Success in Three and Four Year Old Acquisitions Against Volume of Changes Started Within 100 days Partial Correlation Analysis Controlling for Elapsed Time |
|------------------|------------------|------------------|------------------|------------------|
| Success Items:   | Overall           | Financial         | Integration       | Market R & D      |
|                  | Overall success   | Achieving strategic objectives | Recovering the cost of capital | Contributing to group profitability | Technological synergies | Operational integration | Cultural integration | I.T. integration | Gaining market share | Increasing sales volume | New product development |
| Changes within 100 days | −0.2476          | −0.2465           | −0.3892           | −0.4409          | −0.6400          | −0.3611          | −0.5463          | −0.7399          | −0.4888          | −0.5062          | −0.1284          |
|                  | 0.245             | 0.246             | 0.133             | 0.101            | 0.007**           | 0.102            | 0.022*           | 0.001***          | 0.038*           | 0.032*           | 0.362            |

Note: 1 tailed test
Key: Correlation coefficient
Significance
*sig <0.05
**sig <0.01
***sig <0.001
integration (−0.3611, Sig 0.022) also shows a moderate correlation with early levels of change. For the market based success measures, gaining market share (−0.4888, sig 0.048) and increasing sales volume (−0.5062, sig 0.032) show moderate significant negative correlations with levels of change in the first 100 days. For the other success categories, there were no other significantly correlations with the volume of change started in the first 100 days of acquisition.

**Summary**

Looking at all acquisitions, and controlling for the effects of elapsed time since transaction, there is little evidence to support the view that the volume of change started in the first 100 days is associated with perceptions of success. However, for acquisitions where three or more years have elapsed, there are many modest negative correlations for integration and market-based measures of success.

In terms of proposition two, that acquisitions carrying out more changes in the first 100 days are more successful, the results indicate that it is only with older acquisitions, over three years old, that there may be substance in this proposition for changes in integration and market based measures. However, there is no evidence to support the proposition for overall and financial measures of success.

<table>
<thead>
<tr>
<th>Number</th>
<th>Proposition</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceptions of success will diminish over time</td>
<td>Supported</td>
</tr>
<tr>
<td>2</td>
<td>Those acquisitions making more changes in the first 100 days are more likely to be associated with successful outcomes</td>
<td>Unsupported in aggregate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supported for acquisitions three or more years old</td>
</tr>
</tbody>
</table>

**Proposition Summary**

**Discussion**

**Proposition 1**

In examining acquisitions with different amounts of elapsed time from transaction date we find that younger acquisitions rate their success on all measures more highly than older acquisitions. Overall there is a decline in perceptions of post-acquisition integration success over time and this stands in marked contrast to a context of increasing optimism, shown in rising M&A volumes. To some extent this result may owe something to motivational bias in that top executives close to the acquisition in time may feel the need to talk up their achievements [35], as they are still selling the acquisition and post-acquisition changes to stakeholders, whereas top executives more distant in time may feel more able to be objective about ‘ancient history’.

Although the broad trend in perceptions of post-acquisition success is downwards, this conceals variation in the nature of the success curves. For overall success measures and financial success measures, the downward trend is linear. However, for perceptions of integration success, the relationship with elapsed time is curvilinear. There is deterioration in perceptions of success over the first three years and then an uplift, although the success measures generally do not return to the heady euphoria of the early days. This relationship suggests there is more going on than the effects of motivational bias.

The curvilinear results resonate with the Kolb learning cycle, where optimism in achieving a deal and the appearance of smooth progress in the early days obscure many consequences of these early actions. Natural entropy, together with the surfacing of difficulties with initiatives, causes dysfunction within the company. This reduces top executive perceptions of success. However, by the fourth year, some difficulties may diminish as problems are solved, fade of their own accord, or the organisation may just come to terms with living in an altered state, which, although not to plan, may not be less beneficial. In addition these areas of improved success are those over which the top executive of the acquired company has, arguably, greater direct control than the broader strategic and financial goals.

It is interesting to note that the relationship between the different items of success and elapsed time, give rise to quite different interpretations of how an acquisition is faring. In the early days perceptions of strategic and financial success are significantly higher on average than the other success measures, whereas after three or four years, perceptions of integration success show a marked improvement against these broad measures of success. Attempting to assess success at one point in time therefore is to introduce an unintentional bias, as different aspects of post-acquisition integration will exhibit different levels of success at different times.

**Proposition 2**

With the current emphasis upon speed and the supposed criticality of the first 100 days, acquisitions carrying out most change in this window of time would be expected to be more successful than those which were less active. Higher levels of activity signal to stakeholders that managers are aware of the importance of speed of action. This proposition was not supported for all acquisitions across the entire time.
SPEED IN M&A INTEGRATION

frame. On this basis the first 100 days is not a good indicator of post-acquisition success.

However, interestingly, evidence of associations, between levels of activity in the first 100 days and perceptions of success, did arise for acquisitions three or more years old. These associations were for integration and market-based measures rather than for overall measures of success.

This result suggests that top executives during the first years of an acquisition do not associate levels of success with the level of actions taken during the first 100 days. However, top executives of older acquisitions do make this association. Explanations for this result may include survivor bias, where acquisitions making many changes in the first 100 days have failed and so bias the remaining sample. However, there is no reason to suspect that those acquisitions that failed were predominantly high change ones, just as there is no reason to suspect that they exhibited predominantly low change in the first 100 days.

Another explanation could be that top executives of older acquisitions are distorting their recollections of when actions actually took place. Most companies will have documented the timing of when their changes started and if these were consulted, then there is little room for hindsight bias. If the questionnaires were completed from memory, then there may be a compression effect with executives assuming they acted more rapidly than was indeed the case. This would place greater emphasis upon the perceptions of success, did arise for acquisitions three or four years. This means that assessing the success of acquisitions needs to be sensitive to the treatment of time as well as the measures of success, which are being studied. To date, the issue of time on M&A performance has not been accorded the importance it is due.

Speed in post-acquisition integration has become best practice amongst practitioners and is manifest in a number of first 100-day studies and there is also evidence that the financial markets respond favourably to quick wins in this early period. However, it has not been examined critically. Our evidence, in terms of the importance of speed of action in the first 100 days, does not provide strong support for the first 100 days, suggesting that this time frame is perhaps more one of convenience than substance. However, there does appear to be an association between the volume of changes made in the first 100 days and perceptions of acquisition success in the third and particularly the fourth year of life. It is impossible to completely rule out the effects of hindsight and survivor bias, but the older acquisition’s shrewder views on the level of post-acquisition success may be reason for the relationship with early speed of action to emerge. The perceptions of top executives in younger acquisitions are likely to be more clouded by hubris so that any correlation with success measures is hard to disentangle.

A critical examination of the first 100 days shows little overall support for this being a particularly good indicator of acquisition success. Are we suggesting that management and observers drop the first 100 Day emphasis? The first 100 Days have acquired a status and permanence that will be difficult to shake off. Top executives have to live with, and use, the event to their advantage. However this paper may help to bring a more sensitive awareness of the difficulties in identifying clear relationships between speed of early action and post-acquisition.
success. This critical examination of speed and success over time in post-acquisition management suggests a rich agenda for future enquiry.

Limitations and Further Research

This study is based upon top executives’ perceptions of success. Their privileged position gives important views of the performance of their acquisitions. However, this is just one way of assessing performance over time and further research should examine other success indicators.

The nature of the analysis has allowed observations that older acquisitions’ perceptions of success are more closely linked with the first 100 days than younger acquisitions. However, the cross-sectional nature of the research prevents conclusions about whether early assessments of success have any correlation with later assessments of success and vice versa.

To address this, a second cross-sectional survey on these acquisitions, to give a second data point for each, is in hand to enable such comparisons to be made.

Appendix A. Number of Changes in the First 100 Days by Time Elapsed in Years

<table>
<thead>
<tr>
<th>Mean Rank</th>
<th>Cases</th>
<th>Time elapsed</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.14</td>
<td>21</td>
<td>1 year</td>
</tr>
<tr>
<td>40.21</td>
<td>19</td>
<td>2 years</td>
</tr>
<tr>
<td>34.62</td>
<td>17</td>
<td>3 years</td>
</tr>
<tr>
<td>36.81</td>
<td>13</td>
<td>4 years</td>
</tr>
<tr>
<td>31.14</td>
<td>21</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td>70 Total</td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square D.F. Significance
2.0716          3 0.5577

References

[12] D. N. Angwin and Ernst & Young, The first 90 days, Ernst and Young/Warwick Business School (1997).
[20] This argument relates to amicable deals.
[25] Acquisitions Monthly was used as our core database and was cross-checked against AMDATA for reliability. The cut off was a reflection of difficulty in gaining complete data and a realisation that smaller deals.
(under £8m) were increasingly likely to be treated as bolt-on assets and therefore less instructive in post-acquisition issues.


[34] Scale for success ran from 1 being very successful to 4 being unsuccessful.


[36] All four year old acquisitions had top executives who had experienced two acquisitions or more and 50% had experienced three or more.

[37] The first 90/100 day publication was ‘The First 90 Days’ by Angwin and Ernst and Young (1997).