

## USING INDIVIDUAL CREATIVITY TO IMPROVE THE PERFORMANCE OF LARGE ORGANISATIONS

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### **Abstract**

*This study details a process that uses a well defined problem to elicit potential solutions from people working in the organisation who have knowledge of the problem area. The results are compared with two other projects that used a similar process and another project that used the methodology associated with Appreciative Inquiry. The results show that for the three projects that used a similar process, the number of ideas generated per person ranged between 1.33 and 1.53. Whereas for the project that used Appreciative Inquiry the number of ideas generated per person was 2.3. The average value of the savings from the ideas of each project ranged between £3.44 and £5.4K. These studies provide support for the theory that all people are creative problem-solvers given the opportunity to become active participants (Kirton 2003). Furthermore to make use of this creativity in an organisation, managers have to provide a setting that will support and motivate individuals to focus their potential on a target of organisational importance. To gain maximum effect, the problem needs careful definition and the size of the problem-solving group as large as individual capability allows.*

**KeyWords:** *Individual Creativity, Organisational Performance, OD Process Replication.*

### **Introduction**

When markets change unpredictably, the first parts of an organisation to adjust to the new external environment are the departments that are externally focused, such as those concerned with customers, suppliers, competitor information, and cash flow (Cummings & Feyerherm, 2005). Other departments more internally focused or buffered from the external environment may not perceive the need for change, or, if perceived, do not feel the need to respond urgently. It is usual for the resulting gaps in organisational performance (in this case revenue cost) to have existed for some time, or

to suddenly increase in magnitude before they are recognised as important.

The collective actions of the management team play a critical role in evaluating both the environmental changes that have taken place and any resulting gap in the organisation's performance (Kotter, 1996). When large organisations need to respond urgently to such performance gaps, it is important that the problem be well defined and an appropriate intervention framework chosen.

Cummings & Worley (2004) consider that many interventions fail not because the processes or techniques used are poor or badly planned, but because their use does not match the needs of the situation (p. 40). Furthermore, the techniques as well as individuals in the problem-solving group will be different,

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depending on whether the problem is perceived as strategic, operational or both.

The process by which individual ideas are channelled into organisational improvements are described in this study. Prior to exploring organisational problem-solving in the tradition of Action Research (Cummings & Worley, 2004) where large numbers of individuals contribute solutions to a widely understood problem (i.e. saving revenue costs), this paper articulates the theoretical background underlying this process. The essential outcomes from the use of the process are then isolated and compared with three other studies, one of which used Appreciative Inquiry as the method for eliciting ideas.

### ***Background***

Managers often think that most people (except themselves and those more senior) are unable to contribute creatively to organisational problem solving. Moreover, when senior managers are involved, the need for confidentiality tends to be overplayed, while the value of the contributions that the workforce can offer tends to be underplayed, as does the value of their cumulative contribution.

Such misconceptions ignore the reality that for effective creative problem-solving, an understanding of the problem and knowledge of the context, individual capacity and appropriate thinking style are all necessary along with the opportunity and motivation to contribute.

The vital role of management is to bring all of these variables together and ensure that they operate in harmony. Thus, when the problem and its context are understood by most people in the organisation (as is the case with many operational problems) and individual capacity is more than sufficient to solve the problem, then a problem-solving intervention can be organised to which all staff can be invited to contribute.

Where the problem is less widely understood (as in many strategic problems), contributions are invited from a smaller group of people which in turn limits the diversity of the problem solving

group, its communication with others and eventually the implementation of any solutions.

Thinking-style theory indicates that each person has a preference to produce ideas along an adaptive-innovative continuum, some are concerned with doing things better, others with doing things differently (Kirton, 2003; Drucker, 1969). In organisational life where problem solving within the current context predominates, the style preference for effective contributions will tend towards the adaptive; whereas, when the prevailing paradigms are to be challenged, the style preference will tend towards the innovative. Thus, in traditional problem-solving groups, the form of the solution required will influence group membership. Whereas in effective groups, the favoured individual styles are consistent with the solution required. Where group membership is fixed (as in some management teams), there is a tendency for problems to be solved using solutions that are less than effective.

Therefore, if all people can be seen as creative problem-solvers separated only by style, then, when organisational problems are to be solved, all people with an understanding of the problem area can be asked to contribute. This ensures that the widest knowledge of the organisational system is made available along with the broadest diversity of style. When invited, those motivated enough to make a contribution will need to be provided with any information vital to their ability to contribute across the range of problems being considered (Cooperrider et al, 1999).

The following describes the use of these views in organisational problem-solving in the tradition of Action Research (Cummings & Worley, 2004) where large numbers of individuals contribute solutions to a widely understood problem (i.e. saving revenue costs).

### ***Problem Definition***

A problem perceived by the senior managers of a multinational organisation suggested that the operating costs of the corporate divisions were

too high and that the cause was rooted in the recent completion of a large, long term development activity which had now moved into routine production. The size of the corporate organisation coupled with a continuing development orientation of staff was seen as preventing an adequate response to an increasing market pressure for lower unit costs.

### ***Intervention Framework***

Building on the views outlined earlier, the senior managers thought that because of the pervasive nature of 'costs,' it was likely that all of the staff would have vital, detailed current information concerning operational activities from which sound practical cost reducing ideas could be derived. It was proposed therefore that the intervention should involve all of the individuals in the various corporate divisions.

It was also clear that the contributions from so many individuals would need to be progressed through a defined process or 'road map', so that any ideas could be efficiently evaluated and put into use. A project structure was proposed to manage the process and ensure that the administration necessary to keep track of all of the ideas would be made available.

### ***Project Start-up***

The target chosen by the senior managers of the organisation for this intervention consisted of the corporate divisions of the company. Each division provided a central point of integration in the company for the particular function involved. The staff totaled some 1600 people.

However, before the intervention project could involve staff from the target divisions a number of supporting activities needed to be progressed so as to ensure that the commitment of senior management, project roles and expected outcomes were all clearly understood. These activities consisted of:

1) a formal commitment from the senior management team identifying the need to reduce costs, and also supporting the creation of a

project team to progress an intervention with the following three prime objectives:

- i) to involve only the corporate divisions of the company;
  - ii) to generate opportunities to reduce operating costs by a target of 40%;
  - iii) to complete the project within 12 weeks.
- 2) the appointment of a skilled project leader acceptable to the people in the corporate divisions.

*Rationale: From a progress point of view, a project group, removed from day to day priorities, was felt to be essential. Such a project would be able to maintain a focus for both information and resources sufficient to ensure a timely completion of the activities. Also, an independent group would provide a means of ensuring that useful ideas were captured, evaluated and implemented according to the merits of the idea, rather than the personal disposition of those involved as decision makers.*

### ***The Project***

With the project manager appointed, the internal administration of the project was started by pursuing a number of activities in parallel as follows:

1) Appointing a team to support the project manager. One project member was appointed for approximately every 100 members of the corporate divisions. These team members were responsible for the definition of smaller multi-skilled groups (5-10 people) who were focused on particular functional activities.

*Rationale: The balance between the formal project team members and the number of staff in the target divisions is, to some extent, an arbitrary choice. However, the more entrenched the organisation, the more work the formal members of the team will have to do to provide an environment capable of supporting project objectives. As it is easy to underestimate the amount of communication and discussion*

*necessary, particularly amongst the managers and supervisors involved (who may feel rather isolated), more, rather than less formal project staff should be considered; extra staff being particularly valuable during the start-up and idea generation phases of the project.*

2) Planning the four major stages of the process (problem identification, idea generation, evaluation and implementation). Here, the elapsed time between start and completion for each stage and the overall project timescale was scheduled, recognising that the activities of some stages could overlap).

*Rationale: The use of a process model helps to explain and plan the different stages of the project in a transparent and comprehensible way. It also enables all involved to understand how the project will achieve the outcomes required, as well as producing a common language for use by those involved.*

3) Constructing a letter to be sent from the senior member of the management team to all staff in the target divisions communicating the objectives of the intervention. The letter contained information covering the following points:

- a description of the problem;
- for this intervention everybody would be asked to contribute ideas. Wherever possible, ideas would be accepted and implemented quickly. When necessary they would be more carefully examined;
- the formal project activity should be seen as a facilitating mechanism;
- the expected results were savings of 40% of the operating costs of the target divisions;
- an introduction to the members of the project team and their links with the different target divisions;
- detail of the role that the project staff would play in facilitating the process;
- the time scale for the overall project and each of the project stages;

- a request that all recipients of the letter should contribute to the objectives of the project;

- recognition that surplus resources may be identified (details of the policy for dealing with any jobs that may be affected are necessary if individuals are to problem-solve without fear of inequity when resolving changes to the organization). This is particularly important where there is no established policy covering re-deployment, redundancy, early retirement etc. For an effective intervention trust needs to be an important 'value' in the way the organisation works;

- an invitation to the recipient of the letter to attend a briefing meeting where more detailed information would be presented for discussion;

- a suitable expression of thanks to each individual for their interest and any contributions;

*Rationale: Such a communication serves to define the problem publicly as well as focus and legitimise the involvement of every individual in providing solutions. It also serves to communicate the essential detail and time scales of the project and the roles of the project team. To sharpen the focus the letter should be distributed on the same day to every person involved. Where people are away from the office for a lengthy period, the letter should be sent to their home address.*

4) Constructing an information pack for each of the smaller groups that contained all of the basic project 'start-up' information i.e. the project plan, base operational information (e.g. budgets, reject rates, drawings, supply costs etc.) and techniques that help in the generation of ideas.

*Rationale: The information pack provides a data-base of valid, standardised operational information, which can be used to provide the base line of the problem to be addressed.*

5) Sufficient briefing meetings were scheduled to allow all invited to attend. The meetings were arranged as close together as was reasonably possible and chaired by senior members of the management team.

*Rationale: These meetings provide a forum to address the way the project should work, also they provide a setting where the processes concerned with the Project outcomes can be questioned. High on the agenda of most meetings was the process through which staff redundancy would be handled. It is essential that staff concerns be handled in a clear, responsible way, which maintains management credibility and avoids staff feeling victimised. Failure to do this will result in staff withdrawing from the project in order to protect, as far as possible their future.*

6) Creating an administration system to collect and control the following data for each idea:

- a unique serial number to identify each idea;
- names of the author(s) of each idea (this ensures all contributors understand that this data item is only to provide a means of returning information to the correct individuals);
- divisional location of the author(s);
- description of the idea;
- potential cost of implementation, both capital, one off and revenue;
- potential savings, both capital, one off and revenue;
- comments from first evaluation panel;
- comments from any second evaluation panel;
- final evaluation status;
- implementation responsibility.

*Rationale: If the details of each idea generated are to be captured, a well managed system is essential. In the absence of such a system, the project team quickly becomes overwhelmed, ideas are lost and duplicates go undetected. In such conditions, the credibility of the intervention is quickly lost.*

7) Gaining agreement to the way ideas will be evaluated, and nominating specialists, managers and supervisors as evaluation panel members.

*Rationale: The agreed procedure for evaluating ideas was through panels of assessors who formally reviewed the utility of each idea. To avoid ill-considered decisions, each rejected idea had to be reviewed by two panels who had to agree on the outcome. Any disagreements resulted in the idea being carried forward to a panel of more senior staff for a further review. This review procedure could also be triggered by the project team members where it was thought that an idea had been incorrectly accepted or rejected. There were four levels of assessment panel: departmental (where ideas were evaluated as soon as they were complete and any accepted ideas quickly implemented), divisional managers, a panel of directors and lastly the Chief Executive.*

8) Gaining agreement to the responsibility for the implementation of approved ideas.

*Rationale: The success of a project and the benefits to the organisation depend upon the successful implementation of the approved ideas. There would be little more damaging to management credibility than having asked for help in problem-solving, then not to evaluate and, if acceptable, implement the ideas produced. To ensure that all accepted ideas are implemented, the project group nominated for each idea a manager responsible for implementation. Also, for each idea, the necessary resources and technical assistance were agreed with the manager, so that implementation could proceed in a timely and effective manner. The plan for all activities was agreed by the senior managers, avoiding any misunderstanding of the resources required, the time scale and the person responsible for implementation.*

### Project Outcomes

With a well structured lead into the main activity of the intervention a large number of people were expected to contribute a large number of ideas, which would need evaluating and where viable implemented.

The expectations were fulfilled and Fig (1) shows the actual results from this project alongside three other similar projects:

- one project, Bratu (1994), was conducted in Romania where both the social and organisational cultures were significantly different to the UK.
- the second, Oates (1976), was conducted in a manufacturing organisation in the UK.
- the third project by Judge (2004) relates to work in the UK BBC organisation. The project used the traditions of Appreciative Inquiry (AI) (Cooperrider et al, 1999) to both realign the organisations culture as well as reduce the overhead expenditure of the company.

The limited information available can be compared directly with the other projects where it can be seen that the AI tradition shows an increase in the number of ideas generated.

**Fig (1) Results from Four Similar Projects**

	Oates (1979)	This Project (1991)	Bratu (1994)	Judge (2004)
Study Duration (weeks)	3	13	12	26
People Employed	2000	3200	50,000+	28000
Population of Target Organisation	2000	1619	4300	17000
People Contributing	600	1607	62	10700
Ideas Produced	800	2361	95	25000
Average Number of Ideas per Person Contributing	1.33	1.47	1.53	2.3

Number of Ideas Accepted	400 (50%)	1216 (51%)	58 (61%)	*
Average savings of Ideas Accepted. (per year)	£5.0K (npv)	£5.18K	£3.44K	*
Total Savings (per year)	£2.0M (npv)	£6.3M (21%)	£0.2M	*(12%)
Average Idea Evaluation Time (Days)	21	39.5	60	*

*\*Note Information not available*

When comparing the four studies a number of marked similarities can be seen:

- the average number of ideas generated by each person contributing ranged between 1.33 and 2.3;
- the value of the ideas accepted ranged between £3.4K and £5.2K;
- the number of ideas accepted ranged between some 50% and 61% of the total number of ideas generated;
- only a small proportion of the ideas produced were individually large in value;

Collectively, these similarities characterise this type of intervention as follows: if a large number of people can be motivated, then a large range of opportunities are identified and large numbers of ideas of relatively modest value are produced. While each idea itself offers no great saving, collectively they make a significant contribution of immediate relevance.

With such a large number of ideas, the most difficult task is keeping track of their progress. A standard form was used to collect data (idea description, author, costs, savings, evaluation, recommendations etc.) which was then entered into a small data base to ease the location and removal of duplicate ideas and provide an accurate analysis for the reporting of progress.

Once ideas are documented, the evaluation process can be started. The intervention process, allows for ideas to be evaluated by groups of increasingly senior managers. However, as most of the ideas were of modest value, highly relevant to the job situation, they were easily assessed by the managers within the department or division originating the idea. A smaller

number of highly valued innovative ideas appeared more exciting; however they contained larger risk and potentially some discomfort for the organisation. These ideas, more difficult to assess, affecting a wider range of activities, were considered by evaluation panels of more senior managers. (See Fig 2).

**Fig (2). Percentage of ideas Evaluated by the various Evaluation Panels.**

Department	Division	Director	Chief Executive
45%	25%	12%	18%

*Note: The benefit of a well organised evaluation phase is that the bulk of decision making occurs at the department level, freeing more senior levels for the evaluation of a smaller number of more difficult ideas.*

To ensure that ideas were not rejected unnecessarily, a project team member was part of all of the evaluation panels. Where ideas were legitimately rejected, the project team ensured that they discussed the results with the originators and, where possible, reformed the idea or used it as a catalyst for a different approach.

In each of the different projects shown in Fig (1), of all of the ideas evaluated, some 50% were consistently accepted for implementation. As the financial objectives set in the project start-up related to all ideas generated, the actual savings made amounted to some half of the target, i.e. 20% of the total operating budget of the divisions involved.

With regard to implementation, the last job of the project team was to make sure that the approved ideas were implemented, many of the ideas became the responsibility of the managers of each division. However, for the few ideas that had a considerable effect on the organisation, a senior manager or the sponsor of the intervention became responsible for both completing the evaluation and implementation of the idea.

It is important that sufficient of the project activity be retained to ensure that the managers honour their commitment to implement the ideas. Like all projects a regular review of progress with the sponsor is needed to ensure that all of the approved ideas are used effectively.

### **Conclusions**

The key points derived from the results of the interventions described in this paper concerned the style and quantity of ideas.

All levels in the organisation contributed ideas, many of which were small scale and, in Kirton's terminology, are adaptive rather than innovative. These ideas represent small improvements to the current system, where their number adds up to a significant effect. While such significance is often overlooked in the grand schemes that promote organisational innovation, it does form the basis of all quality management processes currently in use.

The small adaptive ideas, highly relevant to the problem as defined, are the easiest to evaluate and implement.

The larger scale adaptive and small innovative ideas are the next easiest, although often requiring more time to evaluate and implement.

Finally the high level, complex, highly innovative ideas are the most difficult to understand as well as evaluate and implement. When implemented, this latter group of ideas can often take a long time to reach their optimum, however, at this point they usually produce levels of effectiveness not attainable by the implementation of the many small ideas. Thus, while these innovative ideas may be vital to the future of the organisation, survival in the shorter term may only be possible from the savings provided by implementing the many small ideas.

From the individual point of view, if ways of minimising operational activity are found and potentially staff redundancies generated, then the terms and conditions that apply to any person leaving the organisation will need to be

acceptable from a personal, as well as the company viewpoint.

For other individuals, the activity of the intervention may cause some reconsideration of their role in the organisation independently of any rearrangements to cope with surplus staff. This is particularly noticeable in two areas:

- one where individuals are concerned for stability, but do not believe the intervention will ever come to an end (indeed they may recognise a need for further improvement);

- the other area is where people feel that the organisation should be culturally more dynamic, and so minimise the need for sudden corrective actions. This latter position is re-emphasised when it is recognised that the design of this type of intervention does not specifically address the variables associated with improving the organisation's orientation towards change.

With these realisations, the more change-oriented individuals will be inclined to seek other more dynamic opportunities, while the less change oriented will seek a more stable environment; members of both groups potentially leaving the organisation to work elsewhere. Such a move may be of little immediate consequence, however, in the longer term, the absence of such individuals is likely to limit even further the problem-solving capability of the organisation. To ensure that the organisation is not disadvantaged in this way, it is essential to have both short and long term views of the skills required.

A wide diversity of thinking styles is needed if effective organisational problem-solving is to take place. Promoting one style over another will result in either an over-flexible or an over-rigid operation either of which will be far from optimum.

From the organisational point of view, the more the source of the intervention is seen as a senior responsible person and the intervention a legitimate adjustment to existing thinking, the more the organisational need is understood and the larger the number of contributors. Some

people, however, will question the management credibility in two quite different ways:

- the first challenge concerns a perception of management as not tackling the root cause of the problem and thus questions the effectiveness of their leadership. While strategy and policies that pre-date the problem are seen as ineffective and need changing, the needed changes are avoided in favour of an attack on efficiency;

- the second challenge comes from a different perspective. Here, the nature of the intervention request being so different from the 'norm' is simply not believable. This is evident in the Romanian project (Bratu) where an organisational culture lacking in trust produces a norm where individual workers are not seen as contributors to management problem-solving. Thus, only those individuals with little concern for any perceived risk will contribute solutions. The opposite effect is seen in the BBC study by (Judge) where Appreciative Inquiry improved the total number of ideas generated. However, there is no information presented about how many were useful (It is noted that the overhead costs were reduced by some 12%).

Many of the ideas implemented will affect the detailed working practises of the organisation and are only visible to those individuals involved.

In organisations where there are internal customer/supplier relationships, some customers will feel that due to the low visibility of these changes, it is possible to return to the original arrangements and forgo any saving that are involved. In such situations the internal suppliers will be pressured to conform, particularly when outside suppliers can also be used to provide such services. Where the arrangements are more visible to the senior managers, the customer demand may be more moderate and excesses more easily resisted by those supplying the service. However, to escape the need to repeat this form of intervention, changes to personal value systems are necessary which encourage commitment to and clarity of a shared vision, as well as real progress towards the resulting organisational objectives.



Many of these findings parallel those from TQM studies where there are similar needs for individual and group creativity, as well as effective use of the problem solving process. However, while the intervention in this study was designed as a transient activity, effects similar to those described in the preceding paragraph when occurring in a TQM program can be a sign of early failure. Furthermore, there is evidence that poor performance can be associated with a lack of support from both culture and the leadership of the organisation.

In summary, these studies provide support for Kirton's theory that all people are creative problem-solvers given the opportunity. In order to make use of this creativity in an organisation, managers have to provide a setting that will support and motivate individuals to focus their potential on a target of importance.

To gain maximum effect, the problem needs careful definition and the composition of the problem-solving groups requires consideration.

Also, additional resources and information are needed to guide any contributions through a defined process that ensures that no unnecessary loss of ideas occurs. Success brings two attendant issues. One concerns the individual when redundancy results from a reduction in future work activities. The other concerns the organisation where success extends the target area and challenges the credibility of both the values and vision of senior managers in the

organisation. Both of these aspects may demand attention if the organisation is to learn for the future from such interventions.

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