

## **Highly effective IT Production organisations**

### ***Introduction***

A number of different analyst organisations over the years have propounded the concept of “highly effective IT organisations”.

The purpose of this document is to view this concept specifically from the aspect of IT Production, as distinct from IT generally.

The reason for making this distinction is that many analysts view IT primarily (if not exclusively) from a project development aspect. By way of contrast, this document focuses solely on IT Production, i.e. the “business as usual” management and support of IT systems.

The focus of this document is technical managers who are responsible for managing the day-to-day support of IT Production Systems.

## ***Characteristics of Effective IT Production***

“Effectiveness” can be defined in terms of whether an organisation or management system achieves its goals.

This can be contrasted with “efficiency”, which can be defined in terms of whether the organisation consumes resources (money, manpower etc.) optimally in order to do so.

IT Production is responsible for delivering day-to-day IT Services – e.g. applications and their associated functionality, infrastructure, support and interfaces.

For the purpose of IT Production, an effective organisation has to be capable of achieving the following:

- Delivers day-to-day management and support of IT services in a timely manner.
- Responds to outside pressures (such as IT incidents or major incidents) in such a way as to restore the service rapidly. This includes the ability to restore a service following a major incident such as disaster recovery.
- Implements new services within business-agreed timescales. This implies that business and IT have negotiated implementation plans.
- Manages the appropriate adoption of new technologies and the retirement of old technologies.

At the same time, IT Production, in order to be effective, also has to be efficient. Therefore, we should add the following additional criteria:

- Delivers IT Services at optimal cost to the business.

Each of these aspects can be scored to some extent, using a series of criteria. This would enable an organisation's effectiveness to be given a rating, in a similar way to the CMMi (Capability Management Maturity Model) (See footnote <sup>1</sup>).

From an IT Production perspective, my experience over more than 20 years suggests that there are two elements which contribute to making an IT organisation highly effective. These are the People aspect and the MOPS criteria.

Of these two, the People aspect can be considered to be most significant.

## **People**

Above everything else, effective organisations are focused on their goals because their people are effective in delivering to these goals.

The whole subject of people management is outside the scope of this document. However, it should be sufficient to say that the following are characteristics of effective people who contribute to effective organisations:

- Direction and Vision.
- Skill and Experience.
- Motivation.
- Team

Effective people are given clear goals – clear direction where to go and what to do. This is a responsibility of leadership – to paint the picture of the future which people can aspire to. It is essential that this direction is unambiguous, so that everyone is “pulling in the same direction”, and that all other activities are seen as subsidiary to this.

Effective people are skilled and experienced. This means that they have an ability to achieve the goals. They also have the experience to apply the skills appropriately. Therefore, skill and Experience is not just about training, but also about allowing people to apply their skills and to learn from that experience.

Effective people are motivated by the organisation that they are part of. This could include their salary and other benefits, including non-monetary benefits or work-life balance. People are different, and one goal of leadership is to apply appropriate motivational techniques to different people, since a motivational stimulus for one person may have no impact whatsoever on another.

Finally, an effective organisation is effective because all the elements above have been blended into a team which is more effective than the sum of its parts. Team building includes aspects of communication, respect for differences and the concept of “mutual assistance”, or “working together”.

All these aspects need to be in place before an organisation can become effective.

## **MOPS**

In addition to the People aspects above, there are four key management contributors to making an IT production organisation effective.

These are known by the acronym “MOPS” which stands for Metrics, Operational Tools, Processes and Procedures and Standards ( “ ” ).

### **Metrics**

Highly effective organisations know what they are doing. They know this because they have mechanisms in place to measure their activity in terms of what projects people are working on, calls being answered, quantities of infrastructure being managed (servers, storage etc.)

The concept of Metrics includes, but goes beyond, the concept of a Configuration Management Database (“CMDB”), to include timesheet capture, resource scheduling etc.

This information is then used to enable them to plan for growth. This includes resource planning, infrastructure refresh projects, and to manage future demands such as new users, company acquisitions etc.

Metrics are also used to sell what the organisation does, in terms of monthly achievements, infrastructure managed etc.

Metrics can also be used to justify future infrastructure investments.

#### **Keywords:**

- Time sheets capture.
- CMDB
- Infrastructure assets.

### **Operational Tools**

Most Organisations have multiples of tools for managing IT and for automating the process.

Managing tools include time capture, service desk, CMDB, asset register, project register, etc.

Automating tools include backup, monitoring, software deployment etc.

Sometimes, these products are purchased and managed in a piecemeal fashion.

Highly effective organisations have a software tools strategy, and only purchase tools which fit with this strategy. They also ensure that tools data is held in a consistent form, and clear data ownership (“referential”) is enforced.

As well as delivering the metrics which are needed for management, suitable tools enable the IT Production organisation to react faster and more efficiently to external events (such as incidents or project deployment).

#### **Keywords:**

- Tools Integration
- Data Referential
- Software Tools Strategy

## Processes and Procedures

Highly effective organisations have appropriate processes and procedures in place and a quality control to enable continuous process improvement. This implies the ability to review existing processes to determine if they are appropriate. Process improvement methodologies such as six-sigma (<sup>iii</sup>) can help here.

Highly effective organisations realise that too much process can be as bad as not enough! Deploying process standards such as ITIL Version 3 (<sup>iv</sup>), in and of itself, will not guarantee that an organisation becomes highly effective.

Highly effective organisations also understand that the key processes are those which have the greatest impact on the Production arena – namely deployment of projects. So they have a strong focus on the project deployment process, and ensuring consistency.

Appropriate processes and procedures enable highly effective IT organisations to re-focus resources into specific activities rapidly to respond to business or external needs.

### Keywords:

- ITIL
- Six-Sigma.
- Project Deployment.
- Process Review.

## Standards

Highly effective Production organisations are “partners” with their development peers.

Instead of simply receiving technologies that are thrown across from development at live date, they are actively involved with the early parts of the project development, to ensure that the proposed solutions are “production worthy”.

Highly effective organisations balance the pressures of functional and non-functional requirements from the business and infrastructure, respectively.

Technologies such as Virtualisation and SOA need to be managed, and so the production teams have a strategy for how to implement these.

Highly effective organisations have a production technology roadmap for technology introduction and retirement.

### Keywords:

- Production–worthiness Standards
- Production Architecture
- Project Non-Functional requirements.

## **Conclusions**

This brief document has attempted to define what we mean by “Effectiveness” in terms of managing IT Production, and suggests two key aspects that contribute to effectiveness.

These aspects are the People aspect and the MOPS aspect.

Of these two, People are the most significant.

The “MOPS” (™) aspect builds on the People aspect by providing a simple checklist and approach that can be used to improve the effectiveness of IT Production.

### **About the Author:**

Dennis Adams is an Associate Member of the Chartered Quality Institute and MBCS CITP member of the British Computer Society.

He is a founder and managing director of Dennis Adams Associates Limited, which was created to deliver a consultancy service to managers of IT Production Systems.

Dennis Adams Associates web site is <http://www.dennisadams.co.uk>

---

<sup>i</sup> CMMi was developed from CMM which came from the Software Engineering Institute (SEI) at Carnegie Mellon University in Pittsburgh. It consists of a methodology for scoring different processes according to their maturity.

<sup>ii</sup> The acronym “MOPS” (™) is trademarked to Dennis Adams Associates Limited, and represents the core methodology and approach for IT management consultancy which was developed by the company.

<sup>iii</sup> Six Sigma is a set of practices originally developed by Motorola to systematically improve manufacturing processes by eliminating defects. It can also be applied to service processes.

<sup>iv</sup> ITIL is trademarked to the UK Office of Government Commerce (OGC) and consists of a set of non-prescriptive processes which represent best practice for managing IT systems.