An Executive Guide to Building Regulation into IT and Process

2003

White Paper

*t*plan

The Corporate Standard for Information Management

Executive Summary

This report contains summaries and conclusions from Government and other reputable research that supports the argument that 'best practice' is good commercial practice. In the so-called real world, it is often argued that management theory and the latest 'methods' are difficult or impossible to define in terms of business benefits.

A range of real world examples and source information is provided here that clearly defines the business benefits, showing how customer satisfaction can be increased, while improving personnel performance, and adding significant business value.

> " For quoted companies, bridging the gap between balance sheet net assets and stock market value would be an extremely useful expansion of shareholder information. Simply identifying unrecorded intangible assets and indicating their value would be a major step in the right direction. "

John Coombe, Finance Director, GlaxoWellcome. June 2000

The Turnbull report and proposed changes to company law in the UK in 2003 demonstrate a coordinated and concerted effort to make the intangible accountable. It is recognised by reputable 'think-tanks' and professional sources that in order to define risk and value of intangible assets, you must first have an accurate method of measurement.

In September 2001 the US Air Force deputy CIO, in the wake of well-publicised IT security weaknesses and physical threats, was driven to publicly challenge software industry leaders to establish new standards of software quality.

Regulation and compliance are likely to increase over time, and liabilities will increasingly impact at business, professional and personal levels. Executives are therefore faced with stark choices, comply with regulation and best practice, or assume the risks personally.

This report shows what processes and methods can do for both IT systems and business operations, demonstrating how this builds operational reality and reputational capital both inside and outside the organisation. It defines what is meant by 'good process' and provides useful information on how busy executives can get to grips with a crucial area of risk and asset value for the business.

Regulation and Process

> " Companies may feel burdened by legislation and other pressures requiring that they have a more transparent information strategy, but they may ultimately benefit from it.
>
> In the UK, corporate governance issues have been the focus of much debate. The culmination of this debate is contained in the Company Law Review that was published in June of this year, and provides a template for the new company law to be introduced in 2003. The final report of the Company Law Review says: "Timely effective access to high quality information is fundamental to our proposals for effective governance."
>
> To satisfy these requirements, the Company Law Review proposes that all companies above a certain size will need to produce an Operating and Financial Review (OFR) as part of their annual accounts and report. The OFR requirement is designed, in the words of the Final Report, "to put the onus on the directors themselves to give their own account, based on their own judgement, of the matters which are important in assessing the performance and prospects of the business. "

Financial Times Survey, November 15, 2001

Government and industry groups are increasingly at odds with the extent that regulation should be applied to the wider business community, with the argument against regulation traditionally centred on the increase of red-tape, resulting in increased costs for the consumer. The variety of self-regulatory schemes widely applied today is the end result of the ongoing stalemate.

The argument against red-tape is crumbling

Research and studies by Government agencies and Industry groups, such as the Institute of Chartered Accountants in England and Wales (ICAEW), have revealed that in the real world, application of best practice process within a regulated framework can result in increased customer satisfaction, improved personnel performance, and increased business value.

For some, such as major shareholders and investors, the new laws and recommended practices are long overdue. For quoted companies the trend appears un-stoppable due to institutional shareholder pressure, according to the FT Survey of 15 November 2001: "In the UK, for example, institutional shareholders, controlling about £1,500bn of assets, own two-fifths of the stock market."

The big pension and investment companies were arguably first to come under scrutiny. Last year, new Government regulations came into force in the UK, demanding that pension funds publish an expended statement of investment principals (SIP), from that day forward they would be expected to set out their approach to socially responsible investment.

This has persuaded the pension funds and asset managers to spell out to companies the information they expect to see in the annual report. In a significant move during October 2001, the Association of British Insurers (ABI) issued new guidelines for companies, advising them on the kinds of new information its members want disclosed in annual reports.

ABI members want company annual reports to identify "significant" risks to their short or long-term value

Regulate IT, Regulate Business

Over recent years the world has seen the explosion of the dotcom industry turn into the dot-bomb industry. However, not even the greatest of pessimists claims this as the end of the IT revolution.

IT is critical to business now, and will become increasingly so as the New Economy develops.

Throughout all areas of industry, IT is playing a crucial role in process and efficiency improvement. Even though many of these improvements are intangible on the balance sheet. IT provides a cost effective medium for business communication, training, process, application, test, control, audit and management.

Because IT is pervasive within crucial functions of the business, IT provides an efficient mechanism for implementing and validating compliance with regulation.

> " In today's global business environment, the significance of information is widely accepted, and information systems are truly pervasive throughout business and governmental organisations. The growing dependence of most organisations on their information systems, coupled with the risks, benefits and opportunities IT carries with it, have made IT governance an increasingly critical facet of overall governance. Boards and management alike need to ensure that IT is aligned with enterprise strategies, and enterprise strategies take proper advantage of IT.
>
> Boards of directors will increasingly be expected to make information security an intrinsic part of governance, preferably integrated with the processes they have in place to govern IT. In this regard, governing boards and executive management should review:
>
> · The scale and cost of the current and future investments in information
> · The potential for technologies to dramatically change organisations and business practices, create new opportunities, and reduce costs
>
> They should also consider the associated ramifications:
>
> · The increasing dependence on information and the systems and communications that deliver the information
> · The dependence on entities beyond the direct control of the enterprise
> · The impact on reputation and enterprise value resulting from IT failures "

Information Security Governance; Guidance for Boards of Directors and Executive Management, 2000

IT is capable of more than merely providing the tools for improvement of functions within the business. All IT systems acquire data, some of which is structured and its value relatively easy to identify. However, studies have found that vast amounts of Intellectual Property can lay dormant within corporate IT environments, the data is unstructured and the asset is therefore impossible to value or utilise.

> " Boards of many quoted companies need to address the same issues: the need to maximise the use of technology, the need to improve customer service, the need to face the challenge of rising costs and falling profitability, and the need to allow people to develop and use their skills in a controlled environment. "

Derek Higgs, Executive Director, Prudential Insurance, June 2000

Regulate IT, Value Intangibles

Traditional published accounts focus on past and present performance, while intangibles, which generally have a significant impact on the future prospects of the business, are not accurately valued.

According to guidance from respected sources, such as the ICAEW, traditional "old economy" intangibles included R&D and Brand, which remain central in the New Economy. Brand valuation is usually based on the historic performance metrics of the Brand. R&D investment is usually written off as incurred, which, in most cases, does not reflect the potential return on investment of the R&D asset.

Sheffield University is in the process of a 10-year study of around 1,000 engineering companies on behalf of the Institute for Personnel Development. So far the study is showing that by far the biggest differentiator in terms of productivity and profitability is the firms' people practice.

IT can provide the framework and infrastructure for the corporation to capture, control and value its most important asset, knowledge.

In 2003 new company law within the UK is expected to force many quoted organisations to report on these intangible assets - and associated risks. An Operating and Financial Review will place the onus on each executive to report accurately on a range of matters affecting the business. In order for management to deliver this information, with accurate asset and risk assessment, management needs to measure, assess, manage and value the intangibles and the process of value creation. This requires:

→ *Executive leadership and commitment*

→ *Structured framework and process*

→ *Efficient and flexible tools*

→ *Management, Project team and User continuity*

→ *Recognised metrics and auditability*

When applied to the business, this approach provides executive management with hard facts about the risks and rewards associated with current intangible assets. The use of automated information management tools allow management to model and assess impacts of proposed change to intangible assets.

> 66 Security breaches are an increasingly common occurrence. As early as 1996, the US General Accounting Office (GAO) reported that the US Department of Defense experienced as many as 250,000 attacks on 15,000 systems the previous year, of which 65 percent were successful, costing hundreds of millions of dollars. More sobering is that only 400 of these were detected and only 20 reported. In 1996 it was largely a vulnerability.
>
> Five years later it is a definite threat. Many national governments have recognized the importance of security, establishing initiatives to reinforce such measures as segregating infrastructures according to their sensitivity, investing in better authentication methods and making users of the infrastructure accountable for their actions.
>
> Executive management has a responsibility to ensure that the organization provides all users with a secure information systems environment. Furthermore, organizations need to protect themselves against the risks inherent in the use of information systems while simultaneously recognising the benefits that can accrue from having secure information systems. 99

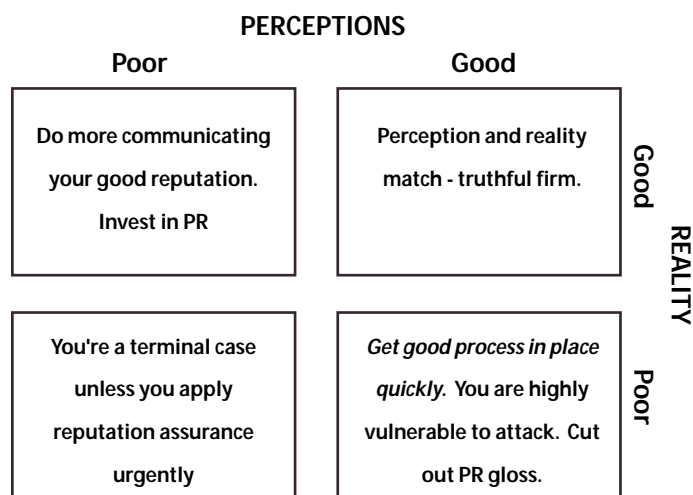*Information Security Governance; Guidance for Boards of Directors and Executive Management, 2000*

Regulate IT, Leverage IT

The phrase used by the ICAEW to describe a significant contributor to intangible value is:

"Reputational Capital"

As its name suggests, reputational capital is a broad subject impacting on all stakeholders associated with a business, its community, personnel policies, business ethics and corporate responsibility - as well as shareholders.

According to Glen Peter, a Partner at PriceWaterhouseCoopers; "One issue for boards in exploring reputational capital is whether your reputation is actually aligned to reality. The idea is to build both the reality of the way a company operates and its reputation."

PERCEPTIONS

	Poor	Good	
Good (REALITY)	Do more communicating your good reputation. Invest in PR	Perception and reality match - truthful firm.	
Poor (REALITY)	You're a terminal case unless you apply reputation assurance urgently	*Get good process in place quickly.* You are highly vulnerable to attack. Cut out PR gloss.	

Reputation and reality have to be aligned

Understanding 'Good Process'

For the business executive, exposed to increased regulation and liabilities, the risks of not having a 'good process' are unacceptable. Government, universities, trade organisations, research groups, consultants and independent product companies all have views on what is 'good process'.

Unsurprisingly, there are a growing number of organisations ready to claim that they have the 'silver-bullet' cure for all business process ills. However, most executives recognise from experience that there is no 'one-size-fits-all' solution.

Good process actually combines good processes within a framework tailored for the organisation. While many proven and standardised processes exist for various functions within the business, they all usually require customisation to fit the needs of the business they are serving. Most of the guidance from official organisations provides frameworks, but they are still only guides.

The problem for executives is the difficulty of collating this information in a usable form to make accurate assessments of the risks and asset values within the business. Management themselves require 'umbrella' solutions to consolidate data and provide a 'balance sheet' for the operational assets of the business.

A 'good processes' management solution is required that is able to consolidate data from all sources related to the operation and performance of the underlying business and its systems, including new or upgraded developments, to accurately assess and report on impacts to asset value, utilisation and risk exposure for the corporation.

Good Process Management Accommodates Change

As can be seen throughout this report, the drivers of change are constant and come from several sources. An Intel report (see page 7, "Reducing the Business Risk of IT" - second in this Executive Guide series of whitepapers) in June 2001 showed that sales and marketing has become the dominant driver of business and IT change. New regulation and company law is already impacting the way businesses operate, and with the development of the new economy, intangibles within the operation will be measured and valued.

While tactically effective processes and tools can provide a wealth of detailed technical information and control of specific business or system functions, they provide only a narrow view of that aspect of the business.

A good process management solution must be capable of assessing the impact of change throughout the business hierarchy; business requirements, business systems and functions, R&D, and the shop floor. It must be capable of allowing change to be driven from any sources, to be assessed by management, and communicated throughout the organisational hierarchy.
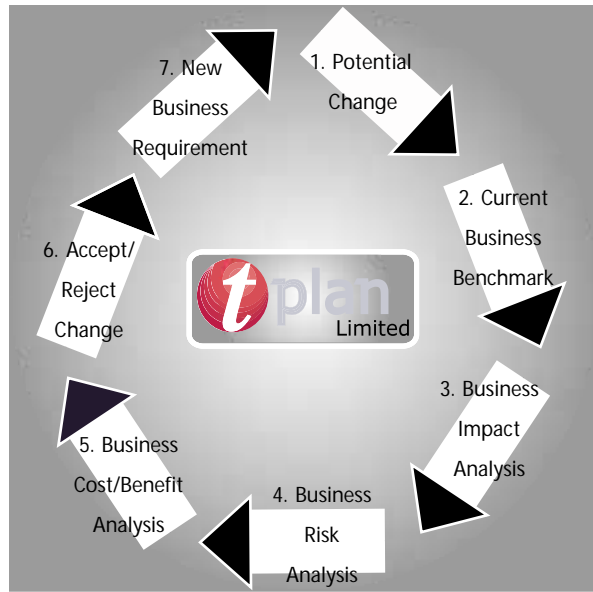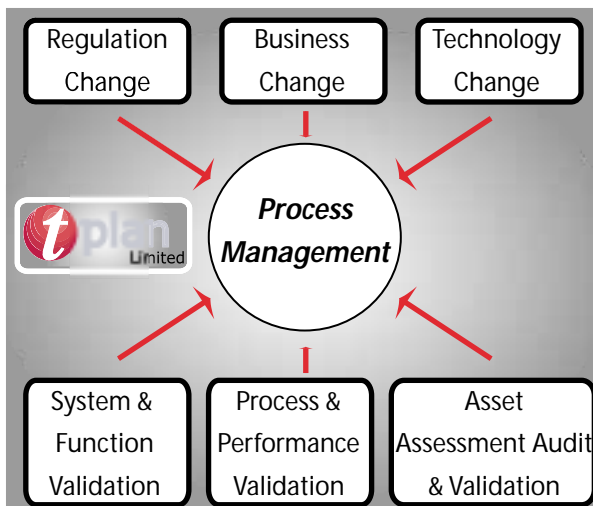

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Many of the problems associated with implementing major business projects, specifically IT projects, are caused by relatively minor technical 'glitches'. These so called 'small-bore' problems are characterised as hard to find, but easy to fix. The cost and risk is in the finding.

Process management provides the infrastructure and control mechanism by which management can ensure corporate standards and policy are measured, maintained, and improved.

The vast majority of small-bore problems are avoidable, or can be found before they become high-risk, by effective process management.

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Good Process Management Accommodates Change

By applying structure and control to IT, the data it holds and the processes it supports, management can identify, value, leverage and communicate with stakeholders based on accurate assessment of valuable business assets.

→ Identify and quantify business risks

→ Accurately assess the impact of change on business assets

→ Capture and leverage business knowledge and IP

→ Measure and audit IT and business process performance

> " For quoted companies, bridging the gap between balance sheet net assets and stock market value would be an extremely useful expansion of shareholder information. Simply identifying unrecorded intangible assets and indicating their value would be a major step in the right direction. "

John Coombe, Finance Director, GlaxoWellcome. June 2000

Process Management Tools

Process management tools that focus on IT have largely grown out of the software quality assurance and software testing industries. Given their focus on processes for test, audit, validation and compliance, it is not surprising these industries are leading the way with process management tools.

There are few process management tools that do not lock the business into a range of 'sub-tools' and services that are integrated and supplied from a single organisation, or its approved 'agent'. It can be argued that a single source supplier has benefits. However, it can also be argued that the business will not always get the best 'sub-tools' or services for the job.

Ovum, the independent research group specialising in analysis of IT quality assurance tools and processes, stress the importance of linking business requirements and process to the QA and testing of IT systems. Yet many of the QA process management tools focus on IT and stop short of business requirements.

What is required is a process management tool that is flexible, accommodating other processes and tools, while being structured and consistent with best practice recommendations.

Case Study – ISMA

The International Securities Market Association (ISMA) is the self-regulatory organisation and trade association for the international securities market.

ISMA's initial usage of T-Plan Professional was prior to the launch of COREDEAL, the investment exchange for international debt-related securities. Stringent requirements were imposed upon ISMA in developing the system to ensure that it met the standards expected by its chosen regulator, the UK's Financial Services Authority (FSA).

During the critical product launch of COREDEAL it quickly became apparent that the usage of T-Plan Professional could be embraced across the range of products and services being developed by ISMA. As a result, the improved structure provided by T-Plan Professional now underpins ISMA's testing in respect of a wide series of products - a case of well-deserved repeat business.

Initially, ISMA was using just the Test Management tool - T-Plan Professional. ISMA now also uses the Incident Management tool to allocate priorities to fixes as they are logged. The quality management reports generated by the incident management tool can be quickly and routinely circulated to the business teams within the company, enabling them to take well-founded decisions as to which issues are most critical in terms of requiring a solution before the launch of a new product or upgrade.

The introduction of a testing methodology and process across the product range is proving itself by saving time and resources. It has certainly brought tangible and considerable operational efficiencies for the people responsible for testing at ISMA - their workload is now far more orderly. However, the benefits are wider. The structured framework offered by T-Plan has beneficial knock-on effects for the business as a whole. All of the testing ISMA's QA team does is now routinely referenced back to the original business requirements of a given product. This means that not only can ISMA quantify and qualify its testing against the actual needs of the business, but that the business specifications produced by its product developers are by necessity more detailed and more accurately prescriptive. As a result, products can be brought to market more quickly.

The thorough testing process brought by T-Plan also brings considerable further reassurance to ISMA in terms of reputation risk. Putting a product live in the secure knowledge that it has been properly and fully tested considerably reduces concerns about undiscovered bugs being released into a production environment.

The key attractions of the T-Plan product suite were:

→ Capacity to support a structured testing methodology and process.

→ Ability to show visibility and traceability of tests against regulatory requirements.

→ Ability to provide test coverage analysis of all levels of testing - from requirements to test scripts to test execution.

→ Tool architecture provides a high degree of information reusability.

Case Study - ISMA

The FSA looked at the testing they were performing and prescribed 2 main requirements:

1. The FSA imposed on ISMA a strict requirement to tie its testing back to COREDEAL's business requirements in order to ensure transparency in gauging exactly how many of the requirements had been tested.
2. The regulator needed ISMA not only to be able to produce a list of errors / incidents that it had found, along with criticality etc., but also to be able to demonstrate how much test coverage had been achieved and to which aspect of the business requirements each incident related.

ISMA therefore needed to provide firm evidence to the FSA of the following:

→ The testing process for the COREDEAL system is under control.

→ Test Plans provide adequate coverage of the functionality of the system.

→ Traceability is demonstrable between source documentation (E.g. Functional Definition) and test documentation.

→ Where functional documentation is not present or inadequate, that this is identified and adequate test coverage is provided.

→ Non-functional testing requirements (E.g. Volume and Stress Testing) have measurable requirements that can be proven.

→ During the test execution phase, statistical evidence of testing progress can be provided showing conformance to the defined testing strategy, including progress against the agreed entry and exit criteria for each stage of testing.

T-Plan were called in to put a process in place. This involved:

→ Delivering a Test Strategy and Test Plan.

→ Implementing T-Plan Professional (Test Management Tool).

→ Production of a central requirements repository in T-Plan Professional for all documentation relevant to the testing life-cycle.

→ Populating the Test Management Tool (T-Plan Professional) with the tests that ISMA had already created and relating these back to requirements. The statistics feature in T-Plan Professional was then able to demonstrate test coverage.

→ Assessment of Business Risk to areas of the system in order to measure impact of change and also to analyse testing coverage against critical areas of the system.

→ Consolidation of all test results in a central repository in T-Plan Professional, with therefore the ability to link and measure passes and failures back to original requirements.

The T-Plan Process Management Solution

T-Plan was designed as a process management tool from the outset. It has continued to prove itself at high profile client sites such as the International Securities Market Association (ISMA).

> 66 The introduction of a testing methodology and process across the product range is proving 99 itself by saving time and resources.

Over the years T-Plan tools have been adopted by many City institutions, the UK Government, utility companies, Telco's and other leading organisations in the UK and abroad who are committed to measuring, managing and assuring the high quality of core assets inherent in IT, know-how, and efficient business process.

> 66 T-Plan is fully consistent with Ovum's Test Management philosophy.
>
> If you need to introduce more order structure and visibility into your testing process, you will welcome the T-Plan method and tool. 99

Ovum Evaluates: Software Testing Tools, 2000

As can be seen from the extracts and statements from respected sources quoted in this set of three papers (see page 16 for content summary of set), corporate governance and IT governance are one and the same. Information management is crucial to the survival and success of the organisation, knowledge is an asset.

In 2003 the law will begin to force companies to report on organisational risks and intangible assets. Effective processes, and the management tools to leverage the information they provide, are urgently required to ensure management have, and can prove the credibility of, the information they will be responsible for accurately reporting.

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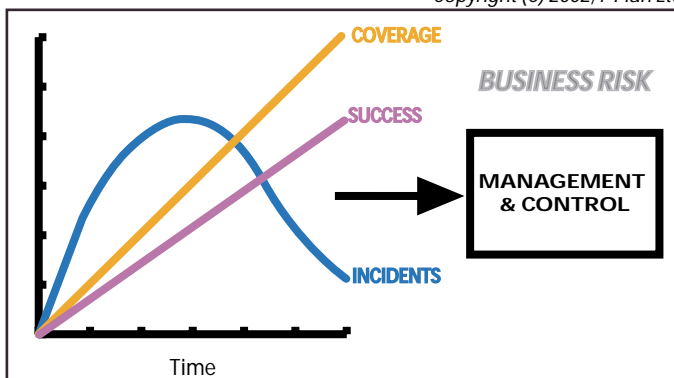
Most sources estimate IT risk as between 50% to 70% of the risks faced by businesses as we move deeper into the new economy - the IT revolution. If this is the case, T-Plan tools are well positioned to help organisations remove a significant element of business risk while; complying with new regulations, implementing best practice, improving productivity and reducing costs.

It's hardly surprising that Ovum and many of the world's leading businesses rate T-Plan as the pre-eminent QA/test process management tool.

Conclusions

Software Quality Management (SQM) is a relatively new term to most executive management, many may not even be aware of the scale of the problem.

The examples of IT disaster selected for this report were drawn from over 50 major incidents reported on various SQM web sites during the months of September and October 2001. These disasters consistently demonstrate:

Lack of access to effective quality assurance processes and tools, and the management information they provide at user, management and board level, is a high-cost and high-risk business strategy.

After 11th September 2001, John Gilligan, the US Air Force's deputy CIO, with the security threats posed by weak and poor quality IT, was driven to publicly state:

> " It is clear that the quality of software design and testing in the past does not measure up to the needs of the present or the future," Gilligan said. "I challenge the leaders in the software industry, especially in the wake of the physical attacks on this nation, to establish new standards of software quality, as well as effective methods to reduce the impact of current vulnerabilities. "

This report concludes that, with senior management commitment to measurable quality, a structured approach to quality assurance can make a significant difference to development, implementation, integration, upgrade and maintenance of small and large scale IT business assets; improving the overall performance of the business, its systems and processes, while reducing the costs of achieving higher performance.

In order to achieve these significant business benefits and rise to Mr. Gilligan's challenge; business, political and other leaders need to make a commitment to best practice.

➝ Investing in proven processes and efficient tools

➝ Understanding the costs and risks associated with change and IT

➝ Building on best practice by fostering a culture of continual process improvement

➝ Leveraging the business QA/test data assets to provide repeated and consistent business value across back and front office business systems and processes

T-Plan QA Management Solutions

T-Plan has gained its expert knowledge of software quality assurance and test management since 1984. The T-Plan tools, incorporating the 'V' Model management process, are delivering results in over 100 blue chip clients worldwide. We are able to provide a comprehensive range of testing related services to support clients in test management and test execution.

The services comprise:

→ Creation of Test Strategies and Test Plans

→ Implementation of formal test processes and methodologies

→ Implementation of test automation

→ QA Management Tools installation

→ QA Management Tools implementation within a project/s

→ Review of current practices

→ QA Management Tools customisation

→ QA Management Tools upgrades

→ QA Management Tools conversions

> " If you need to introduce more order, structure and visibility into your testing process, you will welcome the T-Plan method and tool. "

Ovum Evaluates, Software Testing Tools, 2000

T-Plan QA Management Tools

T-Plan QA Management Tools may be obtained direct from T-Plan, or via a network of T-Plan authorised professional quality assurance partners operating in most regions throughout the world.

The QA Management Tools comprise:

T-Plan Professional allows you to manage every aspect of the testing process, providing a consistent and structured approach to testing at the project and corporate level.

T-Plan
Professional
A Corporate Standard for Testing

Errors or queries found before or during the Test Execution can be logged and tracked throughout the Testing Lifecycle in T-Plan Incident Manager.

T-Plan
IMS
The Leading Defect Tracking Solution

T-Plan Administrator provides a centralised point from which to administer an entire T-Plan Professional enterprise/workflow.

T-Plan
Administrator
Centralized Administration for your Enterprise

Errors or queries found throughout the whole lifecycle of the project can be logged and tracked remotely using the Web version of the T-Plan Incident Manager QA tool.

T-Plan
Web IMS
The Leading Web Incident Manager

IT Quality Assurance

The T-Plan suite of quality management tools has been designed to address the business and IT risk and quality assurance issues identified in this report.

It enables senior management to accurately identify, assess, manage and control the business, operational and IT risks; from design through to implementation and ongoing use or maintenance of the business systems.

> 66 T-Plan is one of a few testing tools that start at the beginning of the development lifecycle. 99

Ovum Evaluates: Software Testing Tools, 2000

T-Plan Benefits

→ Captures the knowledge base of the business, establishing a risk benchmark
→ Facilitates best practice process, compliance, and validation throughout the enterprise
→ Empowers executives with measurability, auditability, and accountability
→ Improves user confidence, trust and efficiency

Insurance

Using T-Plan reduces costs and risks associated with Digital Risk insurance. It enables businesses to prove and validate their digital risk exposure, and it enables underwriters to accurately assess, monitor and audit digital risks.

T-Plan helps organisations and executives reduce exposure to:

→ 3rd party liability
→ 1st party losses
→ Crime
→ Product or service failure
→ Business interruption

Executive Features & Benefits Summary of T-Plan

The T-Plan product features and associated benefits are presented segmented into three groups:

→ *IT and Operations Management*

→ *Project and Personnel Management*

→ *Business and Financial Management*

IT and Operations Management

Feature	Benefit
Insurable Risk	Reduced exposure to business recovery risk. Reduced exposure to underwriting risk. Reduced Premiums. Reduced Data Protection risk exposure. Reduced 3rd party risks.
Assurable Risk	Reduced exposure to business risk. Improved stakeholder reputation. Quantifiable and accountable IT and business development. Reduced liabilities. Defined and measurable IT/IP data assets and associated risks.

Project and Personnel Management

Feature	Benefit
Clarity and Visibility	Improved communications throughout project and system life cycles. Reduced ambiguity and error. Improved user trust and confidence. Quantifiable performance and accountability.
Structure and Framework	Proven method incorporating best practice. Knowledge capture and continuous process improvement. Reduced user training and error. Enables "What if" project change and business risk analysis. Reduced user training and error. Validates regulatory and business rule compliance.

# Executive Features & Benefits Summary of T-Plan

IT and Operations Management

Feature	Benefit
Incorporates the 'V' Model	Robust and proven process. Enables business managers, and other project personnel, to track impacts of technical changes against business requirements. Provides structure, control and auditability to quality assurance.
Field Proven since 1990	Robust tool and utility set. Proven platform, environment, and application independence. Intuitive and easy to use interface for all levels of user.
Most Highly Rated Tool Globally Rated by Ovum Ltd, an independent specialist evaluation consultancy	Widely accepted and used by professional QA and test personnel. Supported in three time zones. Broad range of interfaces to industry leading IT tools; from requirements management test execution to maintenance, supporting the entire life cycle of the asset.
Independent Management Tool	T-Plan Ltd ownership is not associated with test execution tools, or other QA tools. It incorporates direct links to leading third party tools and incorporates open interfaces for other tools to be linked easily. The T-Plan products are complimented by an independent professional user group, chaired by the Bank of England.

The 'V' Model

Test Process Management (TPM) is concerned with controlling all the testing activities and the automated support tools used in a project, within a dedicated management environment. TPM is based upon a professionally recognised industry standard - 'The V-Model', which supports each stage of the system development life cycle.
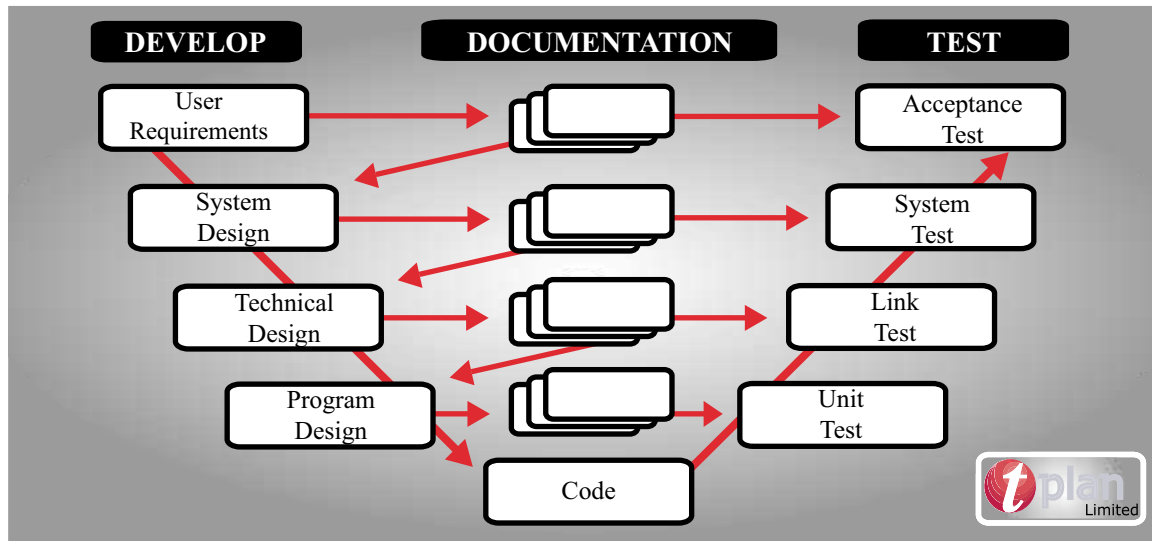
V Model Schematic, Copyright (C) 2002, T-Plan Ltd

As can be seen from the diagram, the 'V' model is constructed with each component being interdependent with the next. This structure enables changes to be cross-referenced throughout the system, allowing impacts of change to be assessed before the change is implemented.

The objective is to ensure every element in the system is validated at the earliest possible stage, to the quality criteria set out by the business managers, providing a comprehensive and measurable audit trail of the systems actual capabilities.

The benefits of this level of control and management over quality assurance are compounded when changes are introduced. With a manual system, checking the impact of even minor changes is complex, time consuming, and prone to human error. With T-Plan this is a simple 'what if' function of reporting impacts of the proposed changes at both technical and business levels, allowing the risk of potential error / fault correction to be identified, together with potential for 'knock-on' or efficiency costs to the business.

Credits

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Additional papers available in this "Executive Guide To" series:

➞ An Executive Guide To: Managing IT Costs

➞ An Executive Guide To: Reducing the Business Risk of IT

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Sources

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→ *Human Capital and Corporate Reputation: Setting the Boardroom Agenda.* Institute of Chartered Accountants in England and Wales. www.icaew.co.uk/centre

→ *Information Security Governance: Guidance for Boards of Directors and Executive Managment.* www.isaca.org / www.itgovernance.org

→ *Ovum Evaluates: Software Testing Tools.* Ovum. www.ovum.com