

Technology Audit

IT Management

Digital Fuel ServiceFlow™, SLA, and Cost Management

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Abstract

ServiceFlow™, from Digital Fuel is a totally integrated, end-to-end suite of Business Services Management (BSM) software that allows services providers to ensure any service delivery arrangement can be managed within the context of service contractual obligations. Complex contracts can be defined in terms of Service Level Agreements (SLAs), Key Performance Indicators (KPIs), and their underlying metrics, which are mapped to the underlying measures within IT systems and processes – ServiceFlow provides powerful facilities to gather data from any type of system, as well as data transformation to roll up the detail into management-level dashboards and business processes that automate SLA and Cost management. Sharing such information provides a firm and irrefutable foundation for partnership-level service delivery, an approach which Butler Group believes should be the bedrock of any service agreement, in order for the interests of all parties to be best served. Considerable further value can be attained from the best practice frameworks that Digital Fuel provides in ServiceFlow, addressing practical considerations within a number of IT and business process service types, and compliance with a number of individual legislative, or technical requirements (e.g. ITIL) – additionally, the inclusion of processes to formalise dispute management and other exception cases demonstrates the extent to which ServiceFlow helps with the nuts and bolts of service management, as well as providing high-level business value. The resources and effort involved in an implementation could be scaled to achieve value progressively, making ServiceFlow a viable consideration for medium-scale services and upwards. The great number of product features that demonstrate real relevance and benefit, lead Butler Group to judge a product such as ServiceFlow, as “probably indispensable” within the context of service deliveries of significant scale. Digital Fuel has established a leading position in its target markets, an impressive customer base, and significant partnerships, which Butler Group expects will be the basis for continued and considerable success.

KEY FINDINGS

Key: ✓ Product Strength ✗ Product Weakness ⓘ Point of Information

✓	Manages the complete lifecycle of business and contractual services obligations and associated processes.	✓	Integration with an impressive array of empirical data sources across technologies and different types of systems.
✓	Allows processing of subjective performance information via Web forms.	✓	Business logic, and data sources, can be visually modelled without using code or script.
✓	Allows in-depth querying of metrics.	ⓘ	Uses Oracle database as standard, but can be customised to interoperate with others.

LOOK AHEAD

The current capabilities of ServiceFlow will be expanded across the scope of BSM, including management of the service agreement lifecycle, service catalogue, service cost, auto-discovery of service interdependences, and a configuration management database. Best practice solutions will include more service lines.

► FUNCTIONALITY

In service relationships, for the interests of both service consumer (customer) and service provider to be best served, transparency of performance within the service agreement is a greatly helpful assistance – however, to prove empirically the levels of performance being achieved requires tools, methods, and processes, which must allow all parties to agree on information-based metrics that measure the performance levels against those agreed in the outsourcing contract, and determine any remedial action that might be required.

Successful outsourcing or other service delivery arrangements (e.g. shared services) require mature, partnership-focused, relationships between service provider and customer, and a structured approach to managing the service provided that incorporates visibility of performance. Digital Fuel’s ServiceFlow is a solution that can validate the performance within a delivered service by providing in-depth insight into data from the strands of the operational services by combining business logic, SLA/Cost management business processes, and analytics with reporting and query facilities that enable all parties to corroborate alignment with the governing service contract, and collaborate to proactively address alerts to potential issues before problems result. When issues do result, any matters of dispute can be resolved in the knowledge of the detail of all parties’ obligations, and performance levels against those undertakings.

Product Analysis

Delivering outsourced services can involve numerous concurrent (and sometimes conflicting) objectives and pressures, such as:

- Multiple live service contracts and SLAs.
- Complex service supply chains within potentially both the customer realm (involving hierarchical internal business units, or subsidiary organisations) and service provider structure, with multiple companies undertaking different elements of an overall service and having different and sometimes subordinate responsibilities.
- Dynamic constraints of time, cost, and service metrics.
- Diverse IT and business systems, often with no integration, or managing focal point.
- Large volumes of data, and frequency of throughput, requiring complex analysis to understand dynamics and trends of performance.
- Frequent changes to business needs, reflected in dynamic SLAs and underlying systems.

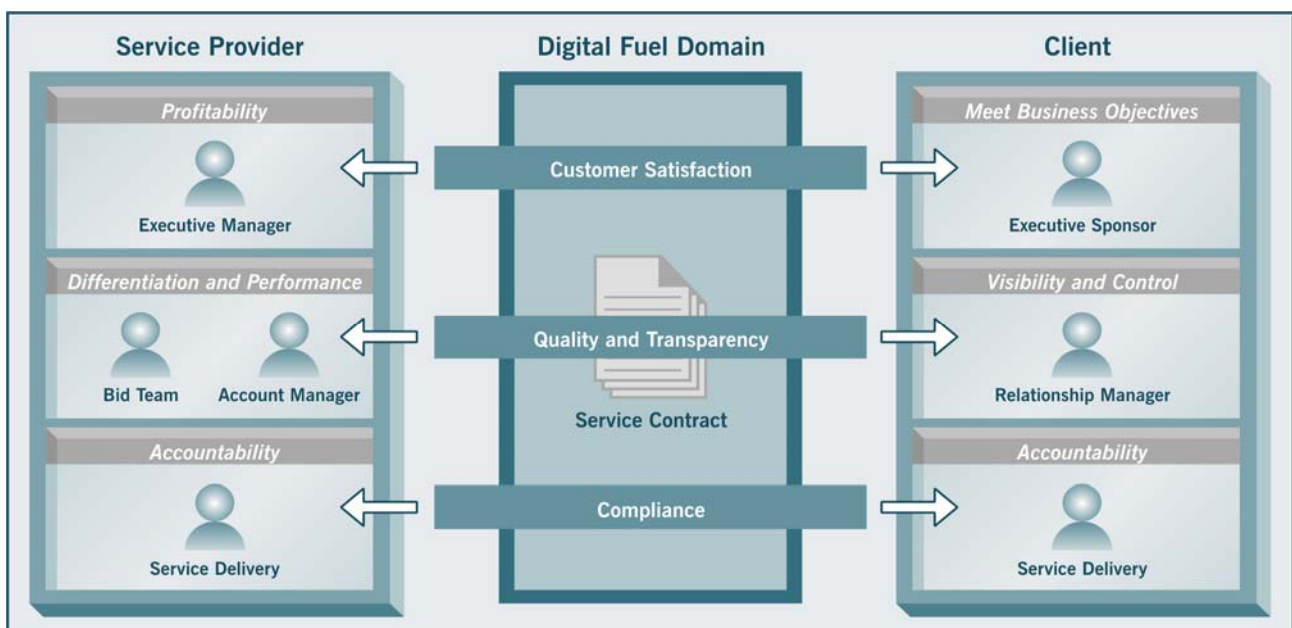


Figure 1: Performance Information Based on the Service Contract is Provided to Both Service Provider and Client

Figure 1 represents the different concerns and high-level activities that result from these pressures, across the service provider and client domains within a service delivery relationship, and shows the position that Digital Fuel occupies, from which its ServiceFlow product plays a facilitating role of providing a business application to collaborate from the basis of the same information between both parties.

The product takes a top-down approach, starting from the actual services contract and its SLAs, which are then mapped onto how the underlying systems fulfil the terms of those agreements as objectives and obligations. These can be comprised of elements of many types (e.g. KPIs, scorecards, service offerings, costs, finance and regulatory compliance, deadline dates, and many others) with very different underlying factors that need to be measured and analysed in different ways.

ServiceFlow is a fully Web-based suite of business applications that provides an end-to-end solution for service level, quality, catalogue, and cost management (see Figure 2).

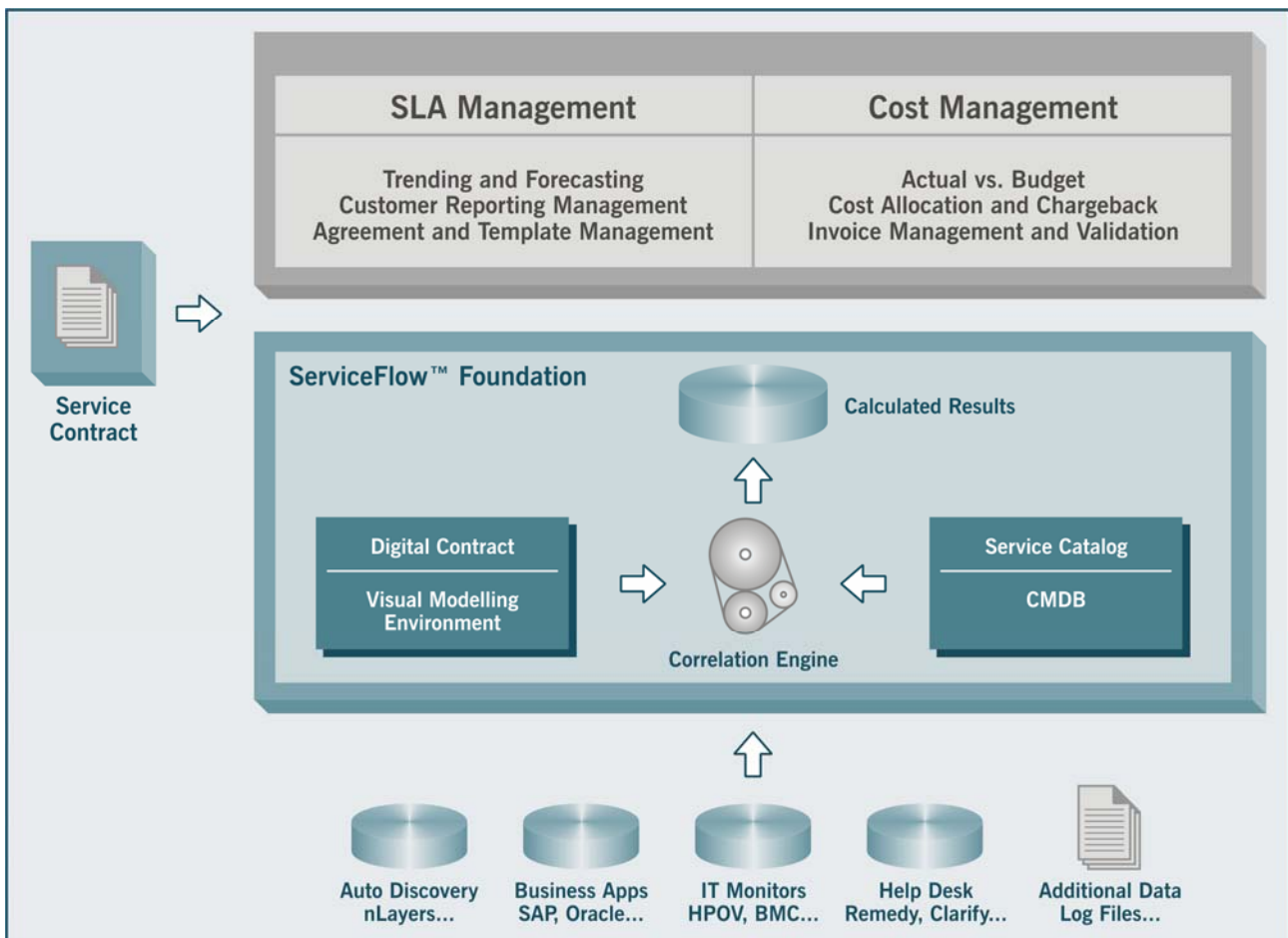


Figure 2: ServiceFlow Software Suite

Organisations can use the visual modelling environment to configure customer and supplier-specific SLAs, and a development lifecycle (including approval and verification) can be built-in. The definition language matches business terminology, but can still express complex logic (e.g. “the percentage of priority 1 faults restored within the time specified by the SLA, during the daily period 0800 – 2000, must be greater than 75% monthly”). In real time, the product extracts data from the appropriate operational systems and applications, and transforms it into the information needed to populate the model, and drive business processes for effective and timely decision-making. ‘Soft’ factors such as satisfaction levels, or innovative management, which are manually entered, can also be included, enabling service performance to be assessed on the basis of an entire range of underlying business goals and objectives.

The business application contains a rich set of out-of-the-box functionality that supports the automation of SLA and cost management for services. It includes an extensive range of reporting and query facilities, including executive dashboards, end of month summary reports, and role-based performance analysis. ServiceFlow also provides full facilities for usage and cost management (including volume-based service cost allocation), invoice management, obligation performance forecasting, and the management of exception cases. For example, although proactive alerts can be configured to warn of imminent SLA breaches, breaches that do happen can result in 'service credits', and probable financial impact for the service provider. Some customers want to include positive incentives in the service contract whereby a provider that exceeds performance targets by a certain extent can gain 'earn backs', effectively constituting financial incentives. ServiceFlow provides facilities to define both these types of arrangements, as well as processes to manage the interaction between provider and client, incorporating formalised management of adjudication and reconciliation processes, when disputes occur.

Product Operation

ServiceFlow allows definition of the following factors that constitute the terms of agreement governing a service:

- The **SLA**, consisting of individual measures that define the performance and other business contractual obligations of a relationship between a service provider and service recipient.
- **Service Level Objectives** (SLOs), each being an individual measure of a particular performance criterion, usually with a Breach Level that defines its minimum threshold value.
- **KPIs**, which measure service performance but are not concerned with breaches of conditions, rather reporting on system activity according to set criteria.
- **Service Offerings**, consisting of the services available to the customer together with the associated formulas for costs, pricing, and consumption-based allocation (to consumer organisations).

The product has a functionally rich modeling environment called Visual ServiceFlow that enables these factors to be iteratively defined in precise terms, and all ambiguities removed, to comprise a 'digital contract'. It includes templates for SLAs and SLOs, facilitating definition of a host of common measurements, of which a few examples are customer satisfaction, asset repair levels, end-to-end transaction timings, or server outage. SLOs are arranged in predefined libraries that categorise objectives for the implementation of components such as incident management, service desk, or network management that comprise commonly used standards such as ITIL, and each SLO has the relevant measure (e.g. availability, packet loss) set up within it. Finer aspects of performance criteria can be added to limit assessments when this is required by contract terms e.g. time windows when performance should be measured, or user population size. Threshold and warning levels can be defined for any type of measurement, in order to trigger alerts when particular people need to be made aware of service levels.

Using Visual ServiceFlow, the business logic can be modelled to represent any obligations in a service relationship, and then it is used to connect the business logic to data from any type of systems. In short it enables one to visually transform obligations into business logic connected to the flow of data, called "service flows". These service flows model service contractual obligations of any complexity by chains of predefined building blocks, called ServiceFlow operators. Service flows roll up raw data into the ServiceFlow business applications for processes, reporting, and other functional needs within the suite based on role-based secure authorisation that users can easily set up in the system. Digital Fuel highlights the enormous disparity of systems that can be used as sources of performance information, and can illustrate over 100 examples spanning technologies such as billing, groupware, security, enterprise applications, Web monitoring, specialist telecoms monitoring, voice logging, databases and data warehouses, help desks, and many others.

Visual ServiceFlow is used to define both the data sources, and which of a range of powerful transformational operations (e.g. aggregation, correlation, and evaluation) should be applied in order to translate raw information into service metrics. Once defined, these are automatically implemented as run-time adaptors which populate ServiceFlow with the appropriate performance metrics, to enable reporting and querying of the information within effective business processes. The product also allows capture of information entered via intelligent Web forms, which are commonly used by ServiceFlow customers for a range of data types such as subjective ratings of performance, capturing objective measurements in place of operational data that is not yet available, or recording sign-off for compliance as part of an approval process. Web forms can be used to set up 'fix plans', which are used to record remedial action associated with SLOs where a performance problem has been reported.

ServiceFlow can be used to automate the use of Operating Level Agreements that involve multiple vendors providing services (i.e. multi-sourcing). To support a disciplined approach to multi-sourcing, Visual ServiceFlow enables definition of the structure of the service delivery, in terms of the organisations involved, and their resources. Within outsourced contracts involving multiple service providers, contractual obligations may be cascaded within a management structure, and ServiceFlow facilitates reporting and alerts throughout such structures, and identification of any risks arising from the structure itself. The same capabilities apply in defining complex organisational and user structures within customer organisations, and the corresponding alerting and reporting. User identities are associated with access rights and role definitions, and ServiceFlow can leverage such information from other data sources e.g. directories. Role-based control of query facilities can be implemented throughout organisational structures.

To facilitate flexible decision-making based on attributes that can change over time, SLOs can have numerical weightings associated, either individually or by SLO Category (reflecting the relative importance of types of SLO, e.g. 'Critical Service Line', or 'Key Measurement'). ServiceFlow's user interface simplifies what would otherwise be a complex set of information, and offers varied analyses and insights very accessibly. For instance, it allows users to slice-and-dice through the underlying data at any point, with all types enabling use of presentation techniques such as bar charts, charting, and trend lines. Users' preferences can be saved as customised settings, and reports can be sent or shared between users, internally within ServiceFlow or via e-mail, Microsoft Word, or using Web links. Such facilities can be accessed from many areas of the business application, and drill-down to the lowest levels of detail in the underlying data is supported throughout. The product also facilitates collaboration via portal integration, offering this via its own functionality (which includes consolidation of service metrics in aggregated or composite scores, RAG status, and association of presentation material with its contract context), or by integration with leading portal software from SAP, Plumtree, or Microsoft.

Product Emphasis

ServiceFlow provides end-to-end tools and processes to enable management of service usage, cost, performance, and quality within a delivered service. Its powerful technical framework provides integration with data sources from all types of systems and environments, enabling detailed metrics from those sources (which are accessible via drill-down inspection and investigation) to form a firm foundation for information that is used throughout its SLA and Cost Management processes. The levels of automation that ServiceFlow achieves can generate greatly improved efficiency in the operation of delivered services, which can provide benefits for both providers and customers. The consistent focus on contract terms, and empirical performance measurement against business-driven targets, align ServiceFlow implementations excellently with the aims of its customer base, and enable improved quality of service that is more likely to meet targets, and support successful service delivery relationships within markets such as outsourcing.

► DEPLOYMENT

Digital Fuel recommends a phased implementation approach for customers of ServiceFlow, which incorporates the following stages:

- Identification of requirements.
- Definition of metrics to measure whether the requirements are satisfied.
- Agreement of templates to map metrics onto systems.
- Configuration of ServiceFlow, and implementation.
- Agreement that the implementation meets objectives.

The company uses a methodology to govern its services approach to customer implementations, with defined project teams and member roles, project management encompassing business and technical programmes, gateway decision reviews to ensure customer buy-in, formal knowledge transfer, and tools to facilitate re-use and extensibility. It offers the following training in skills relating to ServiceFlow:

- Introduction to ServiceFlow, covering matters including day-to-day administration e.g. system access, business logic, report management, proactive alert and escalation set-up, and dashboard navigation.
- Business and Technical Administration, covering matters including ongoing system maintenance and configuration, creating users, reports, adding data sources, and building new flows.

ServiceFlow allows the creation of best practice frameworks, with pre-configured packages including content such as SLAs, KPIs, metrics, dashboards, escalation processes, and reports. These can be created and reused easily and quickly, and exchanged within large organisations and between customers, vendors, and other parties. Digital Fuel provides pre-packaged best practice framework solutions for different types of outsourcing engagements:

- Business Process Outsourcing (BPO), e.g. contact centres, claims processing, human resources, finance and accounting, and telecoms-related operational support services.
- IT, e.g. Helpdesk, LAN, Application, or ITIL compliance.

Customer support is provided via a helpdesk for escalation and resolution of issues, with defined response times for issues of the highest severity levels. Customers can choose from three support levels, each with different SLAs and financial terms. Digital Fuel provides maintenance for customers, releasing service packs approximately quarterly, a minor release, roughly twice a year, and major releases approximately every 12 months. Documentation is provided with the product e.g. guides to getting started, and user and technical interests; and sample SLAs, SLOs, and reports.

► PRODUCT STRATEGY

ServiceFlow is positioned as offering value to all parties in a service relationship within outsourcing (ITO and BPO), telecommunications, and shared services. The following table summarises some of the value ServiceFlow delivers to outsourcing agreements:

Role Within Outsourcing Relationship	ServiceFlow Benefits
Enterprise customer	<ul style="list-style-type: none"> • Greater visibility of consumption, creating opportunities to adjust usage to optimum levels, or reduce unnecessary usage. • Reduction of the overhead cost of managing a relationship with a service provider (e.g. identifying potential issues to address before problems occur, generation and distribution of reports, and management of disputes). • Greater likelihood of a successful outsourcing relationship (thereby avoiding potential costs of under-performance, dispute resolution, renegotiations or changing supplier). Instil discipline and structure with multi-sourcing delivery. • Automation of compliance to technical standards (like ITIL, BS15000, or ISO9001) and regulatory requirements (e.g. Basel II, Sarbanes-Oxley, or HIPPA in the US) into an outsourcing deal, saving added costs of compliance. • Improved service relationships between shared service organisations and their customers via a better customer experience, including quality and depth of information, and integrated processes. • More accurate allocation of costs for services based on consumption by business units within the organisation.
Service provider	<ul style="list-style-type: none"> • Better customer experience – quality and depth of information, and integrated processes, as differentiating features of service. Better business development opportunities as a result. • Ability to standardise product offerings, and reduce cost of establishing repeated service instances for each customer. • Reduction of costs of providing the service via: <ul style="list-style-type: none"> ○ Automation (i.e. redeploy headcount to activities that add more value). ○ Greater visibility of performance and costs leading to fewer delayed payments. ○ Efficient and responsive dispute resolution process, reducing overheads, and potential legal costs. • Reduced risk of service credits, leading to increased profit.

Digital Fuel is in a leadership position amongst vendors of software solutions for BSM solutions that automate SLA and Cost Management. Outsourcing (of IT and business processes) and telecommunications are the target markets attaining greatest growth. Enterprises are increasingly looking to implement shared services methodologies for managing business processes, and IT as a “business”, viewing the consuming business units as customers and managing business value added to the enterprise.

The company has strategic relationships with a number of partners that participate in the distribution of ServiceFlow, including SAP, Siemens Business Services, and three significant new partnerships to be announced in the upcoming quarter.

► COMPANY PROFILE

Digital Fuel has its headquarters in San Mateo, California, with sales offices across the USA, European headquarters in the UK, a sales centre in Germany, and engineering centres in Israel.

It is a privately held company with financial backing from well-known venture capital sources – as such, its detailed financial position is not made publicly available. However, it states that its revenues grew by 145% in the year ending 31 January 2006, and that this period completed eight consecutive quarters of revenue growth. During the same period Digital Fuel doubled the size of its customer base to 35 customers, with its new deals or relationships including CapitalOne, Telefonica, SAP, MAN AG, SITA, Transport for London, and Bearing Point.

The company’s first product deployment was in 2000, and ServiceFlow is now pivotal in some of the largest production deployments of SLA management in the world, with customers including Procter and Gamble, O₂, Siemens Business Services, BBC, Cummins, IBM, Delta Lloyd, CSC, SITA, Bearing Point, and Bombardier. Digital Fuel relates the following examples of customer experience from existing ServiceFlow deployments:

- With a major financial services customer, the product is involved in the management of inbound and outbound payment processing, with benefits including increased quality, reduced write-offs, and reduced risk of non-compliance with the US Federal Reserve’s Regulation Z stipulations.
- Within the provision by Siemens Business Services (SBS) of IT Services charged at over US\$300 million annually, serving 28,000 users at a major UK company, the product enables management of 30 KPIs and measurement of hundreds more performance metrics. SBS attributed its successful bid partly to the capacity of ServiceFlow to measure non-IT service factors such as teaming, and innovation.
- Procter & Gamble has outsourced applications, IT infrastructure, and BPO services billable at over US\$5 billion, delivered in 150 countries, throughout over 200 business units. ServiceFlow is the business services management tool for both outsourcing services, provided through a global shared services organisation, and services sourced internally. It enables business unit satisfaction to be assessed and be visible, reduces the costs of service provision, and optimises delivery to demand.
- A European financial services company, outsources IT services to IBM via an ‘on-demand’ service that involves measuring consumption, and validating resulting invoices, with ServiceFlow providing the means to achieve this and enabling benefits including reduced delivery costs, and better customer satisfaction, to be attained.

► SUMMARY

Butler Group believes that, with ServiceFlow, Digital Fuel has an extremely innovative solution for SLA and Cost Management within BSM, which leads its market area by some considerable extent. The solution is directed at successful customer relationships with functionality that ensures achieving a shared understanding of all service obligations, and the extent of their achievement in operation of the service. Digital Fuel has a very impressive customer base, and provides the foundation for some of the leading-edge service relationships in the arenas of outsourcing, telecommunications, and shared services. In its provision of high visibility into service performance, analysis and insight into contract conditions of any complexity, visual modelling to reflect business logic in a highly flexible fashion without programming or scripting, drill-down querying from top to bottom levels of service metrics, and practices and processes to add unique value within service delivery relationships, it is simply unparalleled today.

Within the context of a services relationship of any considerable size, Butler Group believes it is not so much a question of identifying a need for ServiceFlow, as whether customer organisations can believe themselves wise in failing to consider the advantages they could gain from this solution. For service providers, it could provide a critically differentiating means of productising services and proving their commitment to a visible, target-oriented, and hence mature, partnership approach to outsourcing.

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