Finding Your Needles in a Haystack — Personalised Information Delivery for the Masses

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INTRODUCTION – UNREACHABLE INFORMATION

Increasing number of reporting tools have slowly proliferated across many enterprises

Over the last decade or more the number of reporting tools and report formats has increased rapidly in most enterprises. The main reason for this is different lines of businesses and departments demanding the flexibility to choose the reporting tools that best suit their business needs and that produce reports in the formats required.

Reporting tools are used for operational reporting, regulatory reporting and to support decision making

Today, the result is that most enterprises have a multitude of reporting tools installed across a wide range of operational and business intelligence systems. These tools are used by different communities of users to produce everything from operational reports from data in operational systems, business intelligence reports from data in data warehouses and data marts and more recently a wide range of compliance reports for a multitude of regulatory and legislative bodies. In addition to this, a mass of personal Microsoft Access databases and Excel spreadsheets also exist to add to the complexity.

Business users do not have access to all reporting tools but may be interested in reports produced elsewhere in the enterprise

Amid these multiple tools and the plethora of reports they generate is the business user who, in most cases, can just about find the time to make use of perhaps one reporting tool as well various familiar Office applications to access and report the information needed. Many of these users who are in management or operational roles require access to reports produced in different systems with many different tools in order to get the information they need to do their jobs. For example, an underwriter in an insurance company may need information from the claims system about previous claims history as well as from the underwriting system for payment history to bring together the information needed to decide on whether to insure a new property. Equally, a manager may need to see business performance information from multiple data marts across business units and departments. Furthermore, an operations manager in a manufacturing plant may need to access order information from central systems and perhaps local systems to fully understand the manufacturing requirement for an important customer.

Business users often find that too many tools introduce complexity they do not want

The problem however is that most users do not want nor have the time to learn how to use many different reporting tools associated with different systems to access and report on the information they need. In addition, they do not want to sift through all the reports managed by all the different reporting tools in the enterprise just to find the ones that are relevant to their role. In fact in most cases the chances are that users simply will not know what reports are available in different reporting systems because they do not have time to find out.

People want a simple way to get at all the reports they need irrespective of where they are

Disparate systems, multiple tools and the complexity of learning different user interfaces to get at much needed information are all barriers to timely access and effective use of information to help in day to day operational decision making. Users would prefer one mechanism to deliver only the reports they need at the time convenient to them, in the form they require, from all the disparate reporting systems in use. Also, most users want an easy way to request these reports in a parameterised fashion.

MISSING THE FACTS - THE IMPACT OF TOO MANY REPORTS AND TOO MANY TOOLS

The complexity of too many reporting tools and too many reports can lead to users not receiving timely information

The complexity of too many tools and too many reports that are not visible across the enterprise can be significant.

The first of these is that users cannot see what reports exist across all the tools in the enterprise to identify what might be relevant to their jobs and what reports might help them become more effective if they had access to them. The result is that users:

- Often do not get the information they need at the time they need it in the format that they require
- Spend large amounts of time being unproductive simply looking for information

Users often re-invent reports rather than struggle to use tools unfamiliar too them

- Re-invent reports on the tools they know how to use if the data they need is available.
- Spend time emailing colleagues distracting them from their jobs in order to get them to run reports on their behalf and to email them the output. They then cut and paste this information into the tools they know how to use without any knowledge of whether or not the data has been manipulated before it was sent to them.

Not being able to get at information may mean that users are making 'blind' decisions

- Make business decisions 'flying blind' and hoping that 'experience' will guide them, rather than opting for an alternative that they believe would mean spending hours trying to get at all the information they need. This kind of decision making could have major bottom line consequences.
- Rely on a 'power user' in their department to try to get the information they need
- Seek help from search engines to find information, often failing to find reports because many systems are not crawled by search engine index builders when building search indexes

Lack of pertinent information can lead to errors being made, inefficient operations and unsatisfied customers

In addition, users are less effective because information is not readily available to them. The result can be that serious and costly mistakes are made. In other words process defects can occur due to required information not being available or being available but not at the right time. For example, manufacturing errors may result from critical local and central order information not being available when needed. As a result, too many units may be produced, too few units may be produced, and deliveries to a customer may be over-supplied or under-supplied. The consequence is that customer satisfaction is impacted which in the worst cases can lead to loss of customers due to what they would say was poor customer service.

REQUIREMENTS FOR ENTERPRISE INFORMATION DELIVERY

In order for a company to maximise its return on investment from enterprise information delivery, the following requirements need to be met so that users can receive relevant information at the right time and in the right format:

1. An information delivery system needs to understand all the users and user groups that exist in the enterprise, preferably by inheriting these from a cross platform lightweight directory access protocol (LDAP) compliant directory server.

Information delivery needs to integrate with existing reporting tools to maximise return on investment

2. An information delivery system needs to be capable of integrating with the multiple reporting tools which already exist within an enterprise and be capable of invoking these tools to produce reports on its behalf

3. An information delivery system should be able to deliver one or more reports from one or more reporting systems to a single user or to a group of users at a time of the users' choosing

Publish one or more reports in multiple formats

4. An information delivery system should be capable of running one or more reports once and publishing the report or group of reports in multiple different formats e.g. Microsoft Excel, XML, Adobe PDF, HTML etc.

Deliver to one or more users

5. An information delivery system should be able to publish each report delivered in as many format(s) as required by a user or group of users

Schedule delivery to provide timely information

6. A user should be able to schedule the execution and delivery of an individual report or a group of reports on a regular basis (e.g. annually, quarterly, monthly, weekly, daily, hourly etc.)

7. All metadata associated with information delivery should be capable of being stored in a relational database of the customer's choosing

Deliver via multiple mechanisms

8. Reports should be capable of being delivered:
   - As attachment(s) in an email to one or more email addresses
   - As a file to one or more designated file directory folders or mapped network drives
   - Via FTP to an FTP server
   - Via fax
   - Directly into a portal on demand
   - To a collaborative workspace document library in a portal or enterprise content management system or records management system via an industry standard mechanism

Integrate with collaborative workspaces to facilitate information sharing

Subscribe to receive reports

9. It should be possible for a user or group of users to subscribe to any combination of reports that they are authorised to see
10. It should be possible for a user or group of users to cancel delivery of one or more reports if they are no longer interested in receiving them
11. It should be possible to have a common parameterised report mechanism that can be applied to any reporting tool so that users do not have to define report parameters via many different user interfaces associated with multiple tools

View reports without the need for the tool that created them

12. It should be possible for users to view reports without the need to have access to the tool used to author the reports from their device
13. It should be possible to save configured information deliveries and publish them as web services so that 'delivery services' can be invoked by other applications and portals or as part of a business process
14. It should be possible to alert users via email or instant messaging to a mobile phone or PDA when one or more reports have been delivered.

Operate around the clock serving a global user base

15. It should be possible to operate on a 7x24 hour basis and scale to manage role based personalised delivery for many thousands of users
16. It should be possible to automatically alert system administrators of any information delivery process failure either by email, SMS or system flag

ENTERPRISE INFORMATION DELIVERY SOLUTIONS – INFOFLOW

Infoflow is a company supplying enterprise information delivery software that integrates with existing reporting systems in use across the enterprise. Headquartered in Sheffield, England, it was founded in 2004 and has a number of customers throughout the UK and beyond and overseas offices in Munich, Rome and Barcelona. Infoflow's flagship product is Infoflow.

INFOFLOW

Infoflow can run on a wide range of platforms

Infoflow is a Java based enterprise information delivery system which runs on a variety of platforms including Microsoft Windows 2003, 2000 and XP or later (all variants), Unix (Sun Solaris), Linux and Apple Mac OSX. It also integrates with J2EE web servers including Apache as well as Microsoft Internet Information Server (IIS). It can be used to manage delivery of operational reports to operations managers, compliance reports to many regulatory bodies, and business intelligence reports to business analysts and those responsible for performance management.

STEPPING UP TO INFORMATION DELIVERY REQUIREMENTS USING INFOFLOW

Infoflow can be used to deliver personalised information to a mass user base in multiple different formats

Infoflow can be configured to manage groups of users and many different groups of documents

Reports can be personalised for individual users

Looking at the requirement defined earlier, Infoflow manages the information needs of each information consumer including employees, customers, partners and suppliers and delivers personalized information to those users in different roles both inside and outside the enterprise. It does this by connecting to a wide range of reporting tools that already exist inside the enterprise including Business Objects Web-Intelligence and Crystal Reports, Hyperion, SAP-BW, Microsoft Excel and legacy print output. Infoflow is capable of delivering one or more personalized documents (e.g. reports) to a single user or group of users. Reports can be delivered in a range of popular formats via email, FTP and file to a user or to a file directory folder or mapped network drive. The product allows information deliveries to be configured, parameterized and saved on the Infoflow server and has a built-in scheduler to allow reports and deliveries to run on a regular basis. Therefore it is possible to handle 7x24 hour information delivery operation to a global user base. Infoflow inherits user and user group information from any LDAP directory and allows users to have several active roles. In addition, reports can be delivered to a collaborative workspace via a mapped network drive so as to relate this information to other information and collaborations already associated with a community of users. Furthermore, users don't have to have the tool used to create a report in order to view a report published from it. All the user needs is a browser to subscribe to information of interest and to place any filters on that information in order to personalise it.

CONCLUSIONS

Information delivery is fundamental to improving effectiveness

Enterprise information delivery is fundamental to improving the effectiveness of employees, managing compliance reporting across multiple regulatory bodies and managing business performance. Without the establishment of a common, scalable enterprise information delivery mechanism, companies will always suffer from users struggling to get timely information and could also suffer from process defects caused by the lack of available information.

User productivity and effectiveness can be improved by timely delivery of relevant information

Companies who are intent on raising the standard of their business practices by establishing timely information delivery can't optimise this without a scalable common enterprise-wide information delivery mechanism. Therefore investment in enterprise information delivery software is important to improving employee productivity and effectiveness as well as satisfying on-time delivery of regulatory reports.

Personalised information delivery for the masses

Infoflow's platform together with their services program go a long way to providing timely personalised role-based delivery of information to masses of users in most enterprises.

The ability to integrate with existing systems, configure different deliveries, schedule deliveries of one or more reports from multiple back end systems to one or more users inside or outside the enterprise makes Infoflow a serious contender to providing solutions for enterprise wide information delivery.

About Intelligent Business Strategies

Today, successful companies are those that can absorb new information technologies and use them effectively in their businesses. But faced with so many new technology developments, how can IT and business users possibly keep up? Intelligent Business Strategies is a research and consulting company whose goal is to help companies understand and exploit new developments in business intelligence, analytical processing and enterprise business integration. Together, these technologies help an organisation become an *intelligent business*.

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