Office of Inspector General

Usefulness of IM's Website

March 28, 2008
Inspection Report No. 436

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

To: Andrew J. Donohue, Director, Division of Investment Management

From: H. David Kotz, Inspector General

Date: March 28, 2008

Re: Office of Inspector General Inspection - Usefulness of IM's Website (No. 436)

Attached is our final inspection report on the Division of Investment Management's website. Your oral comments to the draft report have been incorporated as appropriate.

Management concurred with all of our recommendations. We appreciate the courtesy and cooperation that was extended to our staff during this inspection.

Attachment

cc: Peter Uhlmann
        Diego T. Ruiz
        Jennifer McHugh
        Barry Miller
        Paul Goldman
        Darlene Pryor
        Donna Hawkins

        Richard Hillman, GAO

USEFULNESS OF IM'S WEBSITE

EXECUTIVE SUMMARY

The Office of Inspector General of the Securities and Exchange Commission conducts regular audits and inspections of Agency operations to promote the effectiveness, integrity and efficiency of the Commission.

We conducted an inspection of the Division of Investment Management's (IM) intranet site, IMweb, to determine whether it was useful for its staff and to identify areas in which it could be improved.

Our inspection found that IMweb offered limited utility to IM staff outside of IM's Office of Financial Analysis (OFA) and Office of Disclosure and Review. The staff in IM's OFA found the website useful for posting its financial and statistical reports such as fund watch reports, "dashboard" data, and fund industry statistics, in electronic form. OFA distributed electronic links to its reports in IMweb instead of distributing paper copies. Staff in the Office of Disclosure and Review used the analyses of fund returns in the stock, bond, and money market "watch" reports. In addition, the staff that we contacted in the Commission's Office of Compliance, Inspections, and Examinations (OCIE) found the fund watch reports useful. OCIE used IMweb's fund watch reports in its risk assessment activities.

However, the staff that we contacted throughout IM's other offices such as the Chief Counsel's Office and the Office of Regulatory Policy and Investment Adviser Regulation, indicated that IMweb was of little use to them. They indicated that they seldom used the financial and statistical information on IMweb in their work, although they did use information related to filings, no-action letters, and proposed and final rules. They indicated that they obtained this information from their own tracking systems, shared computer drives (on which documents were sometimes difficult to locate) and the Commission's website.

Our inspection found that although OFA sent links to its reports to all 19 IM staff that we contacted, 9 indicated that they did not know about IMweb. Only 4 of 19 IM staff we contacted indicated that they had used the site.

This report provides recommendations on how IM could improve the usefulness of its intranet. Options for IM to consider include developing a new intranet using a web-based tool (e.g., Microsoft SharePoint), or improving IMweb's utility. However, we recommend that prior to undertaking any of these actions IM should clearly specify the objectives of its intranet to determine how to conduct the improvements. We also recommend that IM's Information Technology (IT) staff use the appropriate system development procedures and website best practices to implement IM's intranet improvements.

Our inspection further found that IMweb was difficult to use with the screen reader software that the visually impaired staff utilizes. We recommend that IM's IT staff obtain the appropriate assistance and training to ensure that IMweb, and IM's other

applications as appropriate, meet Section 508 of the Rehabilitation Act of 1973 accessibility requirements.

Commission management concurred with all of our recommendations and provided oral comments to this report.

OBJECTIVES, SCOPE AND METHODOLOGY

The objective of the inspection was to determine if the Division of Investment Management's (IM) intranet site (IMweb) was useful to its staff and to identify potential improvements. We surveyed staff in IM and in the Office of Compliance Inspections and Examinations (OCIE) regarding IM's intranet.[1] We also surveyed staff in the Division of Enforcement and the Division of Trading and Markets to discuss how they used their intranets. In addition, we conversed with staff in the Office of Information Technology (OIT) regarding the web-based tool, Microsoft SharePoint. Finally, we researched applicable guidance regarding the usefulness of intranets. We conducted this inspection between August 2007 and January 2008 under the Quality Standards for Inspections dated January 2005.

BACKGROUND

The Commission's 2004 to 2009 Strategic Plan, under the goal to "Maximize the Use of SEC Resources," includes an initiative to "Enhance Employee Productivity." This initiative involves using technology, such as intranets, to improve the flow of information, capture institutional expertise, and automate internal activities.

Intranets are networks within an organization for which access is restricted to a specific group such as offices and divisions within an agency. Organizations use their intranets for various purposes, including providing centralized access to information and documents, automating work processes, and providing a means for groups to collaborate on projects.

IM's Information Technology (IT) staff indicated that it developed IMweb, as it currently exists, in FY 2002 to provide a site for IM's Office of Financial Analysis (OFA) to post electronic copies of its reports and to reduce the amount of paper reports distributed around IM.[2] IM's IT staff developed IMweb as a series of basic HyperText Markup Language (HTML) pages.[3] IM's staff reported that its intent was to receive links to the reports on the intranet site instead of paper reports.

Since the website's inception, IM's Office of Financial Analysis (OFA) posted a number of its reports on IMweb (*e.g.,* mutual fund and money market watch reports, "dashboard" report data, investment company industry statistics). The other IM offices kept their internal documents on shared computer drives and posted many of their public documents on the Commission's public website at www.sec.gov.

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[1] OCIE uses IMweb's fund watch reports as part of its risk assessment activities.
[2] OFA indicated that it is IMweb's primary user, but IMweb was developed for all IM.
[3] HTML is used to write internet web pages.

A number of Commission organizations use intranets. For example, the Division of Enforcement uses a division-wide intranet that provides document retrieval and research capabilities. An office in the Division of Trading and Markets developed an intranet to provide its staff with centralized access to its internal memoranda.

Some Commission offices are developing intranets using a web-based tool (Microsoft SharePoint), provided by the Commission's Office of Information Technology (OIT). SharePoint provides centralized document management, document version control, and other capabilities. IM has a test version of SharePoint. OIT is currently testing an updated version of SharePoint and is developing related guidance.

Federal website requirements and best practices primarily address Federal websites accessible to the public, but may have applicability to intranets. Section 508 of the Rehabilitation Act of 1973 as amended, 29 U.S.C. §794 (d), requires Federal agencies to make their technology including intranets, accessible to employees and members of the public with disabilities to the extent that this does not create an "undue burden" on the agency.

INSPECTION RESULTS

We found that IM's intranet site, IMweb, offered limited utility for obtaining electronic versions of OFA's information and reports (*e.g.*, fund watch reports, "dashboard" data, and fund industry statistics). However, we found that numerous IM staff did not use the website for these purposes, but, in fact, used information from their own tracking systems (databases) and generally posted their documents to shared computer drives, on which documents were sometimes difficult to locate, and to the Commission's website. Although OFA sent links to its reports to all 19 IM staff we contacted, 9 indicated that they did not know about IMweb. In addition, only 21 percent (4 of 19) IM staff we contacted indicated that they actually used the site.

We recommend that IM take steps to improve the usefulness of its intranet. Options include developing a new intranet using a web-based tool such as SharePoint, or improving IMweb's utility. However, we recommend that IM more clearly specify the objectives of its intranet before it considers ways to improve it. We also recommend that IM's IT staff use the appropriate system development procedures to implement IM's intranet improvements.

We also express concerns about the fact that IMweb was difficult to use with the screen reader software that the visually impaired staff utilize. It is critical that IM's IT staff obtain the appropriate assistance and training to ensure that IMweb, and IM's other applications as appropriate, meet Section 508 accessibility requirements.

IM's Intranet

IM's IT staff indicated that it developed IMweb as a basic web page for maintaining OFA's electronic documents. The IT staff developed IMweb as an informal system consisting of a series of simple HTML website pages, and OFA designed the reports to include on the site. The IT staff did not survey the rest of the IM staff for their

requirements regarding IMweb or use system development procedures in developing IMweb.

We surveyed 19 IM staff to discuss their use of IMweb and the sources of the information that they used in their work. The staff that we contacted were responsible for activities such as disclosure reviews, interpretative matters, and rulemaking. These staff used information related to filings, no-action letters, and proposed and final rules. This information was obtained from IM's computers and servers, filings and related correspondence on the Commission's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system, and from the Commission's website at www.sec.gov. We found that, other than in Office of Disclosure and Review, IMweb was not widely used by the IM staff that we contacted. Although OFA sent electronic links to its reports to all 19 IM staff that we contacted, 9 indicated that they did not know about IMweb. Only 21 percent (4 of 19) IM staff we contacted indicated that they used the site.

The overriding reason given by the staff who reported that they did not use IMweb was that it did not provide information that was useful to them. These staff used multiple sources of information that were located throughout IM including their own tracking systems (databases), their shared computer drives and the Commission's website. Some staff told us that internal documents were sometimes hard to locate on the shared computer drives, and that they would find a more centralized source for certain internal documents helpful.

As noted in the background section of this report, most of the requirements and best practices regarding Federal Government web sites apply to sites open to the public. However, certain best practices also apply to intranet sites. For example, organizations should:

(a) Set clear goals for their intranet sites;

(b) Identify user requirements;

(c) Monitor whether the site meets users' expectations; and

(d) Provide useful content.

Systems development procedures generally are considered applicable to large, complex projects, and include planning, defining requirements, system design, development, testing, implementation and support. However, these basic concepts can be applied to systems of any size (*i.e.*, system development efforts should be planned to ensure that user requirements are met).

The IM staff that we surveyed offered a multitude of views on what would improve the usefulness of an intranet. For example, several IM staff, including some senior staff, indicated that a more centralized source of internal documents would be useful. Another suggestion involved including the text of the Investment Company and Investment Advisers Acts and the related rules, with the date of the last update noted on the page. A further suggestion involved restricting access as appropriate to internal work products that the staff might post to IMweb. We offer the following additional suggestions:

- Upload or link selected internal documents to IMweb from other IM offices;

- Provide links on IMweb's front page to appropriate on-line research sources; and

- Include a list of staff contacts in IMweb for Investment Company or Investment Advisers Act issues.

After a review of the system, in our view, IM has at least two alternatives for improving the usefulness of its intranet. First, IM could develop a new intranet using a web-based tool such as SharePoint. SharePoint's potential benefits include centralized document management, document version control (to track revised drafts), staff collaboration, and other capabilities, which IMweb does not currently include. IM staff could search for and retrieve documents from a central location as well as set up sites for collaboration on document revisions. Second, IM could improve the usefulness of IMweb (e.g., in accordance with the suggestions noted above).

There are certainly advantages and disadvantages to both approaches. SharePoint, or a similar tool, could provide IM with more sophisticated document management and staff collaboration capabilities. To obtain these capabilities, however, IM would have to expend the resources to plan, develop and implement a new system and train its staff to use it. (One IM office tested the current version of the tool, and did not find it useful for marking documents and sharing them with other offices. However, this office was provided with little guidance, no reference materials, and insufficient permissions in the tool to designate recipients for its documents.) The other option would be to keep IMweb as is and implement useful changes quickly by, for example, implementing one or more of the suggestions noted above. In that scenario, IM would have a tool (IMweb) that may be easier to use, but its capabilities would be less sophisticated than SharePoint's or a similar tool.

However, prior to considering its options on how to improve its intranet, IM needs to more clearly identify its specific objectives for the tool. Our inspection report and the feedback from IM staff have revealed that their staff outside of OFA and the Office of Disclosure and Review, are simply not finding the site useful. Thus, we believe that IM should consider the findings of this report and make efforts to more clearly identify what it hopes to achieve from the website. Developing concrete and specific objectives would help IM to identify what functions it is seeking its intranet to provide for its staff and what types of information would be useful to be included on the site. Identifying clear and specific objectives would help inform IM with respect to whether it needs to implement a new intranet or undertake efforts to improve its existing intranet.

We also believe that IM would significantly improve the likelihood of a successful intranet project if it incorporated website and system development processes and best practices. These processes and best practices would not have to be as elaborate as those for larger, more complex systems. However, these best practices would help to provide a framework for ensuring that IM obtained a useful result that met its staff's needs.

Recommendation A

IM should identify clear and specific objectives for its intranet based upon the findings in this report and the feedback from IM staff. IM should discuss

these objectives with its IT staff and seek further clarification of the staff's needs.

Recommendation B

After identifying objectives, IM should take appropriate steps to improve its intranet, including considering the options described in this report and incorporating the feedback from its staff. This effort should include developing an appropriate project plan that incorporates applicable website best practices and systems development processes. IM might also consider consulting with other Commission offices and divisions that have implemented intranets.

Accessibility

To comply with Section 508, agencies are required to provide its blind or visually impaired individuals with a means of operation and information retrieval that does not require user vision.[4] Screen reader software such as Job Access With Speech, or JAWS, verbalizes computer screen contents to allow blind or visually impaired individuals to use agency technology. For example, screen reader software allows individuals to navigate on-screen menus, read documents and spreadsheets, and to conduct word searches for items.

IMweb was difficult to use with the screen reader software utilized in IM for visually impaired individuals. For example, the screen reader software was only able to read the converted part of the section title and one of the section titles on IMweb's main page was only partly converted into a hyperlink. In addition, while the staff directory was designed as a table, it actually combined two tables on the same page. The screen reader software read across both tables, which made the result unclear and made it difficult to comprehend the table.

In addition, the screen reader produced an unintelligible result for the fund watch report that we tested. OFA posted the fund watch reports in Portable Document Format (pdf). Files in this format can be difficult for screen readers to use. We checked the document properties for the fund watch reports posted on IMweb for the year 2007. The entries for the document properties indicated that the documents were not formatted (tagged) for use by screen readers.

The IM staff we contacted about this either indicated that they were not aware of the accessibility requirements for IMweb or they assumed that IMweb would work with the screen reader software.[5]

The Commission recently organized a working group to address Section 508 issues (Section 508 Working Group). The Section 508 Working Group includes representatives from OIT, Office of Human Resources, Equal Employment

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[4] As implemented by 36 C.F.R. §1194.31

[5] The Adobe Acrobat products used to convert the fund watch reports into pdf provided an "accessibility" feature which included document tagging. This feature appeared to have been activated on the computer used to convert the fund watch reports. IM's IT staff is looking into this matter.

Opportunity, and the Office of Administrative Services. The working group has provided Section 508 awareness training to the Headquarters and field office IT specialists to familiarize them with Section 508's requirements. Also, the working group plans to develop policies, standards and guidelines.

IT specialists are responsible for ensuring that the electronic and information technology in their offices and divisions, including intranet sites, meet Section 508 requirements. For example, IT specialists should consider Section 508 requirements when planning IT projects and developing requirements for new or modified projects.

Recommendation C

IM's IT staff should obtain the appropriate assistance and training to ensure that IMweb, and IM's other applications as appropriate, meet Section 508 accessibility requirements.

DISCUSSION OF MANAGEMENT COMMENTS

Commission management concurred with all of our recommendations and provided oral comments to this report.

LIST OF RECOMMENDATIONS

Recommendation A

IM should identify clear and specific objectives for its intranet based upon the findings in this report and the feedback from IM staff. IM should discuss these objectives with its IT staff and seek further clarification of the staff's' needs.

Recommendation B

After identifying objectives, IM should take appropriate steps to improve its intranet, including considering the options described in this report and incorporating the feedback from its staff. . This effort should include developing an appropriate project plan that incorporates applicable web site best practices and systems development processes. IM might also consider consulting with other Commission offices and divisions that have implemented intranets successfully

Recommendation C

IM's IT staff should obtain the appropriate assistance and training to ensure that IMweb, and IM's other applications as appropriate, meet Section 508 accessibility requirements.