WHITE PAPER

Intuitive enterprise applications improve business performance

Sponsored by: IFS

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2011

Global Survey

IDC Opinion

This document presents the results of an extensive survey IDC has carried out on behalf of IFS. The aim of the survey was to examine the importance of usability and flexibility in enterprise applications. Both IFS and IDC had already identified a market trend indicating that these were increasingly important to users, but the results were even more unequivocal than anticipated:

- ☑ Only 29% of companies find their enterprise applications intuitive and easy to use

- ☑ More than half (60%) of companies consider some tasks time wasting when using the enterprise application. Most notably, half of the companies (50%) stated that the applications were fundamentally not designed with usability in mind while a fifth of companies (36%) responded that the applications were never a good solution for the company in the first place

- ☑ 45 % of companies expect noteworthy business change to take place in the coming 12-24 months and as many as 82% believe their enterprise applications need modification to support these changes

- ☑ Almost half of the companies (44%) believes the enterprise applications have a negative impact on business agility

The survey clearly documents that while enterprise applications are essential for running a business; the very same applications are too rigid and obstruct companies when addressing changes in the business. Moreover everyday productivity is hampered by meager usability, caused by unintuitive user interface, poor integration, difficult navigation and lack of search functionality.

Background

Due to the technological development, the world is more interconnected and intelligent than ever and most companies operate in a global market place. Best practices and operational excellence from a single innovative company, instantly affect the market for another company on the other side of the globe. Agile companies, which swiftly react to the changes, have opportunities beyond the local markets. Companies, which are unable to react however, face massive challenges and will struggle to stay in business.

While the economy gradually recovers from the financial crisis, we are witnessing the largest transformation of the IT industry since the dawn of the PC era a quarter of a century ago. Connected mobile devices, cloud computing, massive amount of data, and digital natives entering the labor market, have a dramatic effect on how IT is used in companies and organizations. And not only does the industry change – the pace of change increases for both IT vendors and end-user companies. This evidently affects the requirements for applications – both in terms of functionality and in terms of how users interact with the application.

Each year, IDC announces a series of predictions for the near term future. One of the main predictions for 2011 is that enterprise applications become "social". This means that enterprise applications will increasingly make use of "web 2.0" functionality – e.g. semantic search and wikis or community-like help and support functionality.

Another prediction is that enterprise applications will be extended to unstructured processes and mobile devices. The main reasons are to make better use of the applications and optimize the business processes by allowing a larger number of employees in the organization to interact directly with the applications – both for accessing information and feed data back in the system.

While not included in this IDC's predictions, an important trend for the IT industry is the increased pace of change in business and society today. New products and services are brought to market continuously and companies need to be agile and quickly respond to changes. The logic consequence of this is that companies need flexible enterprise applications, which allow for change in market approach and business processes.

Enterprise applications pose challenge to business productivity

Most companies of some size rely heavily on enterprise applications, which encompass significantly more than basic accounting. Whether using individual applications or an integrated solution to manage customer relationship, human capital, logistics, supply chain, internal processes etc. it is a highly complex setup. Unfortunately, the complexity of the system is often reflected in the use of the applications.

FIGURE 1

Enterprise applications' ease of use

Q. How easy to use are your enterprise applications - ERP, CRM, BI, Financials etc.?
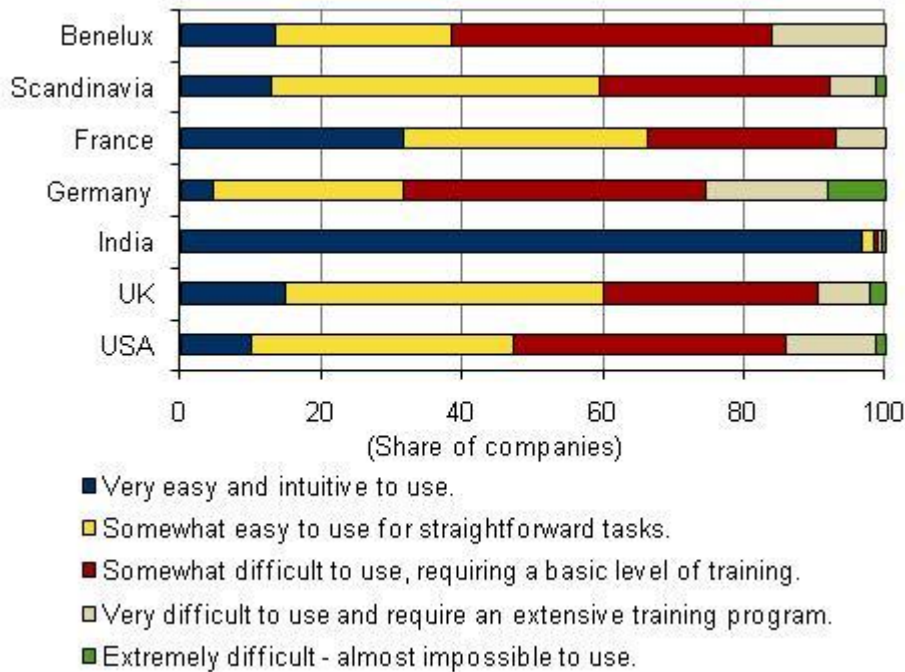
Source: IDC, 2011

Enterprise applications are not considered intuitive and easy to use. All in all, just less than two thirds of the respondents believe that basic use only is relatively easy. However, as the figure above illustrates, there are considerable country differences.

Most apparent is that virtually all respondents in India find that the use of enterprise applications is easy and intuitive to use. Although this can partly be explained by the importance of usability in the purchase process, which will be dealt with later in this document, IDC believes the main reason is in the cultural differences. Most employees in India are very task oriented whereas in the other countries and regions, most employees are result oriented. In addition, USA and Western Europe are more advanced in terms of consumers' IT use and more accustomed using PCs and technologies like smartphones.

The other differences between the countries largely reflect the industry demographics and the installed base of enterprise applications. For instance German companies are least likely to find the applications easy and intuitive as there are relatively more manufacturing companies in Germany. Germany is also the country, where most respondents find that the applications are very or extremely difficult to use.

It should be stressed that it is the perception of user friendliness which differs significantly; actual use is more or less identical across the globe. Consequently it is just as important to focus on usability as the benefits of improving workflows and processes are equally valuable.

When asked about the specific issues related to the use of enterprise applications more than 60% of the respondents report that there are at least some areas that could be improved. Again India stands out with less attention to time wasting activities

and excluding, more than 75% of the respondents can identify areas that could be improved.

Most common concerns relate to complexity and usability of the applications. Many users find the applications unintuitive and illogical, which make it difficult for new users. Other important issues include flexibility, integration, performance and being outdated. In regards to usability and complexity, steep learning curves and illogical menus are frequently brought up. Some of the most saying statements are:

- ☒ *"It is so difficult to use... Almost all employees are struggling with it!"*

- ☒ *"Lack of flexibility in the execution process and time to recover errors."*

- ☒ *"Difficult to customize, problematic to encourage dissemination of information. Hard to integrate legacy business processes"*

- ☒ *"Not intuitive enough for users to be able to do something new without contacting helpdesk for guidance. Ad-hoc reporting is not easy enough for users to 'self-serve'."*

Though ease of use and complexity may be considered mere nuisances, which can be addressed by proper training, IDC believes these issues should be attended to, as they reduce productivity. The survey reveals that 36% encounter tasks that are considered time wasters when working with the enterprise application. Excluding India, the figure is 44%, which shows the importance of improvement. American companies are most likely to encounter time wasting tasks (57%) and Indian companies least likely (1%) followed by France (34%). Again, country differences are largely explained by industry demographics, but the installed base of specific applications have a saying as well.

Time wasting activities in enterprise applications

Q. In your opinion, which of the following is the top time waster when using business applications?
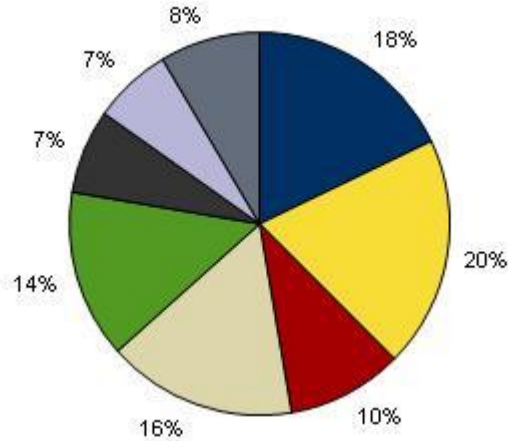
- Transferring data from one application to another.
- Searching for information through a complex navigation structure.
- The application just doesn't work in the way that I want to work.
- Learning modules with different structures, commands and work in different ways.
- Waiting for applications that have slow to start up and poor system response times.
- Navigating in and between enterprise applications that are not fully integrated.
- Functions or business process steps are not grouped or ordered in a logical way.
- Other

Source: IDC, 2011

The most common time wasters are direct results of the above-mentioned issues. As the figure above depicts, searching through complex menu structures are considered the main time waster – closely followed by transferring data between applications. Learning how to use more functionalities and basic system performance issues are also considered time wasting. Most of the replies in the "other" category also revolve around deviations of usability and complexity – often related to a specific task or functionality.

Considering the prevalent issues with using enterprise applications, IDC believes companies can benefit from improving usability and reducing the perceived complexity. Although straightforward training is enough to make most relevant employees able to use the systems, intuitive interfaces and seamless integration allows for more advanced use, which will support faster and better business decisions.

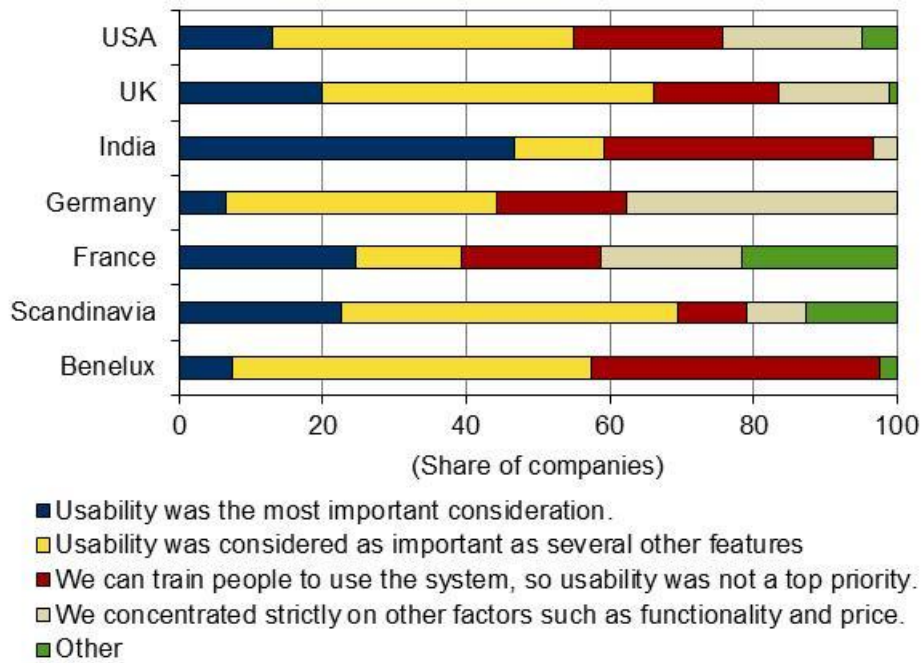## Intuitiveness and search are crucial for improving usability

The figure below illustrates that usability is already considered by 60% of companies - 24% even saw it as the most important consideration. Although this seems like a

large share, IDC believes most companies stating usability was one of several features considered did not truly prioritize this, as more tangible functionalities are likely to take center stage over "soft" features when pros and cons are weighted.

F I G U R E 3

Companies focus on usability

Q. In the past what priority did you place on application usability when looking to purchase a new system?

- ■ Usability was the most important consideration.
- ▫ Usability was considered as important as several other features
- ■ We can train people to use the system, so usability was not a top priority.
- ▫ We concentrated strictly on other factors such as functionality and price.
- ■ Other

Source: IDC, 2011

Again India stands out; this time because companies from the country is most likely to have had usability as the most important consideration. The figure also shows that usability has had least importance in Germany and Benelux.

FIGURE 4

Value of usability features

Q. Which of these usability features would you find valuable?
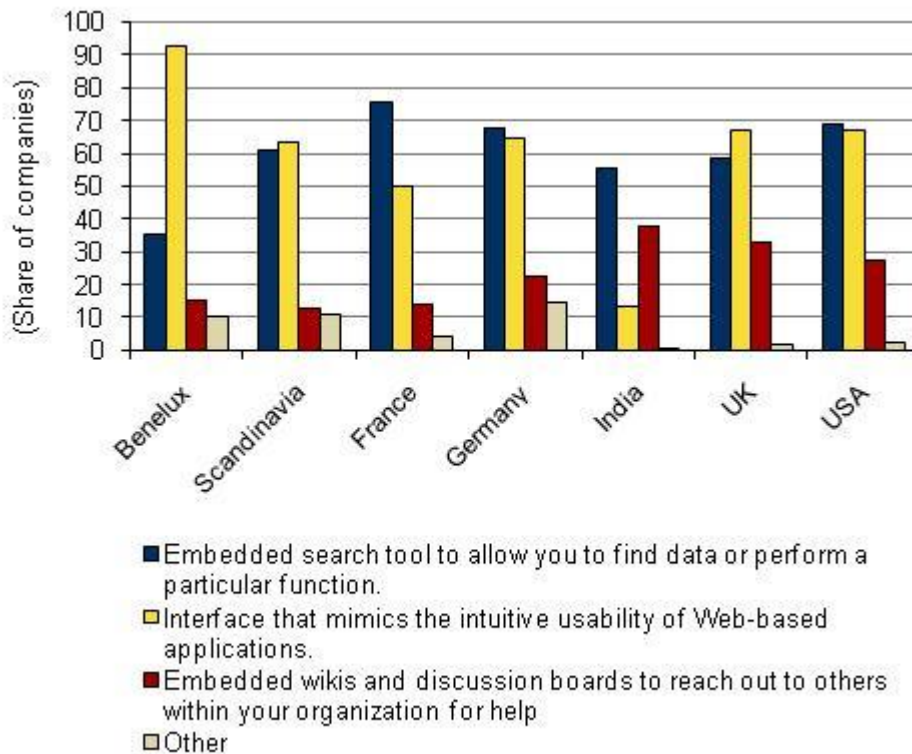
Source: IDC, 2011

The figure above clearly documents that both search and intuitiveness are highly valued as usability related features. All in all, more than 60% of the respondents, value embedded search, while 55% values an intuitive user interface. The replies in the "other" category predominately relate to integrations with other applications or importing and exporting data.

There is some variation between countries as companies in the Scandinavian countries, Germany and USA find that intuitive interface and search tools are about equally important. An intuitive user interface is considered especially important in Benelux, while search is most important in France and India. Interestingly, Indian companies rarely values an intuitive user interface, but is most interested in wikis, discussion boards etc.

This goes well with the previous findings and argumentation that Indians are less familiar with IT and intuitive user interfaces and more Indian companies have actually focused on usability when purchasing the enterprise applications.

Although the majority of companies have considered usability when deciding on enterprise applications, more than 40% of the surveyed companies have experienced actual problems related to usability in the application.
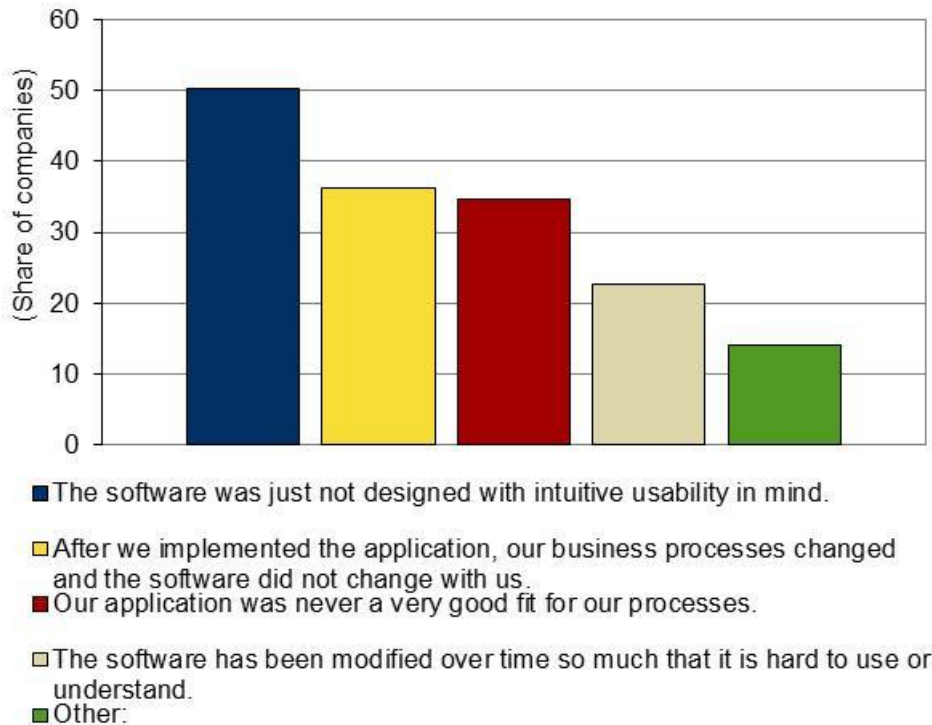
The survey proves that usability should be a key criterion when evaluating enterprise applications, as the likelihood to experience problems correlates with the company's previous focus on usability. Only 24% of the companies, which had usability as the

most important consideration has experienced problems. Among the group of companies that did not consider usability as an important factor almost half (49 %) have encountered problems. While this emphasizes the significance of considering usability, it also reveals that usability is complex and difficult to address.

FIGURE 5

Cause of usability challenges

Q. What do you think are the root causes of the usability challenges with your enterprise application?

■ The software was just not designed with intuitive usability in mind.

□ After we implemented the application, our business processes changed and the software did not change with us.
■ Our application was never a very good fit for our processes.

□ The software has been modified over time so much that it is hard to use or understand.
■ Other:

Source: IDC, 2011

The figure above shows that the most prevalent usability problem goes very deep as most experience problems, which relate to the software being designed without intuitive use in mind. Included in other replies are mostly specific issues or that the system is old fashioned and has a steep learning curve. The results also suggest that companies struggle with finding an application which fits the specific needs and that change in the application and/or the business environments enhances the problems.


Software vendors can help companies become more agile

All companies live in a world of constant change and 45% of the surveyed companies expect noteworthy business changes to take place in the coming 12-24 months. The financial crisis have had a great effect in all countries, but there is still focus on growing business and especially in USA (64%), United Kingdom (73%) and France (53%) are likely to go through some kind of change in business.

Anticipated business changes

Q. What changes do you anticipate your business will be making in the next 12 to 24 months?
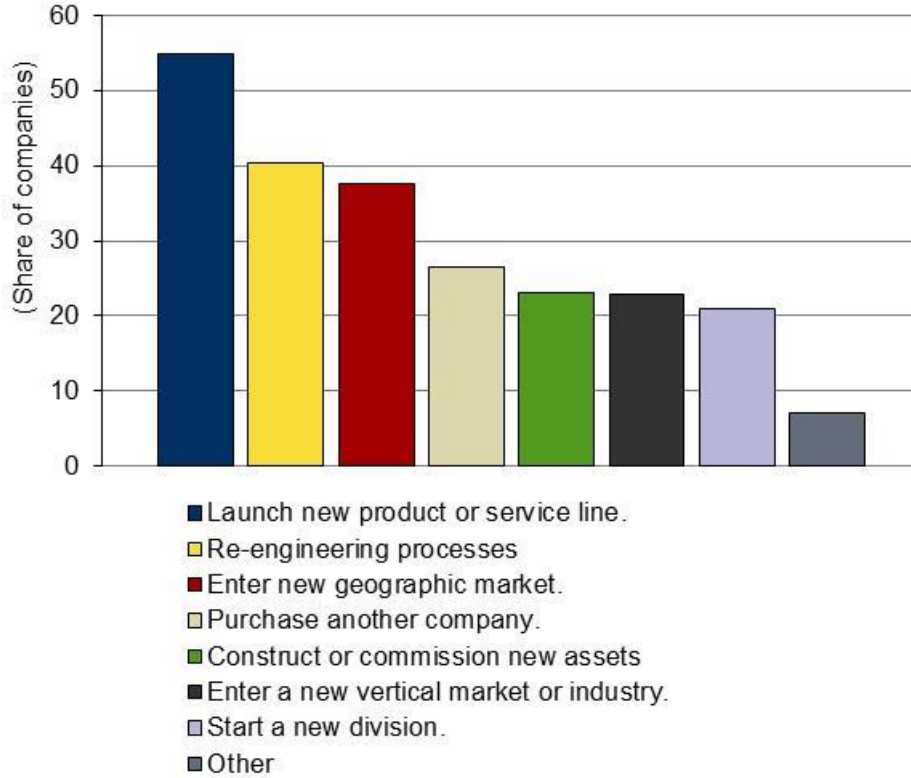

Source: IDC, 2011

The figure above depicts the most prevalent changes, which are launching a new product or service line, re-engineering processes or entering new geographies. Most of the companies, which expect change, anticipate several changes to occur. For instance will entering a new geographic market often also include setting up a new division, while acquiring another company virtually always includes process changes and/or entering new markets.

Evidently, these changes must be supported by the enterprise applications in use. However, as the figure below illustrates less than a fifth (18%) expect that this is directly possible, while nearly half (48%) believes some adjustments or modifications are needed. Most of the replies in other are specific in terms of which – typically substantial – modifications need to be done.

F I G U R E 7

Enterprise applications' ability to cope with business change
%
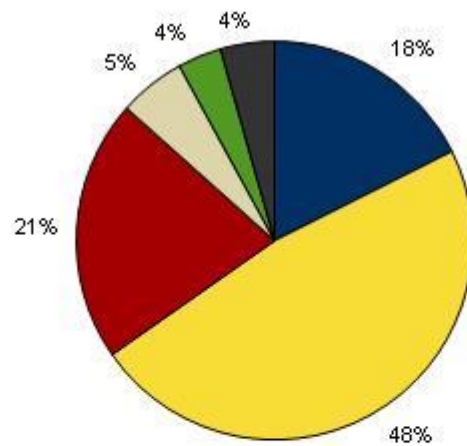
- Extremely well with minimal added expense or business disruption.
- Pretty well, but integration/modification are required.
- Not too well. Substantial functions must be handled outside the application.
- We will have to completely re-implement our enterprise software in a different way.
- We have not really thought about it.
- Other

Source: IDC, 2011

Most companies believe software vendors can help them in their endeavors of change – typically by making it easier for the user to reconfigure the applications without external help and thereby increasing the applications flexibility, but also by being more receptive and attentive to the changes in the specific businesses and provide better software, which is more agile, easier reconfigurable and specialized for specific industries.

FIGURE 8

Software vendors' ability to help

Q. How do you think your enterprise software vendor can help you best deal with ongoing business change?
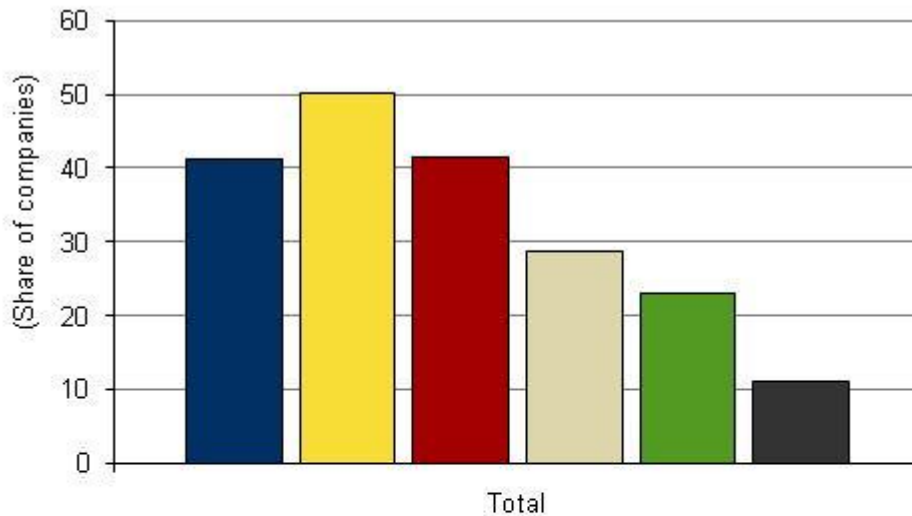
- Design enterprise software so that it can be implemented and reconfigured quickly and easily.
- Make it easy for us to change the way the software is configured without consultants and system integrators.
- Listen to us and take an interest in what is happening in our business.

- Anticipate changes in technology, bringing new and innovative technology into the application.
- Focus on our industry so that as our needs expand, the right vertical industry functionality is already available in the application.
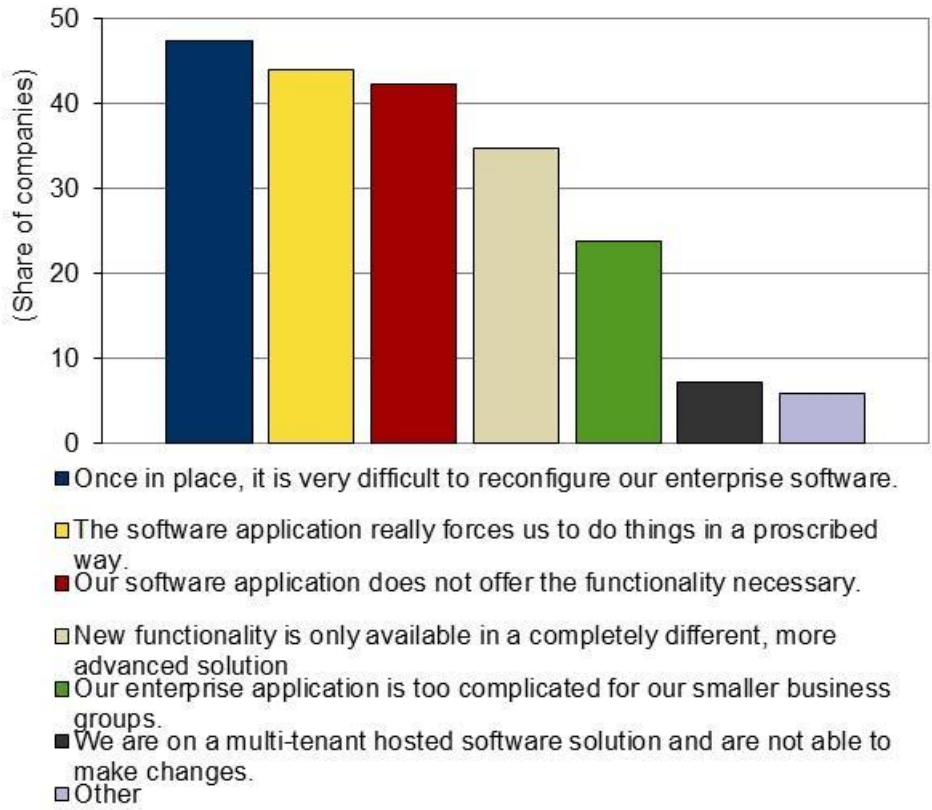- Other:

Source: IDC, 2011

The consequence of having to modify enterprise applications to match changing business needs is rigorous. Almost half of the companies surveyed (44%) believes the enterprise applications have a negative impact on business agility, with India and German companies being least likely to believe so, with respectively 8% and 16%.

FIGURE 9

The negative effect of enterprise software

Q. What are the ways that your enterprise software slows you down or makes change more difficult?

■ Once in place, it is very difficult to reconfigure our enterprise software.

□ The software application really forces us to do things in a proscribed way.

■ Our software application does not offer the functionality necessary.

□ New functionality is only available in a completely different, more advanced solution

■ Our enterprise application is too complicated for our smaller business groups.

■ We are on a multi-tenant hosted software solution and are not able to make changes.

□ Other

Source: IDC, 2011

As the figure above illustrates, the negative effects are multiple. The most prevalent issue is actually changing or reconfiguring the enterprise application. Nearly as common are problems arising from companies being forced to use processes, which match the IT system rather than the business case and simple lack of required functionalities.

Survey Scope and Methodology

This Whitepaper is based on the results of a global survey carried out during March-April 2011. The questionnaire and response alternatives were prepared by IDC and IFS in collaboration to ensure the stringency and clarity of the results and avoid bias and loaded wording.

The survey consists of 1244 completed telephone interviews (CATI) with C-level respondents in companies with 100 Million USD or more in annual revenue. The interviews were carried out in Benelux (44), Scandinavia (300), France (101), Germany (63), India (208), UK (200) and USA (237) across all industries excluding financial services and the public sector. The final sample encompasses:

- ☑ Process manufacturing: 26%
- ☑ Discrete manufacturing: 38%
- ☑ Construction: 3%
- ☑ Retail and wholesale: 6%
- ☑ Communication: 3%
- ☑ Utility: 2%
- ☑ Service: 2%
- ☑ Other: 16%

The respondents were screened to ensure involvement and influence in the purchasing process for enterprise applications – i.e. enterprise resources planning (ERP), enterprise asset management (EAM) etc. The final sample consists of C-level executives at financial/corporate, line of business or IT management level.

- ☑ 472 CFO/corporate management
- ☑ 157 CIO/CTO
- ☑ 263 LOB (Line of Business)

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