ISDA FpML Survey
January 2011

INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION

ISDA, which represents participants in the privately negotiated derivatives industry, is among the world's largest global financial trade associations as measured by number of member firms. ISDA was chartered in 1985, and today has over 800 member institutions from 54 countries on six continents. These members include most of the world's major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end users that rely on over-the-counter derivatives to manage efficiently the financial market risks inherent in their core economic activities.

Since its inception, ISDA has pioneered efforts to identify and reduce the sources of risk in the derivatives and risk management business. Among its most notable accomplishments are: developing the ISDA Master Agreement; publishing a wide range of related documentation materials and instruments covering a variety of transaction types; producing legal opinions on the enforceability of netting and collateral arrangements (available only to ISDA members); securing recognition of the risk-reducing effects of netting in determining capital requirements; promoting sound risk management practices, and advancing the understanding and treatment of derivatives and risk management from public policy and regulatory capital perspectives.

About FpML
FpML (Financial products Markup Language) is the freely licensed business information exchange standard for electronic dealing and processing of privately negotiated derivatives and structured products. It establishes the industry protocol for sharing information on, and dealing in, financial derivatives and structured products over the Internet. FpML is based on XML (Extensible Markup Language), the standard meta-language for describing data shared between applications. The standard is developed under the auspices of ISDA, using the ISDA derivatives documentation as the basis. For more information, please visit www.fpml.org

1. Introduction

The FpML survey asks for information on the current use of FpML, and planned use going forward. The use of the standard has become widespread and not all users of the standard are actively involved in the development of the standard itself. This survey is one of the tools for the FpML Standards Committee to collect information on the areas of use and give direction to the future development of the standard. It is the intention to conduct the survey on an annual basis going forward.

43 firms responded to the survey; 20 are classified as financial firms and 23 as non-financial. This later category includes vendors, central market infrastructures such as data repositories, and clearing houses and administrators. Certain of the questions were geared towards financial firms while others were asked specifically to capture vendors in the broad sense. Annex 1 contains the list of firms that responded and the category they fall under. The overview of the survey results is split along the same lines where appropriate.

The survey responses are grouped into five categories:
1. Responding firms' background
2. Usage and application of FpML
3. Standard development strategy
4. Documentation and training
5. Software and consulting firm profile

2. Background

This first set of questions gives an idea of the profile of the survey respondents. We divided the respondents into a first category of "financial" firms and a second category of technology firms, solution providers and central infrastructures, such as clearing houses and data repositories. These are referred to as "non-financials" in the text. 20 firms are classified as financial firms; 23 firms fall in the non-financial category.

As part of the background questions and to establish a profile of the firms, we asked the volume of derivative contracts on a weekly basis. 74% execute more than a thousand OTC derivatives trades on a weekly basis. (Table 1)

Table 1. Approximate volume of derivative contracts traded weekly
Financial firms

>1000/week	73.68%
100-1000/week	15.79%
10-100/week	10.53%

In addition, 48% of non-financial firms process over a thousand OTC derivatives trades on a weekly basis. (Table 2)

Table 2. Approximate volume of derivative contracts processed weekly
Non-financial firms

>1000/week	47.83%
100-1000/week	0.00%
10-100/week	8.70%
<10/week	4.35%
Not applicable	39.13%

Finally, non-financial firms were asked about the distribution of their software throughout the market. 31% indicated their software is installed at more than 25 derivatives market participant firms. (Table 3)

Table 3. Number of derivatives market participant firms at which a firm's software is installed
Non-financial firms

|	
>25	30.43%
10-25	8.70%
<10	17.39%
None/unknown	4.35%
Not applicable	39.13%

3. Usage and applications, volumes

In what follows, references to FpML include both standard FpML and also FpML based messages (extended FpML).

3.1 Usage and applications
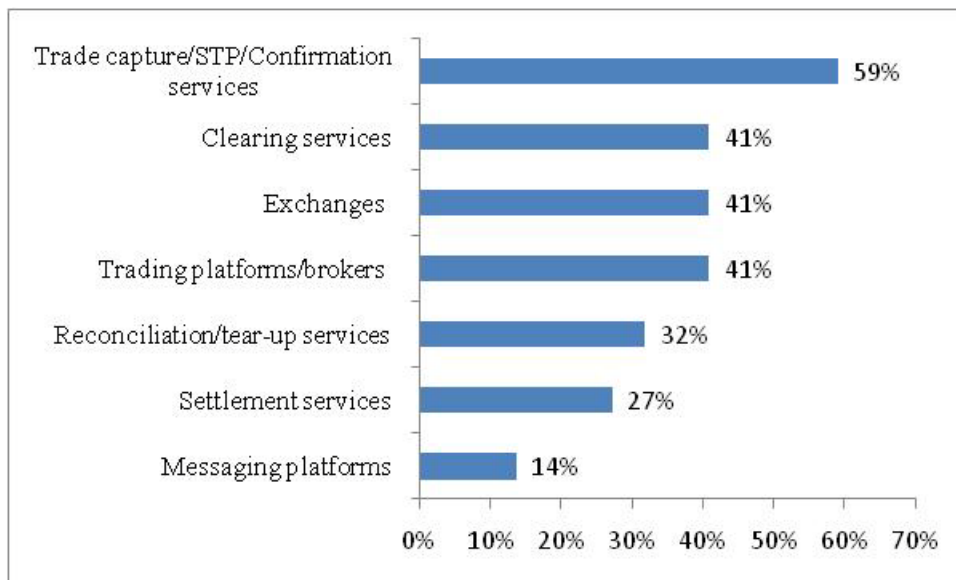
Communicating with external platforms

The adoption rate for trade capture and confirmation services is very high, with 95% of the financial firms indicating the use of FpML for these purposes. Other areas with an uptake from half or close to half of all respondents include the links to trading platforms and brokers; the link to reconciliation and tear-up services, and links to clearing houses.

Chart 1. Communicating with external platforms
Financial firms
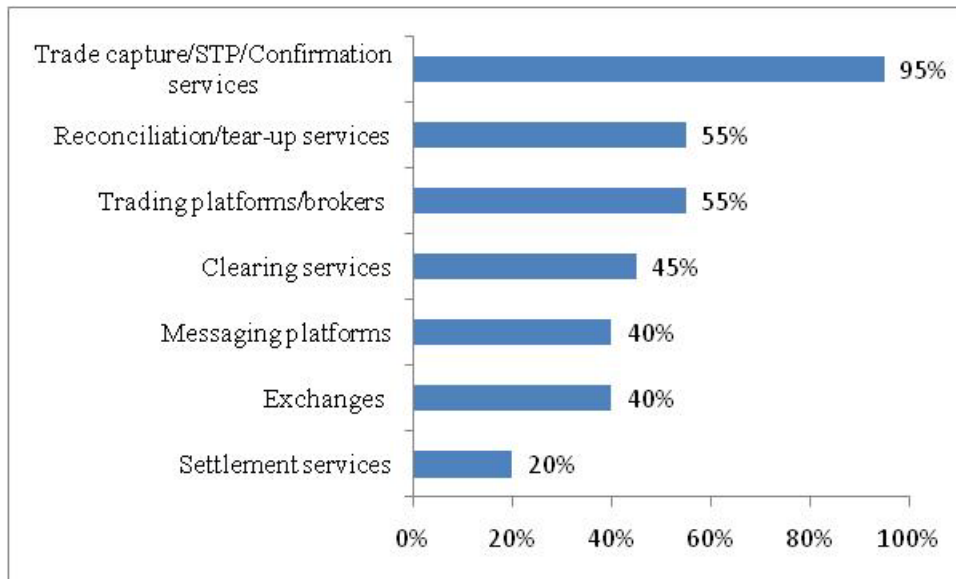
A similar trend can be seen in the data provided by the non-financial firms, reflecting their involvement or support for these areas. (Chart 2)

Chart 2. Communicating with external platforms
Non-financial firms

Communicating with external parties

When communicating with external parties the most common scenario for sending and/or receiving FpML is the communication with a counterparty. Close to 60% of the respondents provide that kind of functionality. Communication with middle office and back office providers comes in second place with close to 40% of respondents. The use of FpML for integration with valuation and risk services providers is remarkable. This is not an area where FpML coverage has been widely known in the industry.

Chart 3. Communicating with external parties
Financial firms
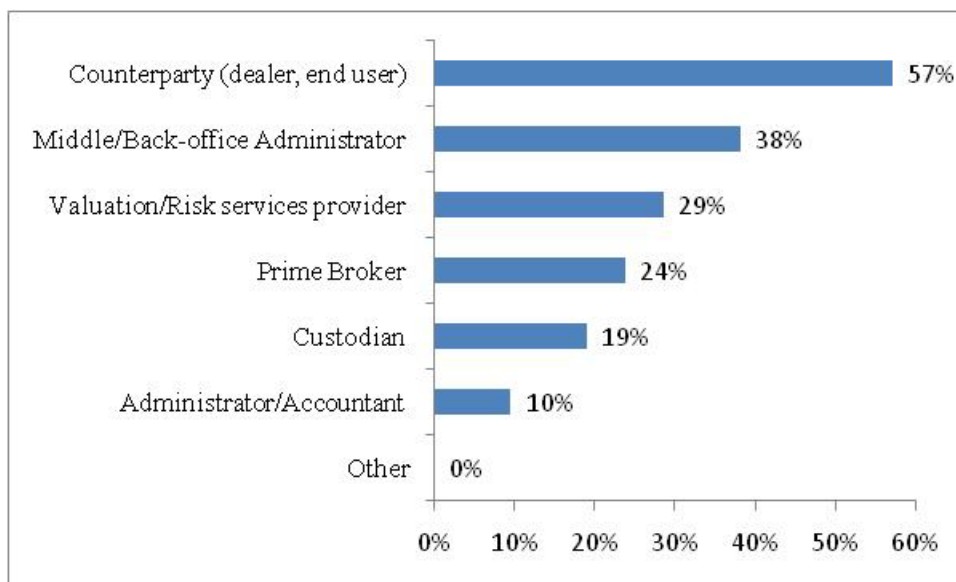
Internal STP

This question is intended to determine the use of FpML internally; within institutions rather than for communication with external parties. The areas where FpML is most used internally are the integration between front office and middle office systems (76.19%), to confirmation systems (71.43%), and between front office systems (57.14%).

Table 4. Internal STP
Financial firms

Between front office systems	57.14%
Between front office and middle office (position keeping, P/L) systems	76.19%
To confirmation systems	71.43%
To settlement systems	38.10%
To global reporting/risk systems (credit, market, collateral)	28.57%

Pricing and Risk Management

In the area of pricing and risk management, we see a relatively low uptake for the financial firms. This low degree of uptake can partly be explained by the fact that substantial coverage for pricing, valuation and risk reporting was just introduced in recent versions of the standard. Reporting itself is currently a major area of focus and will be facilitated by the views approach in version 5.x.

The responses from the non-financial firms indicate that a slightly higher degree of support for these functions is available (Table 5).

Table 5. Pricing/Risk Management

	Financial Firms:	*Non-financial firms:*
Valuation/risk reporting	19.05%	36.36%
Interfaces to pricing applications	23.81%	27.27%

Other usage

Table 6. Trade archives/databases/audit records

	Financial Firms:	*Non-financial firms:*
FpML trade/message archives for operational systems (position keeping, settlement, etc.)	33.33%	54.55%
FpML trade/positions for risk management or reporting applications	33.33%	27.27%
FpML message archives for logging/audit/analysis purposes	47.62%	36.36%

Table 7. Reporting

	Financial Firms:	*Non-financial firms:*
Internal position reporting	33.33%	27.27%
To/From counterparties or other business partners (includes DSWG format)	33.33%	36.36%
Cash flow reporting/reconciliation	23.81%	31.82%
Valuation reporting/reconciliation	23.81%	31.82%
Regulatory reporting	14.29%	36.36%

3.2 Message volumes

The first question in this section asked for the approximate total daily number of FpML or FpML-based messages produced and/or received in the organization, across all application areas and product types. The numbers include corrections, cancellations and position messages in bulk reports, but exclude acknowledgements and error messages.

The numbers vary greatly. One obvious reason for the variation is the difference in size of the institutions and the types of OTC derivatives that they are trading or processing. In addition, not every institution provided an answer for this question. For the financial institutions the highest number of daily messages given is 3.255 million. For the non-financial firms the highest number of daily messages given is 1 million.

The second question in this section asked for the approximate percentage messaging breakdown (nearest 5-10%) by asset class. This breakdown by asset classes puts interest rate derivatives first with close to 40% of the volume, followed by credit derivatives and FX. The uptake of very recent coverage in FpML of commodity derivatives and syndicated loans is encouraging.

Table 8. Messaging volume - asset class breakdown

	Financial Firms:	*Non-financial firms:*
Interest Rates	39.29 %	38.08 %
Credit Derivatives	18.94 %	24.62 %
FX	12.36 %	18.85 %
Equity	7.79 %	6.54 %
Commodities	5.01 %	2.85 %
Syndicated Loans	3.21 %	8.08 %
Other	13.40 %	1.92 %

This next chart gives the breakdown of the messaging volume for the financial firms by type of application. The response for each individual institution totals 100%. The response indicates a high level of use of FpML for internal STP purposes.

Chart 4. *Messaging volume - application breakdown*
Financial firms
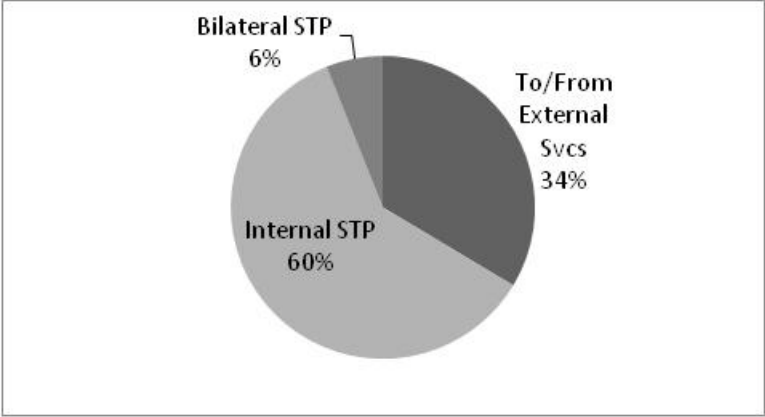
Finally, Table 9 gives the average number of different external organizations financial firms communicate with, using FpML.

Table 9. *Messaging volume - external use*

	Financial Firms:
External Platforms/Utilities	2.31
Clients/Counterparties	5.07
Financial Svc Providers	3.93

The numbers vary greatly. For example while the average number for clients/counterparties is 5.07, the maximum number mentioned is 40.

4. Standard development strategy

As part of the development strategy we asked a set of questions on the current and planned use of the standard. For current use among financial firms, the versions most often cited are 4.2 and 4.6. In the 4 series the most recent version in use is Version 4.7, which reached recommendation status in February 2010. This shows a time lag in adopting new versions. An important driving factor for the adoption of a new version is the new functionality that it contains. (See: http://www.fpml.org/roadmap/roadmap.pdf for a high level overview of the additions in each version).

The information for the non-financial firms shows a more even distribution across the different versions. Certain non-financials do support all versions. This is partly driven by the nature of the non-financials and their business model. We do see a high uptake of Version 4.6 for the non-financials, which is in line with the financials.

It is positive to see the first uptake of the 5.x versions. Version 5.0 was published as a Recommendation in July 2010. The low level of use of earlier versions of FpML (before 4.0) are also an indication that firms do upgrade when newer versions become available.

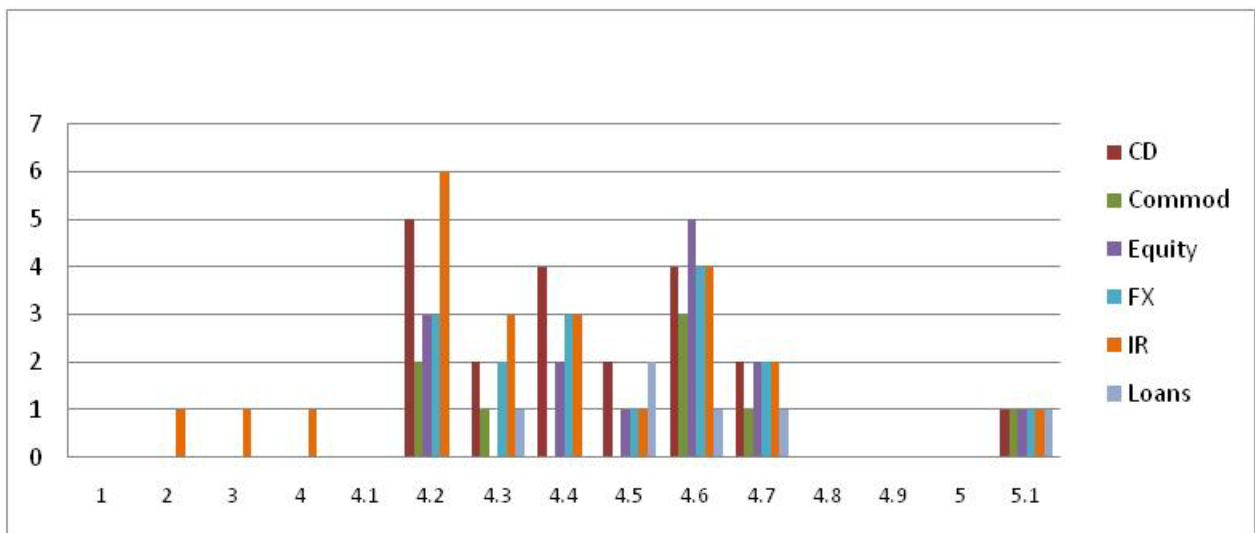**Chart 5. FpML versions - current use**
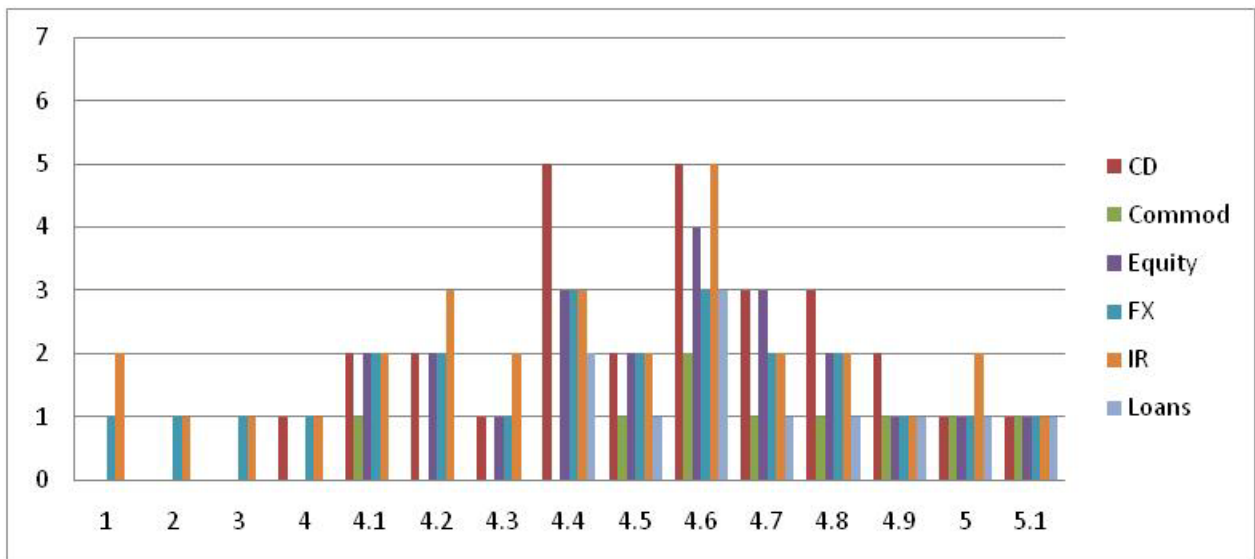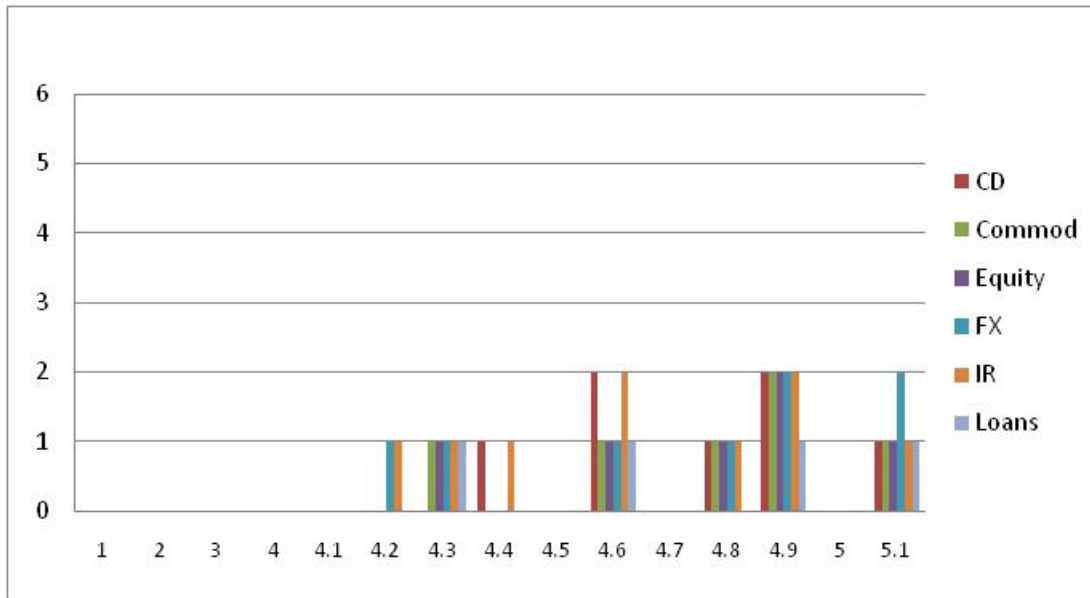*Financial Firms*

Chart 6. FpML versions - current use
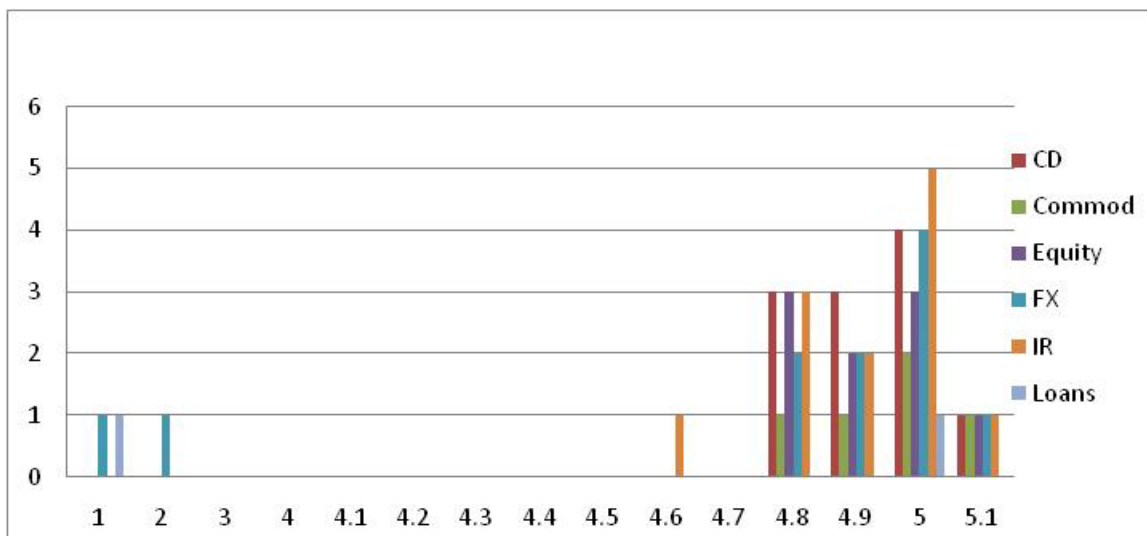*Non-financial Firms*

The overview for the planned use of the standard, which can be found in charts 7 and 8, points towards the more recent versions of the standard. In their planning firms seem to skip Version 5.0, which is not unexpected given that Version 5.0 does not provide new product coverage compared to Version 4.8. In addition, Version 5.1 covers all 5.0 functionality and more.

Chart 7. FpML versions - planned use
Financial firms

The planned use by the non-financial firms is even more concentrated in the most recent versions. Note that at the time of the survey, Versions 4.8 and 5.0 were the most recent versions in Recommendation. Versions 4.9 and 5.1 were in development.

Chart 8. FpML versions - planned use
Non-Financial firms

A second set of questions under the development strategy focuses on FpML extensions. There is a clear difference between the financial firms where most (85%) of the respondents do have extensions, versus the non-financials, where only slightly more than 50% make extensions. Type extension is the preferred way of extending the standard.

Specific examples of extensions given by respondents include: payment information; transaction data; non-STP product representation; customer account information; sales attribution and commission; repos, future contracts, hedged loans, floating rate loan deposit contracts.

Note that the results are not volume-weighted. Each response is given the same weight.

Of the firms that indicated they had extensions, the difference between financial and non-financial firms in terms of the scope of their extensions is revealing. Financial firms are adding features/fields (71%) or products (52%) in at least 50% of the cases. The percentages for non-financial firms are considerably lower with only one in four providing these types of extension. (Table 11)

In general, firms indicated they are extending product coverage more than existing messages or processes.

Table 10. Extension mechanism

	Financial Firms:	*Non-financial firms:*
We don't extend	14.29%	45.45%
Wrapping	28.57%	18.18%
Type extension	61.90%	18.18%
Schema customization	33.33%	13.64%

Table 11. Scope of extensions - product coverage

	Financial Firms:	*Non-financial firms:*
Features/fields	71.43%	22.73%
Products	52.38%	22.73%
Asset classes	42.86%	9.09%

Table 12. Scope of Extensions - process and workflow

	Financial Firms:	Non-financial firms:
Features/fields	52.38%	18.18%
Messages/events	52.38%	13.64%
Messaging framework	28.57%	22.73%

The final section under development strategy focuses on potential areas for future use of FpML. The questions on future use range from more product coverage in existing asset classes to additional derivatives asset classes. In addition we asked for feedback on integration and inter-operability efforts with other standards.

The two asset classes in which the demand for additional coverage is highest are FX and Commodities (Table 13). Survey responses mention Exotics and hybrids and Repos as additional asset classes for FpML to cover (Table 14). Note that repo extensions already exist and are available on the FpML website. Repos are also most mentioned by the non-financials as an asset class to cover. For the other areas where additional coverage is required, collateral and clearing receive the most mention, followed by reference data and electronic trading. For the non-financials the top two are reference data and clearing. (Table 15)

Table 13. Additional Product Coverage in existing asset classes

	Financial Firms:	Non-financial firms:
Credit Derivatives	23.81%	27.27%
Interest Rates	23.81%	31.82%
FX	38.10%	27.27%
Equity	28.57%	27.27%
Commodities	33.33%	18.18%
Syndicated Loans	28.57%	22.73%

Table 14. Additional OTC derivatives asset classes

	Financial Firms:	Non-financial firms:
Weather	9.52%	4.55%
Exotics and hybrids	42.86%	18.18%
Repos	42.86%	36.36%
Securities Extensions	28.57%	13.64%

Table 15. Other areas of coverage

	Financial Firms:	Non-financial firms:
Pre-trade (pricing, structuring, RFQ)	28.57%	31.82%
Credit risk	28.57%	27.27%
Collateral	47.62%	22.73%
Global market risk	23.81%	18.18%
Market data	33.33%	27.27%
Reference data	42.86%	45.45%
Clearing	47.62%	40.91%
Electronic Trading	38.10%	27.27%

In terms of integration/interoperability with other standards, more than half of the firms indicated interoperability with FIX/FIXML and with SWIFT. (Table 16)

Table 16. Integration/inter-operability with other standards

	Financial Firms:	Non-financial firms:
ISO20022	28.57%	36.36%
SWIFT standards	52.38%	36.36%
FIX/FIXML	57.14%	54.55%

5. Documentation and training

As part of the questions related to the adoption of the standard, we asked about obstacles firms face in their adoption of FpML. From the list of suggestions, the issues that ranked highest as obstacles were: the complexity of the standard and the lack of use by business partners/clients. (Charts 9a-b)

The majority of firms indicated they learn about FpML through reference documentation (76% of the respondents) and examples (62% of the respondents). The available executive summaries, introductory materials and user guides (19%) or open source tools and examples applications (14%) are currently considered marginally useful when learning about FpML.

Charts 10a and 10b show that the availability of more examples and open source tools; more example applications and programming examples, score collectively as the top two mentions for additions in order to be able to use FpML more effectively.
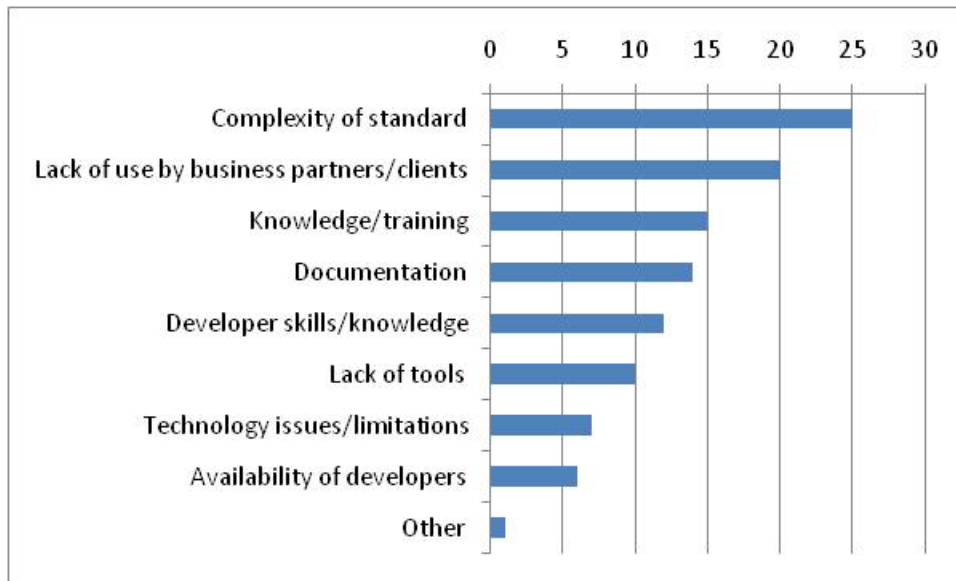
Chart 9a. Obstacles to using FpML
Financial firms

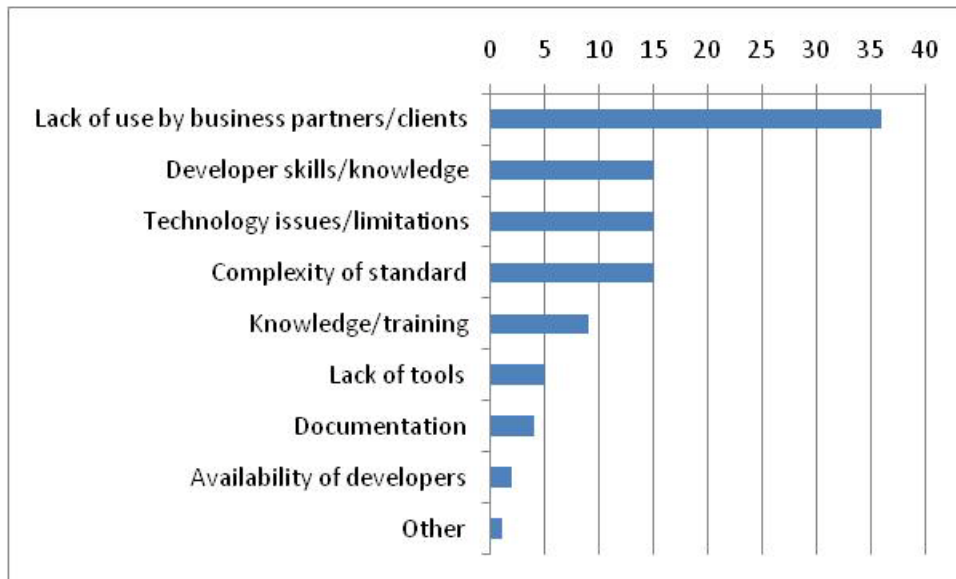

Chart 9b. Obstacles to using FpML
Non-financial firms

Chart 10a. Which of the following would help you use FpML more effectively
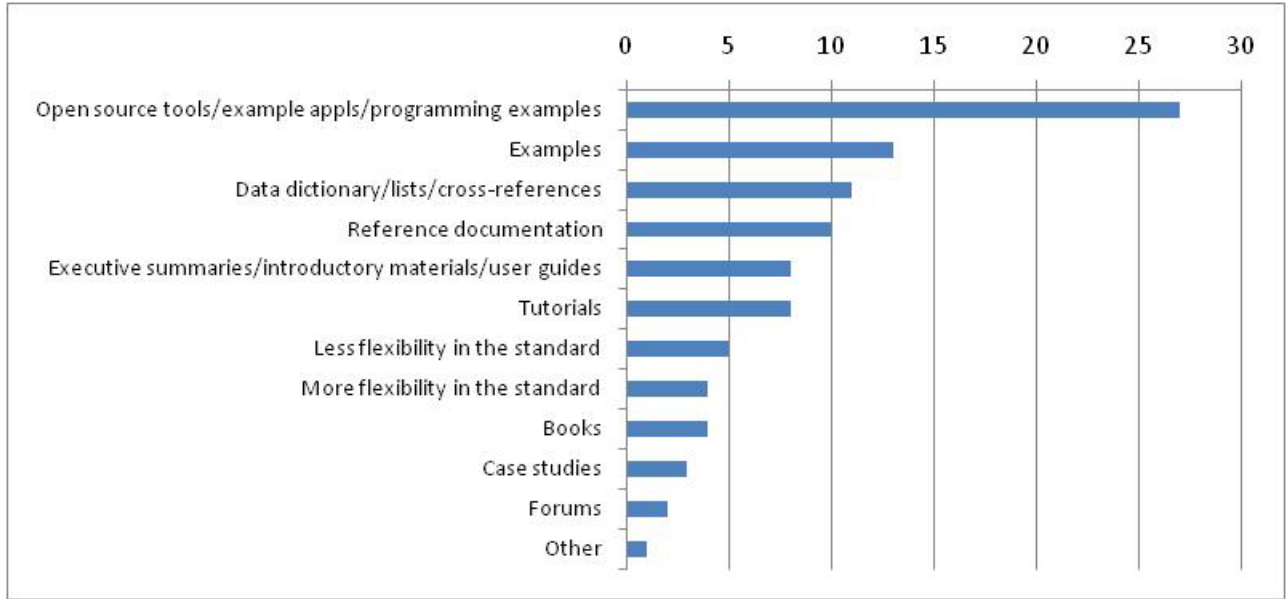*Financial firms*

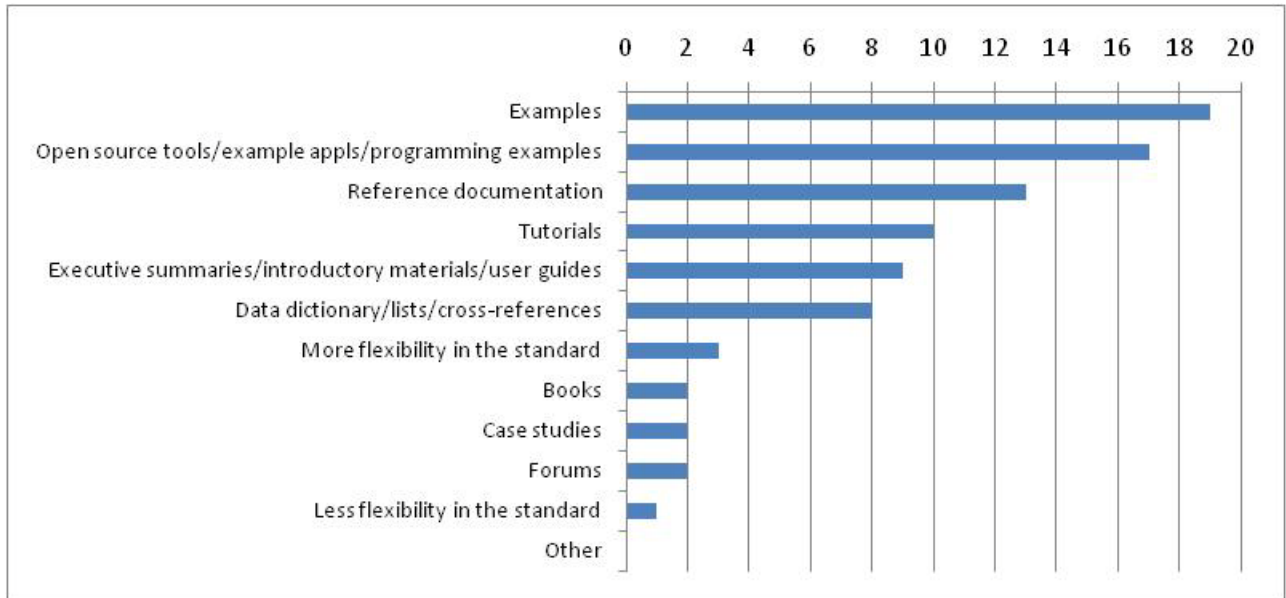***Chart 10b. Which of the following would help you use FpML more effectively***
Non-financial firms

Table 17: How do you learn about FpML
All firms

Executive summaries/introductory materials/user guides	20%
Examples	56%
Reference documentation	71%
Data dictionary/lists/cross-references	29%
Tutorials	15%
Books	2%
Case studies	2%
Forums	22%
Open source tools/example applications/programming examples	12%

The FpML website (www.fpml.org) was mentioned as a good source of information generally.

6. Software and consulting firm profile

In this final section we asked about the type of FpML based products and services non-financial firms offer. The type of offerings were broad and evenly distributed. Several non-financial firms did not respond. About a third of non-financial firms are offering interfaces to/from systems (36%) and matching and reconciliation products/services (27%). 22% of firms offer tools to create/transform/parse FpML or validate FpML.

In terms of services, firms indicated they provided advisory services (32%) and system integration services (36%).

Table 18. FpML based product and service offerings

Interfaces to/from systems (such as position keeping or confirmation systems)	36.36%
Tools to create/transform/parse FpML	22.73%
Matching and reconciliation	27.27%
Validation	22.73%
Middleware (persistence, messaging, etc.)	9.09%
Trade capture/display	18.18%
Advisory services	31.82%
System integration services	36.36%

Annex 1

Financial Firms	Non-financial Firms
Bank of America Merrill Lynch	Algorithmics
BlackRock	Alpheus Limited
BNP Paribas Corporate & Investment Bank	Brook Path Partners
Citadel	Chatham Financial Corp
Citi	CME Group
Credit Suisse	Consilient FT
Deutsche Bank	Currenex
Dexia Bank	DBmind Technologies
Goldman Sachs	DTCC
ICAP	Global Electronic Markets
JP Morgan Chase	Globeop Financial Services
MF Global	HandCoded Software
National Australia Bank	Hobury
Royal Bank of Scotland	ICE
Societe Generale	LCH.Clearnet
Standard Bank	MarkitSERV
State Street	Omgeo
Tullett Prebon	Shanghai NewTouch Software
Wells Fargo	STALEMATE
WestLB	SunGard
	SWIFT
	Taskforce
	Trade Settlement