

## SERVICES IN INDUSTRY and SEMANTICS IN SERVICES

### Service Web 3.0 Roadmap Survey

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The Service Web 3.0 roadmap survey primarily aims to obtain the general consensus of the expert community in addressing industry's most promising benefits of adopting global networked service solutions envisioned under the European Commission's proposed Internet of Services. Additionally, we aim to access a common perception of the coming challenges within the Internet of Services domain where semantic technologies could provide a viable solution.

Please take 10 minutes to share with us your predictions on industrial uptake of networked, service-based solutions and the potential role of semantic technologies.

Later this year, Service Web 3.0 will publish two specialized roadmaps that will include the collective opinions of this survey.

This survey is taken anonymously. However, if you would like to be notified about the outcome of the survey, please let us know your e-mail address (you will find the appropriate form at the end of the survey). Also, check our website: [www.serviceweb30.eu](http://www.serviceweb30.eu)



Thank you for participating.

1) Which of the following best describes your current position?

- |   |                   |
|---|-------------------|
| a. CEO/Director                             | e. Student        |
| b. CTO/Head of Department                   | f. Trainee/Intern |
| c. Principal Investigator/Senior Researcher | g. Freelancer     |
| d. IT Professional                          | h. Other:         |
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2) Which of the following best describes your organization?

- a. Academic institution
  - b. Research organization
  - c. Industry
  - d. Other
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3) How many employees work at your organization (for academic institutions, please refer to your college, department or institute)?

- |            |                     |
|------------|---------------------|
| a. 1-10    | e. 300-1,000        |
| b. 10-50   | f. 1,000-5,000      |
| c. 50-150  | g. 5,000-10,000     |
| d. 150-300 | h. More than 10,000 |

4) How would you rate your organizations' level of expertise with regard to SOA, Web services and future applications based upon an Internet of Services?

- a. Expert
- b. Advanced
- c. Intermediate
- d. Novice
- e. Unfamiliar

5) Has your organization already adopted, or does your organization plan to adopt any of the following technologies (internally or externally):

- |                                   | Yes                      | No                       |
|-----------------------------------|--------------------------|--------------------------|
| a. Web Services                   | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Service Oriented Architectures | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Cloud storage                  | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Cloud applications             | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Software-as-a-Service          | <input type="checkbox"/> | <input type="checkbox"/> |

6) From the following research domains, which will have the greatest effect (hindrance or support) on the adoption of services in industry? Please only select three domains.

- a. Network Architectures and Mobility
- b. Content Creation Media Delivery
- c. Security, Privacy and Trust
- d. Internet of Things
- e. Real World/3-D Internet
- f. Cloud Computing
- g. Future Internet Socio-Economics
- h. Other:

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7) From a scale of 1-10 (1 being the least promising, 10 being the most promising), which industrial domains stand to gain the most from a realized Internet of Services?

Industrial Domain	Potential (1-10)
Ecommerce	
Business Process Management	
Supply Chain Management	
Customer Relationship Management	
Content Management Systems	
Financial/Accounting Management	
Enterprise Resource Planning	
Marketing/Advertising	
Other:  <hr/>	

8) Which three factors will have the strongest positive effect on the use of services in industry? Please only select the three most important factors.

- a. Providing access to various resources anywhere and anytime
- b. Combining services to create composite applications/business process
- c. Integration aspects
- d. Facilitation of IT outsourcing
- e. Ease of exchanging data between various systems (facilitator of communication)
- f. Manageability of the service-based solutions
- g. Reusability of developed functionalities
- h. Ease of deployment
- i. Flexibility of the developed service based solutions
- j. Other:

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9) Which three factors will pose the greatest challenge in the adoption of services in industry? Please only select the three most important factors.

- a. The costs of implementation
  - b. Lack of standardization
  - c. Inability (due to unwillingness or high costs) to change from current software paradigm
  - d. Unclear economic benefits
  - e. Lack of available, reliable, online services
  - f. Lack of qualitative services
  - g. Lack of technical knowledge
  - h. Inadequate service engineering support
  - i. Total costs of ownership
  - j. Other:
- 

10) Which functionalities will be adequately provisioned for industrial uptake by the future Internet of Services? Please only select the three most important functionalities.

- a. Mobile device & access technology
  - b. Context awareness
  - c. Notification
  - d. Service orchestration
  - e. Remote collaboration
  - f. Content management
  - g. Security, privacy, and trust
  - h. Semantic capabilities
  - i. Assistive technology
  - j. Large-scale computing
  - k. Community development
  - l. Other:
- 

11) How would you rate your organizations' level of expertise with regard to the Semantic Web and semantic technologies?

- a. Expert
- b. Advanced
- c. Intermediate
- d. Novice
- e. Unfamiliar

12) From a scale of 1-10 (1 being the least promising, 10 being the most promising), which research domains stand to gain the most from semantic technologies?

Research Domain	Potential (1-10)
Online services and applications	
Business process management	
Business intelligence	
Information management	
Enterprise management systems	
Multimedia and content	
Social networks	
Life sciences	
Collaboration systems	
Other: _____	

13) From a scale of 1-10 (1 being the least promising, 10 being the most promising), which semantic technology research challenges are achievable in the next 10 years?

Research Challenge	Potential (1-10)
Intelligent large scale content access	
Scalable security, trust, and identity systems	
Scalable interoperability	
Reasoning/inference-based search and discovery	
Reasoning/inference-enabled collaboration	
Other: _____	

14) Which three factors will have the strongest positive effect on the use of semantic technologies? Please only select the three most important factors.

- a. Providing one common vocabulary for an organization/community etc.
- b. Automation of data and information management
- c. Opportunity to reduce human factor in various operations
- d. Providing better (semi-automatic) support for knowledge-intensive processes
- e. New possibilities for data mining and business intelligence
- f. Reasoning possibilities over semantically annotated resources
- g. Efficient combination of data, information and knowledge
- h. Knowledge management
- i. Other:

\_\_\_\_\_

15) Which three factors will pose the greatest challenge in the adoption of semantics in service technologies? Please only select the three most important factors.

- a. Total costs of ownership
  - b. Complexity of semantic technologies
  - c. Immaturity of semantic technologies
  - d. Lack of tangible benefits
  - e. Lack of training and experts to use/develop/maintain systems
  - f. Business and real world problems remain too complex and heterogeneous to be solved with semantic technologies
  - g. Other:
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16) Has your organization already adopted, or does your organization plan to adopt any of the following technologies (internally or externally):

	Yes	No
a. RDF	<input type="checkbox"/>	<input type="checkbox"/>
b. Ontologies	<input type="checkbox"/>	<input type="checkbox"/>
c. Reasoners/Inference engines	<input type="checkbox"/>	<input type="checkbox"/>
d. Semantic storage/repositories	<input type="checkbox"/>	<input type="checkbox"/>
e. Semantic Web services	<input type="checkbox"/>	<input type="checkbox"/>
f. Semantic applications (i.e. middleware/modeling tools)	<input type="checkbox"/>	<input type="checkbox"/>
e. Semantic wiki	<input type="checkbox"/>	<input type="checkbox"/>

17) Semantic technologies will be fundamental in the realization of the Internet of Services vision.

- a. Strongly agree
- b. Agree
- c. Impartial
- d. Disagree
- e. Strongly Disagree

\*\*\*\*\*OPTIONAL\*\*\*\*\*

Please leave your name and email address and we will inform you when the survey results have been compiled.

Name:

Email address:

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Thank you very much for taking part in our survey.