Assessment of Hybrid Software Development Method with Enhanced IS/IT Audit Capability.

Your participation in this questionnaire **promotes scientific research** of the International Hellenic University, towards the evaluation of **a new hybrid software development method** with enhanced **IT/IS auditing.**

Following your involvement in an IT project that **utilized core elements** of the proposed method, IT/IS controls were implemented to support **co-working agile** and **waterfall teams**. This questionnaire aims to assist in evaluating the method and confirming the theoretical evaluation results.

*The information will be kept **confidential** and study findings will be presented only in summary form and your **name or email would not be used in any report**. If you have any questions about this study, please contact Mr. Ioannis Kirpitsas (ikirpit@cs.ihu.gr). If you have questions about your rights as a research participant, please contact Prof. Theodore Pachides, International Hellenic University (pated@cs.ihu.gr).*

By completing this survey, you are consenting to participate in this study.

* Indicates required question

Email *

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Summary

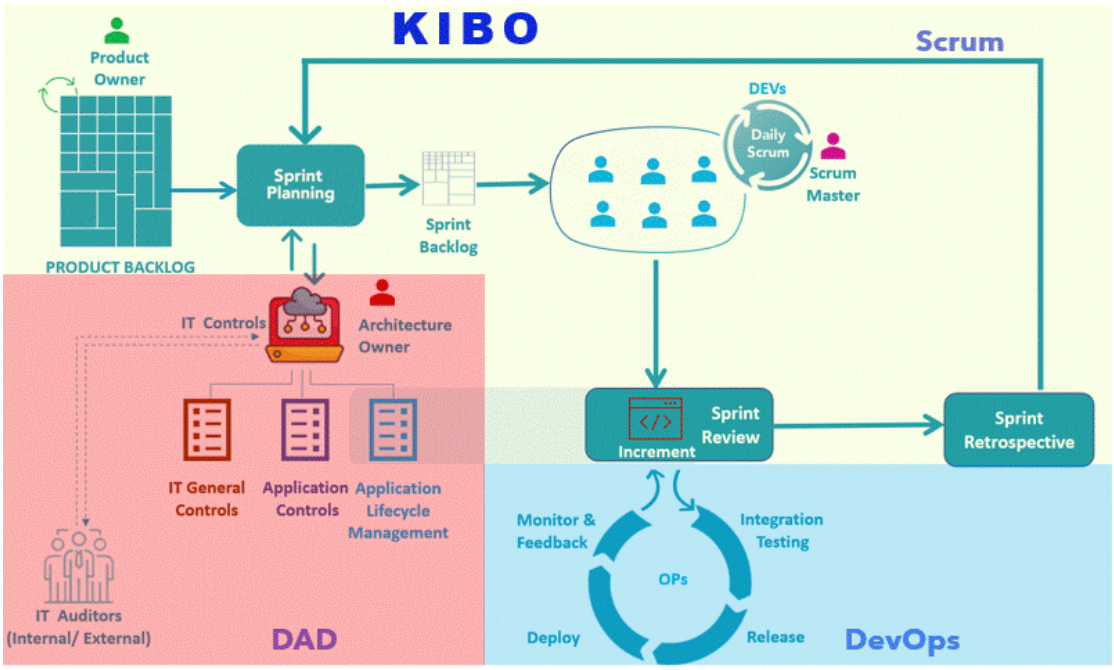
Software development nowadays combines elements from **traditional** and **lightweight** (agile) approaches, forming **hybrid methodologies**. Current research identifies a significant gap between software development and assurance of **business value** as an SDLC outcome.

Pre-fill responses, then click 'Get link'

("***KIBO***") combines elements from the following methods:

- **SCRUM**, as the basis for teamwork and solution delivery approach, adapting guidelines, events and artifacts.
- **DevOps** as the collaboration basis of the development and operation teams.
- **Disciplined Agile Delivery** (***DAD***), adapting the **Architecture Owner** role as the connection point of **IT/IS Audit function** with the development and operations teams.

You can find more details about KIBO, here



Evaluation of the Hybrid Software Development Method

The method assessed previously using **COBIT® 2019** IT governance framework, that aims to align **IT goals** and **values** with **business objectives.**

To evaluate the method's **practical implementation**, the following criteria are used:

1. Development Speed
2. Processes Followed and Final Product Reliability
3. Ease of Method
4. Security and Protection
5. Quality of Final Product
6. CI/CD (Continuous Integration/Continuous Deployment
7. Net Developer Satisfaction

Pre-fill responses, then click 'Get link'

1. Assessing Development Speed

This assessment focuses on evaluating the efficiency and productivity of the development process, determining how quickly new features or updates can be delivered to users.

1.1. The method followed enables faster development cycles compared to our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

1.2. Implementing the method has reduced the time-to-market for software products. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

1.3. The method streamlines development processes, allowing for quicker iteration and delivery. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

1.4. Development tasks are completed more efficiently with the method followed than with our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

2. Assessing Process Followed and Final Product Reliability

This assessment includes reviewing whether the development team adhered to best practices, methodologies, and standards throughout the project. Additionally, it involves testing the final product to ensure it meets quality expectations, functions correctly under various conditions, and is free from critical bugs or defects.

Pre-fill responses, then click 'Get link'

2.1. The method ensures a consistent and reliable process from development to deployment. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

2.2. Final products developed using the method are more dependable and less prone to errors. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

2.3. The method provides clear guidelines and procedures, resulting in a more reliable final product *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

2.4. Our team has greater confidence in the reliability of the final product when using the method. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

3. Ease of Method

Assessing Ease of Method involves evaluating how straightforward and user-friendly an enhanced IS/IT Audit capability method is for a team to adopt and implement. This assessment focuses on the clarity of guidelines, simplicity of processes, ease of learning and application, and integration with existing workflows.

3.1. Team members find it easier to understand and adopt the method compared to our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

3.2. The method simplifies complex development tasks, making them more manageable. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

3.3. Learning and implementing the method require less effort and time compared to our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

3.4, The method provides intuitive tools and frameworks that support ease of use for team members. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

Assessing Security and Protection of a software development method involves evaluating its integration of security practices throughout the lifecycle, focusing on robust procedures for identifying and mitigating risks, secure coding practices, regular vulnerability assessments, and adherence to security standards

4.1. The method incorporates robust security measures to safeguard both the development process and the final product. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

4.2. Our team has greater peace of mind regarding security risks when using the enhanced IT/IS contols method. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

4.3. Security vulnerabilities are addressed more effectively with the hybrid method compared to our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

4.4. The hybrid method prioritizes security throughout the development lifecycle, ensuring protection against potential threats. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

5. Assessing Quality of Final Product

Assessing the Quality of the Final Product involves evaluating the end result of a software development project to determine how well it meets the predefined requirements and quality standards.

Pre-fill responses, then click 'Get link'

5.1. Products developed using the method exhibit higher levels of quality compared to those developed using our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

5.2. The method emphasizes rigorous testing and quality assurance practices, resulting in superior final products. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

5.3. User feedback indicates higher satisfaction with the quality of products developed using the hybrid method followed. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

5.4. The hybrid method enabled us to deliver final products that meet or exceed customer expectations consistently. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

6. Assessing CI/CD (Continuous Integration/Continuous Deployment)

Assessing CI/CD involves evaluating how effectively the processes and tools automate code integration and deployment, ensuring streamlined testing and rapid, reliable software delivery.

6.1. The method facilitates seamless CI/CD practices, allowing for faster and more reliable software delivery. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

6.2. Continuous integration and deployment are more automated and efficient with the method. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

6.3. Our team experiences fewer disruptions to workflow due to CI/CD processes when using the method. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

6.4. The method promotes a culture of continuous improvement and iteration through CI/CD practices. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

Assessing Net Developer Satisfaction involves evaluating the overall contentment and experience of developers using the hybrid software development method, focusing on various factors such as the ease of use, effectiveness, and efficiency of the method or tool in supporting development tasks.

7.1. The hybrid method enhanced my productivity and effectiveness as a developer. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

7.2. I feel more engaged and motivated when working with the method compared to our existing methods. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Pre-fill responses, then click 'Get link'

7.3. I would recommend the method to other development teams based on my experience. *

- ◯ Strongly Disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

Please help us to better understand your background

Pre-fill responses, then click 'Get link'

Which role is more representative to your background? *

- ◯ Business Analyst
- ◯ Project Manager
- ◯ Product Owner
- ◯ Scrum Master
- ◯ Software Developer
- ◯ IT Auditor/ Controller
- ◯ Security Engineer
- ◯ Delivery Lead
- ◯ Business Consultant
- ◯ Agile Coach
- ◯ DevOps Practitioner
- ◯ QA Engineer
- ◯ C-Level Executive
- ◯ IT Architect
- ◯ Researcher/Academic
- ◯ Student
- ◯ Other:

How many years of professional experience do you have in your field? *

- ◯ 0 years
- ◯ 1-3 years
- ◯ 4-6 years

What is your Academic background?

- ○ Graduate
- ○ Postgraduate
- ○ Doctorate
- ○ Professor
- ○ Other:

Please leave here any extra comment or remark you may have. (Optional)

Your answer

Get link