SHYFTE 4.0

Building Skills 4.0 through University and Enterprise Collaboration

Project Presentation

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Co-funded by the
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EU Program Countries

1. ULL - Université LUMIERE Lyon 2, **France (coordinator)**
2. UNS - University of Sannio, **Italy**
3. UNL – University Nueva of Lisboa, **Portugal**
4. COGNITUS - SME, **France**

ASIA Partners Countries

1. CMU - Chiang Mai University, **Thailand**
2. KU   - Kasetsart University, **Thailand**
3. CDU   - Chengdu University, **China**
4. CUIT - Chengdu University of Information Technology, **China**
5. UPM - Universiti Putra Malaysia, **Malaysia**
6. UTM - Universiti Teknologi Malaysia, **Malaysia**

Associated Partners

Lind Homecare (SME, France); KnowledgeBiz (SME, Portugal); MCMC (Gov. Agency, Malaysia); CAIRO (Stakeholder, Malaysia)

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BUILD AND STRENGTHEN LINKS

between HEIs and Industry 4.0, and promote the job market by minimizing the skills gap.

BUILD SKILLS 4.0 LABS
or Learning centers of excellence in Asian Partner's HEI to enable each of them to become the reference center in its country.

SUPPORT ACADEMIC AND ADMINISTRATIVE STAFF
in Asian HEIs to design and implement new methodology and learning materials.

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SHYFTE 4.0 will provide the basic and novel skill development strategy in both EU and Asia with main focus on four research domains:

- Industrial engineering and management,

- Software Engineering and Big data analytics

- Wireless and Networks analytics,

- Artificial Intelligence

Specific Project Objectives:

- Analyse the **gap between the skills** acquired in HEIs and the skills required by industry of the future (WP1)

- Develop a **Skills 4.0 based learning framework** (WP1)

- **Design and implement teaching programs** and learning materials for four domains of expertise (WP1 & 2)

- **Implement four Pilots**, based on the four domains of expertise, in the HEIs of the Asian partners (WP2).

- Develop a **Skills 4.0 based Training and Learning Center of Excellence** in each Partner country (WP2)

- Define a **quality assurance plan** for the learning programs based on quality audits to ensure the sustainability (WP3).

- Develop a successful **exploitation and dissemination strategy** (WP4)

SHYFTE 4.0 Methodology

- **Methodology:** The training programs addresses both "train-the-trainer", and "train-the-students" types training. The development will follow the appropriate adaptive learning approach for skills enhancement

- **A Skills** 4.0 **based Training and Learning Center of Excellence** will be developed in each Partner country (WP2) to disseminate and sustain the outcomes of the project.

- During the project **50 students per PC** will benefit from the SHYFTE four programs. **Each program will take 5 days**. At least, **60 trainers/teachers and 300 student**s will be trained. With this approach, skills and knowledge transfer will be fast and efficient. The number of trained teachers will be changed according to the requirement.

- **SHYFTE goes in quality assessment training process**. The project will develop the Quality certification for trainers to validate the skills and develop standard/procedures of the programs.

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SHYFTE 4.0 Organization

WP1 - Preparation

- Literature review of Industry4.0,
- Identify the skills requested by Industry4.0
- Analyze the gap by overlapping the skills4.0 with the existing skills in HEIs. Develop the Skills 4.0 learning framework
- Design teaching programs and learning materials for the 4 domains.

WP2 - Developement

WP2 DEVELOPMENT

- Implementation of shyfte4.0 framework - Learning and training materials for the 4 pilots:
  - Industrial engineering and management,
  - Software Engineering and Big data analytics
  - Wireless and Networks analytics,
  - Artificial Intelligence
- Develop the skills4.0 training and learning center

WP3 – Quality Plan

WP4 – Dissemination & Exploitation

WP5 – Management

Project management coordination and reporting

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- **Budget: 952 617€**

EU GRANT REQUESTED FROM THE EUROPEAN UNION (in EUR)		
1. Staff Costs	301 262,00	Cannot exceed 40% of total Grant requested
2. Travel Costs + Exceptional Travel Costs	271 255,00	
3. Costs of Stay	227 100,00	
4. Equipment Costs	120 000,00	Cannot exceed 30% of Total Grant requested
5. Subcontracting Costs	33 000,00	Cannot exceed 10% of Total Grant requested
Total Grant requested from the European Union	952 617,00	Should be equal or above EUR 500.000,00 and cannot exceed EUR 1.000.000,00

DISTRIBUTION OF THE GRANT BY ORGANISATION (in EUR)									
Partner N°	Name of Partner	Country	PR/PA	1. Staff Costs	2. Travel Costs	3. Costs of Stay	4. Equipment Costs	5. Subcontracting Costs	Total Costs (in EUR)
P1	University Lyon2 ULL	France	Programme Countries	81 244,00	30 110,00	28 200,00	-	5 000,00	144 554,00
P2	Università degli Studi del Sannio	Italy	Programme Countries	60 664,00	29 750,00	27 000,00	-	-	117 414,00
P3	UNINOVA institute	Portugal	Programme Countries	45 179,00	28 800,00	26 100,00	-	-	100 079,00
P4	COGNITUS	France	Programme Countries	30 491,00	13 735,00	12 600,00	-	-	56 826,00
P5	Chiang Mai University	Thailand	Partner Countries	19 708,00	27 980,00	22 800,00	20 000,00	5 000,00	95 488,00
P6	Kasetsart University	Thailand	Partner Countries	19 708,00	27 600,00	21 600,00	20 000,00	5 000,00	93 908,00
P7	Chengdu University of Information Technology	China	Partner Countries	14 025,00	28 320,00	22 800,00	20 000,00	5 000,00	90 145,00
P8	Chengdu University	China	Partner Countries	14 025,00	28 320,00	22 800,00	20 000,00	5 000,00	90 145,00
P9	University Putra Malaysia	Malaysia	Partner Countries	8 109,00	28 320,00	21 600,00	20 000,00	4 000,00	82 029,00
P10	University of Technology Malaysia	Malaysia	Partner Countries	8 109,00	28 320,00	21 600,00	20 000,00	4 000,00	82 029,00

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WP1 Preparation (CMU-COGNITUS) :

- **T1.1** Literature review of Industry4.0 in Europe, Asia and over the world

- **T1.2** Identify the skills requested by Industry4.0 (questionnaires; workshop with Industry; relevant reports from EU commission)

- **T1.3** Analyze the gap by overlapping the skills4.0 with the existing skills in HEIs. Develop an emerging model (emerging skills; disparate skills, shift skills…)

- **T1.4** Develop the Skills 4.0 learning framework - Identify the relationship between the skill4.0 and the SHYFTE 4 domains

- **T1.5** Design teaching programs and learning materials for the 4 domains.

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WP2 Development (ULL-UPM):

- **T2.1** Pilot in Domain1- Industrial engineering and management (Training materials)
- **T2.2** Pilot in domain2 - Software Engineering and big data analysis (Training materials)
- **T2.3** Pilot in domain3 Wireless networks analytics (Training materials)
- **T2.4** Pilot in Domain4 - Artificial Intelligence (Training materials)
- **T2.5** Develop the skills4.0 training and learning center

WP3 Quality Plan (CUIT-UNS):

- **T3.1** Strategic Quality Plan Quality plan to verify the effectiveness of the learning program
- **T3.2** Formation Quality Plan (FQP)
- **T3.3** Quality audits to analyze and evaluate the transfer of skills4.0. Measuring the impact of these skills on SMEs
- **T3.4** Sustainability assurance plan

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WP4 Dissemination and Exploitation (UNL-CDU):

- **T4.1** Dissemination and exploitation strategy (Create strategic plan)

- **T4.2** Awareness dissemination and acceptance of emerging skills4.0

- **T4.3** Exploitation and dissemination for action (Web site, meetings, …)

- **T4.4** Scientific and technical dissemination (Conferences, workshops, seminars, …)

WP5 Management (ULL):

- **T5.1** Project management coordination and reporting

- **T5.2** Quality, Risk and Innovation management

"All project partners are involved in all the WP"

- **Role of the WP leaders:** the WP leader is responsible of:

  - Organize with the Tasks leaders the work plan of each task of the WP
  - Verify that the reports are submitted on time, that they are of high quality and that they meet the project's expectations

- **Role of the Tasks leaders:**

  - responsible for the timely implementation of the activities in the task and the reporting to the WP Leader

- **All project partners :**

  - Should fulfil their tasks duly, timely and according to the distribution of work
  - Timely delivery of all financial statements and reports to the Coordinator

SHYFTE 4.0

Thank you !