



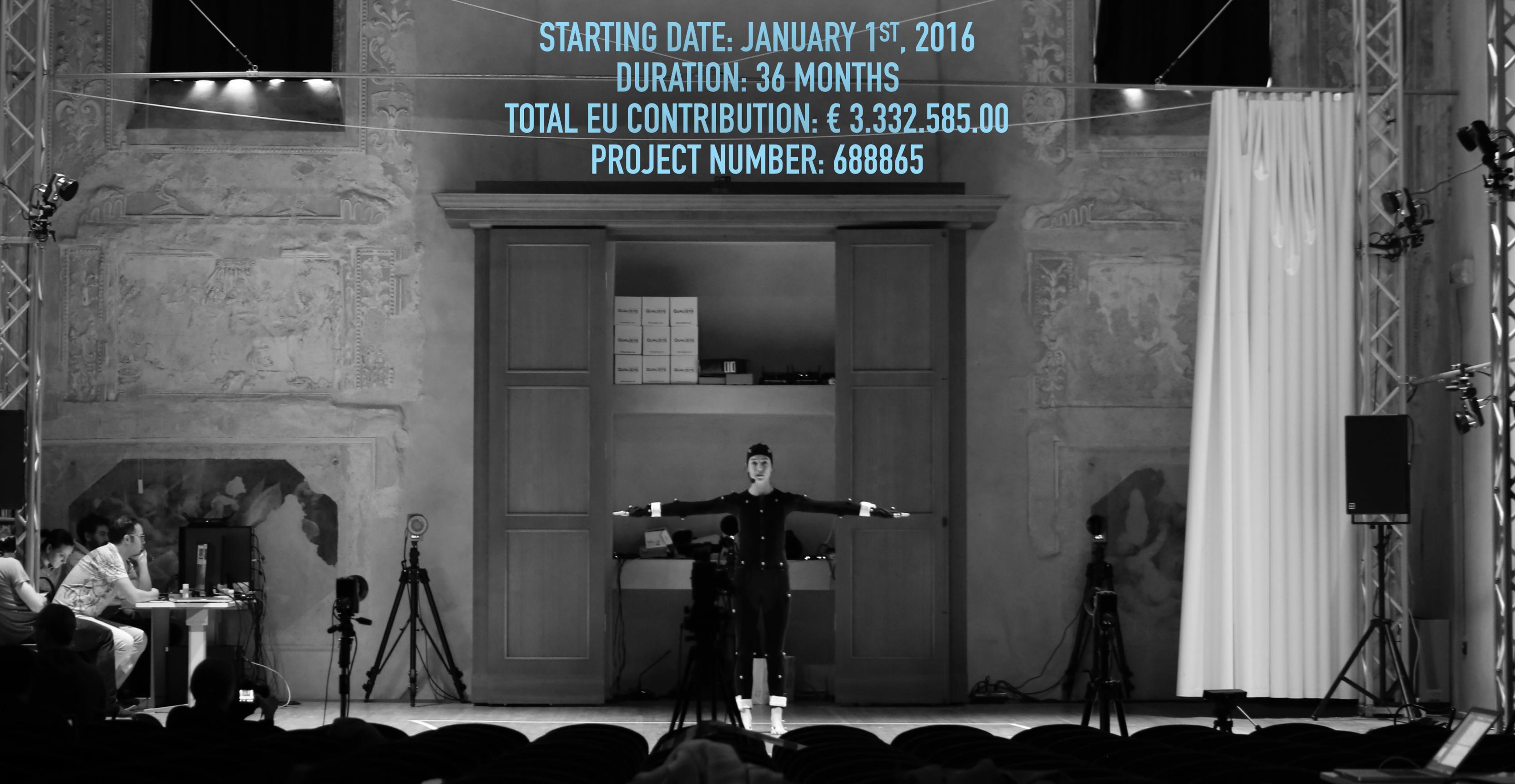
# WHOLODANCE



## WHOLE-BODY INTERACTION LEARNING FOR DANCE EDUCATION

Wholodance is a Research and Innovation Action funded under the European Union's Horizon 2020 Programme.

**STARTING DATE: JANUARY 1<sup>ST</sup>, 2016**  
**DURATION: 36 MONTHS**  
**TOTAL EU CONTRIBUTION: € 3.332.585.00**  
**PROJECT NUMBER: 688865**



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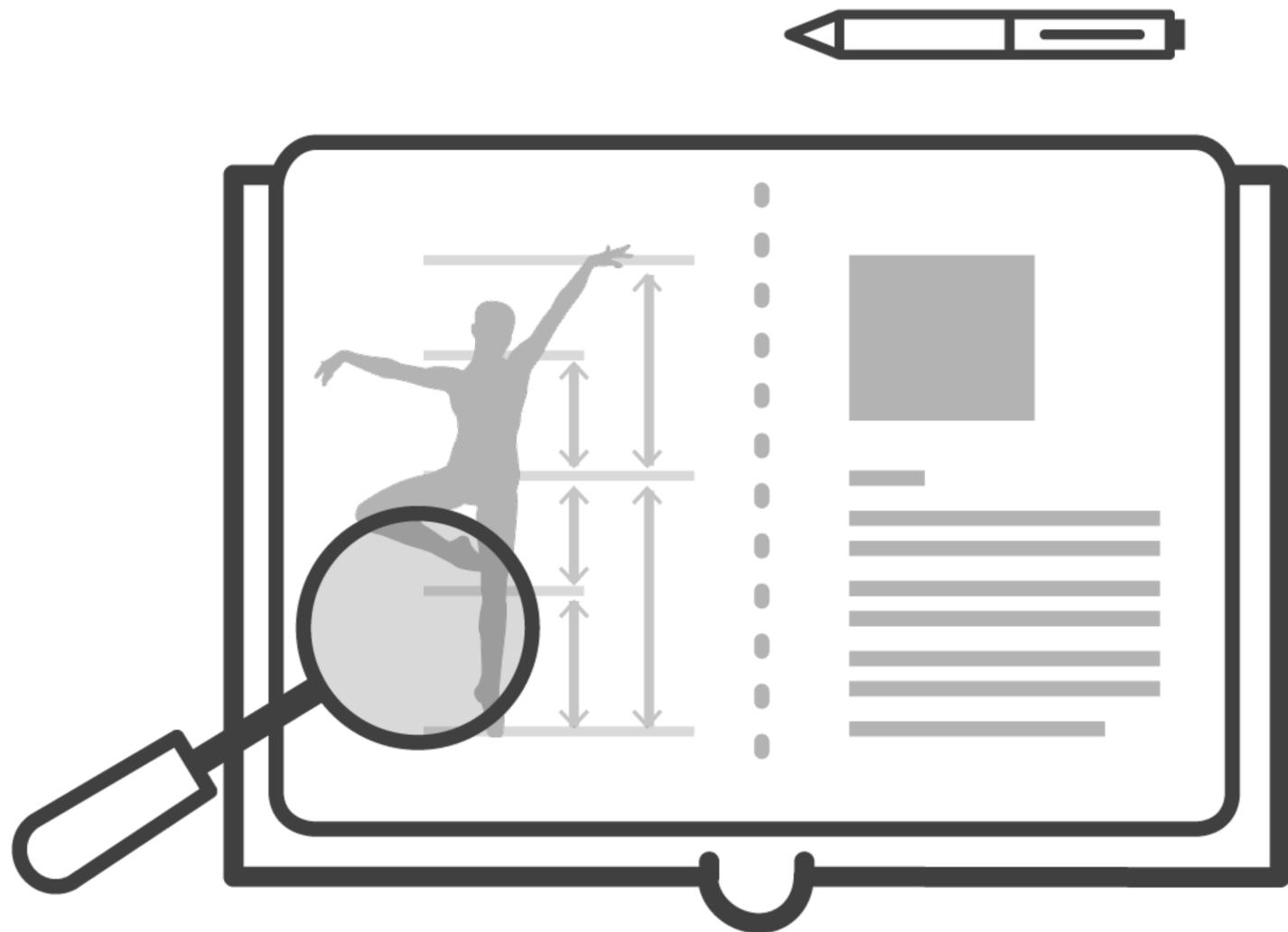
**Wholodance aims at developing and applying breakthrough technologies to Dance Learning in order to achieve results that will have relevant impacts on numerous targets including, but not limited to, the dance practitioners ranging from Researchers and Professionals to Dance Students and the Interested Public.**



# WHOLODANCE

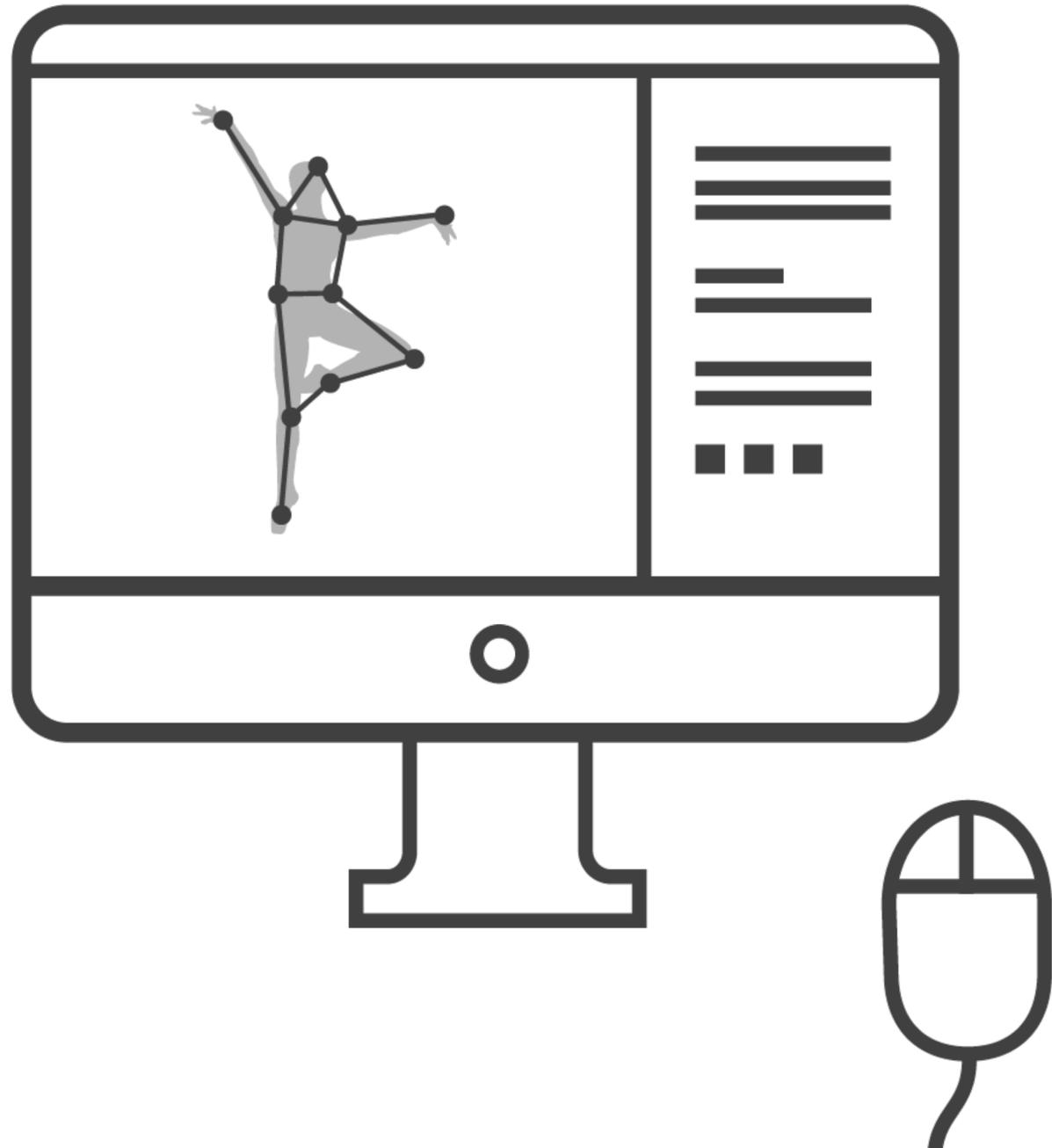
focuses on five main Objectives

# 1. INVESTIGATE BODILY KNOWLEDGE



by applying similarity search tools, computational models, emotional content analysis and techniques for the automated analysis of non-verbal expressive movement to dance data that will help investigate movement and learning principles, vocabularies, mental imagery and simulation connected to Dance Practises.

## 2. PRESERVE THE CULTURAL HERITAGE



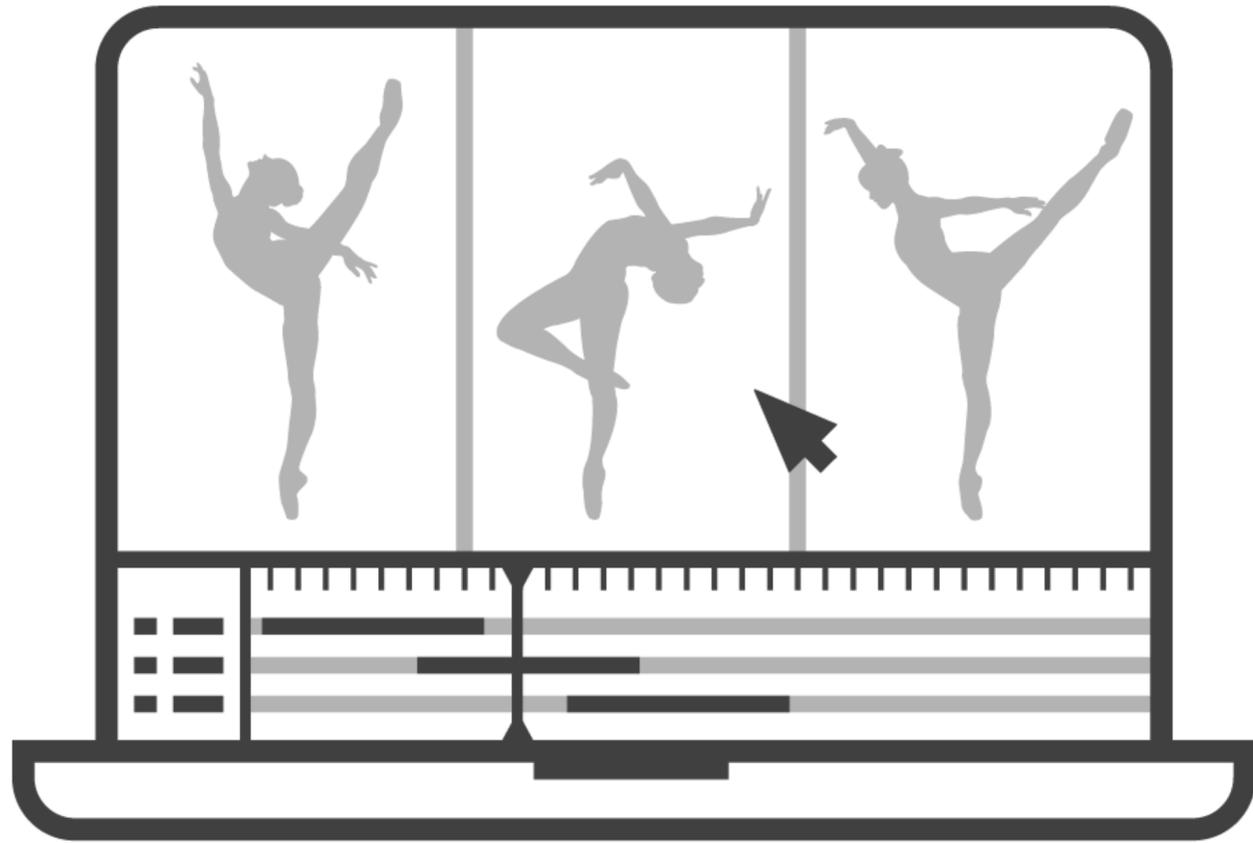
by creating a proof-of-concept motion capture repository of dance motions built in methods allowing interpolations, extrapolations and synthesis through similarity search among different compositions documenting diverse and specialized dance movement practices, and learning approaches.

### 3. INNOVATE THE TEACHING OF DANCE



**by developing among others a life-size volumetric display that will enable a dance student to literally step inside the Dance master's body that through the use of immersive and responsive motion capture data, will identify and respond to collisions between the physical and virtual bodies**

## 4. REVOLUTIONIZE CHOREOGRAPHY



by building and structuring an interactive repository of motion capture dance libraries. Custom dance data blending engine will give choreographers and dance teachers a powerful tool to blend and assemble an infinite number of dance compositions.

## 5. WIDEN THE ACCESS AND PRACTICE OF DANCE



by providing access to the created dance database through commercially available consumer grade motion capture devices like the MS Kinect, Intel's real sense and others.

JAN 2016

DEC 2016

## PROJECT'S TIMELINE

### PRELIMINARY DEFINITIONS AND GROUND-TRUTH DATA ACQUISITION (M1-M12):

- Acquisition of the preliminary knowledge coming from the end-users
- First definition of the learning scenarios
- Definition of the different users' profiles
- Embryonic definition of the semantic representation models
- Pipeline for the motion capture process will be developed
- Data acquisition stage of the capture process will be completed

JAN 2017

DEC 2017

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## PROJECT'S TIMELINE

### MODELS, PLATFORM, AND SIMILARITY SEARCH BASIC DEVELOPMENT (M13–M24):

- Definition of the emotional representation and music–dance representation models,
- Preliminary deployment of data–driven and model–driven analysis software
- Data management platform will be released and tested in its alpha version
- Data integration and similarity search framework will also be defined
- Functioning mockup graphical user interface will be demonstrated

JAN 2018

DEC 2018

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## PROJECT'S TIMELINE

**VISUAL USER INTERFACE AND DATA-DRIVEN MODELS, TOOLS AND PLATFORM DEPLOYED AND LEARNING SCENARIOS VALIDATED (M25-M36):**

- ☑ Mockup GUI built in the second phase will be finalised**
- ☑ The interface will be validated through learning experience scenarios completed on-purpose**
- ☑ The different systems (data management platform, similarity search tools, model-based software, with final libraries) will be delivered**
- ☑ The WhoLoDancE Dance-athon will be organised to disseminate the project results in a public event**

# CONSORTIUM

**LYNKEUS.**



**MOTEK**  
ENTERTAINMENT 



**Coventry**  
University 



**Kdanse**  
Jean-Marc Matos  
Anne Holst

