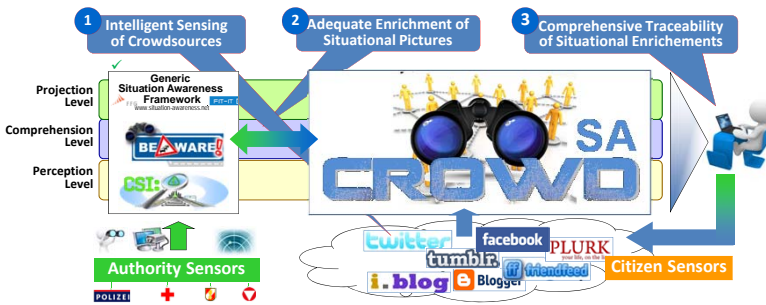


# SA CROWD

# CROWDSOURCED SITUATION AWARENESS FOR CRISIS MANAGEMENT

## MOTIVATION

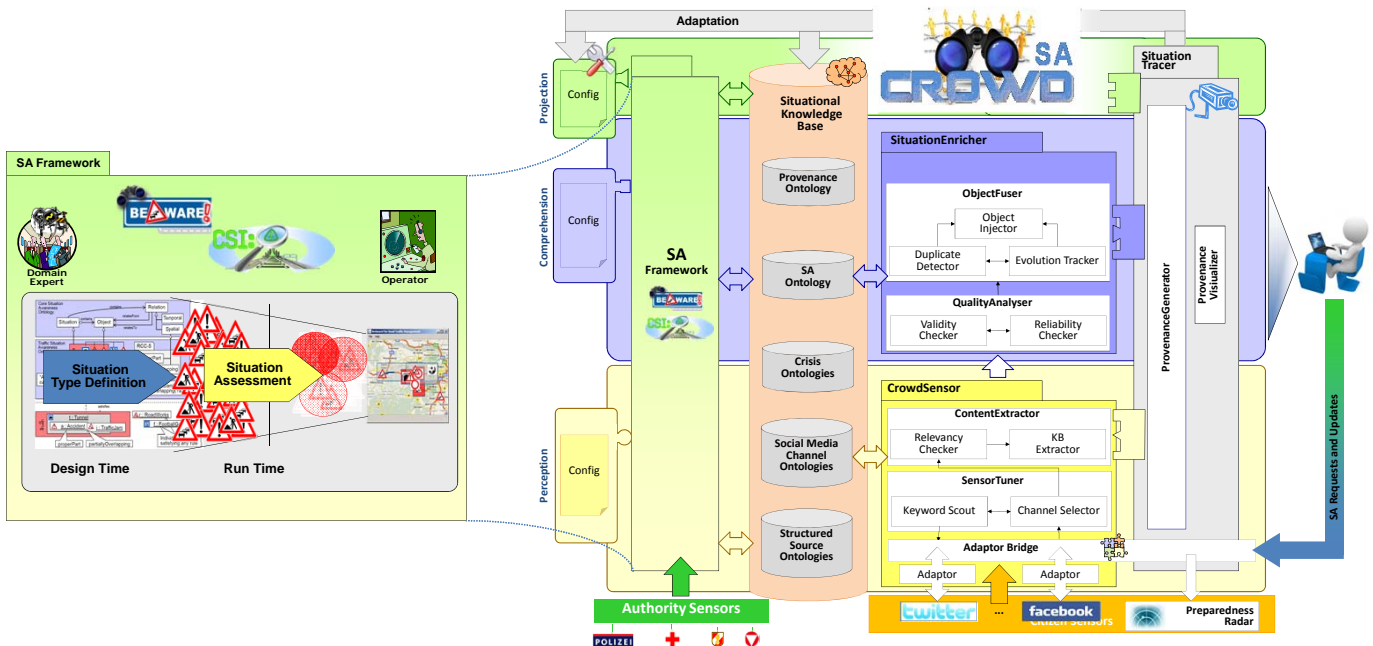
- Rapid rise of social media and ubiquitous mobile access**
  - 800M+ Facebook, 400M+ Twitter users
  - 5,6B mobile phone users
- Social perceptions as "wisdom of the crowd" for crisis situations** caused by
  - Humans (e.g., mass panic, crime, terroristic attacks)
  - Infrastructure (e.g., power failures)
  - Environment (e.g., floods, wildfires, hurricanes, earthquakes)
- "Citizens as sensors" provide "emergency intelligence" for crisis situation awareness (SA)**
  - **Pre-crisis** by detecting unexpected or unusual incidents
  - **In-crisis** by reporting on the crisis' evolution (e.g., impacts and causes)
  - **Post-crisis** by enabling a feedback-loop using forensic analysis



- Leverage situation awareness for crisis management**
  - Assessed on basis of **conventional information sources**
  - With sensed **crowdsourced information**
  - In a **traceable manner**
- Enhance the preparedness of both,**
  - **Authorities** and
  - **Citizens**
 to allow for **more accurate decisions** in crisis situations

## GOALS

## APPROACH



- Evaluation hypothesis**
  - **Authorities & citizens** have a basis for **more accurate decision making**
  - Especially during **periods of increased information demand**
- Three evaluation pillars**
  - **Collaborative case-study definition**
    - definition of critical situation types and test cases
    - functional & non-functional properties (e.g., scalability)
  - **Post-crisis case study**
    - forensic analysis & simulation of a situational picture
  - **Real-life data case study**
    - dedicated crowd (50.000 Red Cross volunteers) in exercise crisis
- Focus on natural disasters** (e.g., floods) and **impacts on traffic**

## INFO

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