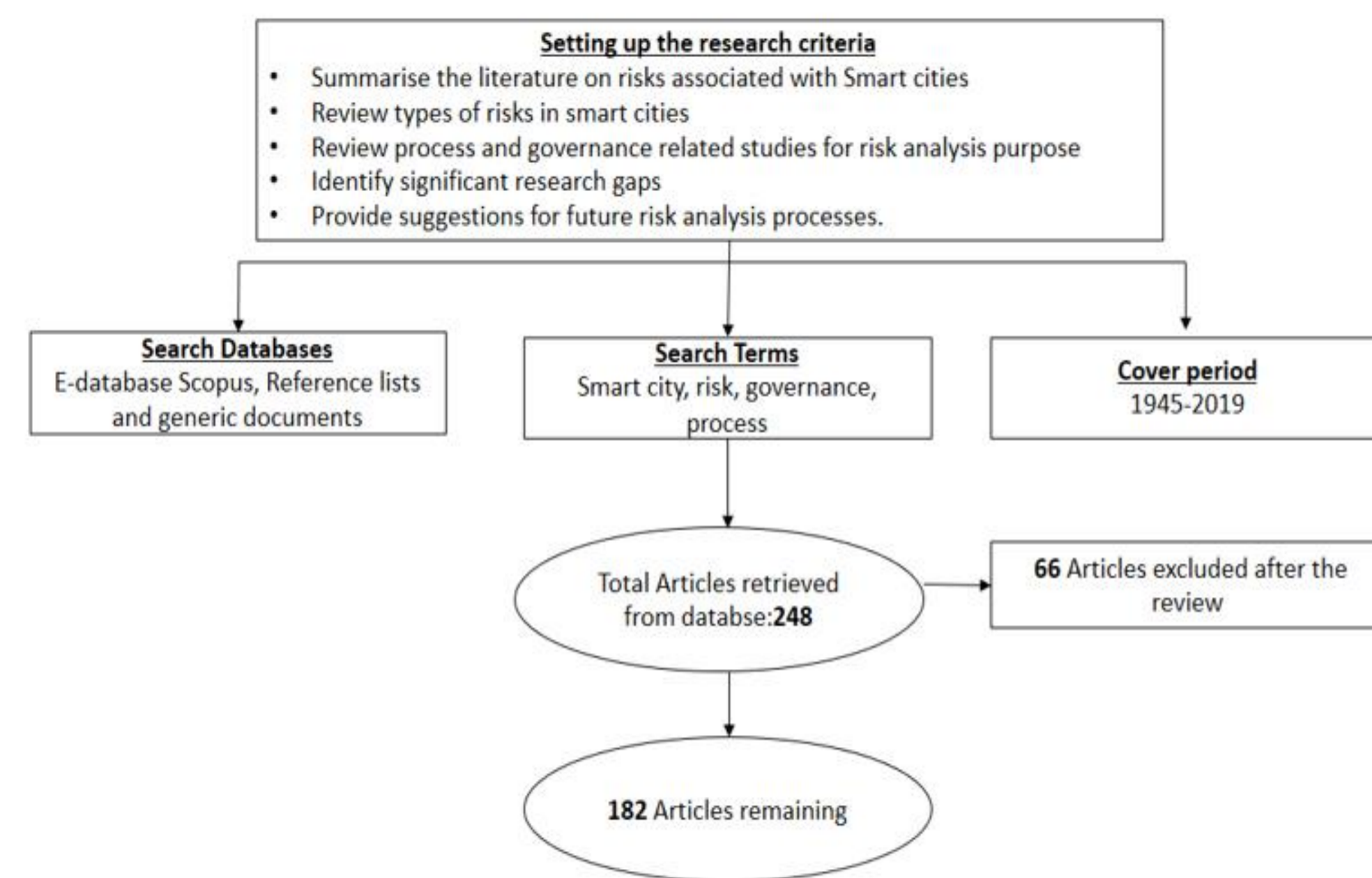**Title: Risk Assessment Framework for Smart City Services: "An Architectural Approach"**
Presenter: Priyanka Singh

INTRO:

- The connotation of smart city services introduces risks not only with the technology but also with non-technical aspects like process and management where a human element is involved.

- However, there are only limited attempts to investigate risk in the context of process and management while the literature of technology-oriented risks is relatively comprehensive. This study focusses on non-technical governance orientated risks for smart city services.

METHODS:

RESULTS:

- There are various non-technical parameters influencing risks, and there is a common factor among all those parameters. That is a "social factor", this term includes a wide range of issues as highlighted in Table 1.

- The issues related with proper decision making, collaboration, liability and accountability, finance, etc. from the governance increasing the probability of risks in different domains of smart city services.

- Hence it becomes essential to consider non-technical aspects from the governance side before deploying any new services during the planning phase itself, so that risks emerging from such services can be avoided in the future, and even if it occurs then we have a better plan to mitigate them.

Theory

It is vital to consider the influence of **non-technical** factors from **governance** perspective for minimising the impact of **risks** associated with **smart city services**.

SCAN ME

Non-technical Factors influencing Risks in Smart Cities

- ☐ Lack of periodic and emergency procedures in policy
- ☐ Absence of proper governance framework
- ☐ Weak collaboration
- ☐ Lack of social and economic consideration
- ☐ Requirement of Multi-stakeholder's approval
- ☐ Conflicting goals
- ☐ Discontinued technology
- ☐ Absence of effective policy
- ☐ Absence of human resources
- ☐ Lack of local level leadership & coordination
- ☐ Complex, uncertain and ambiguous risk assessment process
- ☐ Liability related issues
- ☐ Unclear accountability
- ☐ Lack of perspective from various stakeholders
- ☐ Negligence of social and historical context
- ☐ Lack of effective Policy
- ☐ Outdate regulations and Financial challenges
- ☐ Technology awareness issue

Table 1: Risks influencing Factors

How can we consider these non-technical factors during the risk assessment process before deploying the services?

FROM LITERATURE:
Enterprise Architecture(EA) framework has been suggested as a way to manage complexity, multi-stakeholders and the service-oriented nature of smart cities, and it has also been proposed that architected approach radically reduces the risks, timeline in governance projects.

CONCLUSION:

- There is a plethora of research to investigate risks in different domains of the smart cities, and most of them are focusing on technological part. But there are various factors other than the technology which influence risks, and these factors can be analysed with the help of EA.

- However, EA and risk is not well explored, and there are various factors as pointed out in the literature that can be responsible for effective risk analysis process. Therefore, we need to understand the impact of these factors and their influence on overall risk assessment process.