



Southern African Association for Institutional Research

Foundations of Institutional Research 2015

The research process



Presented by Yuraisha Chetty
Director: Institutional Research, University of South Africa



Purpose of this session

The **purpose** of this session is to:

- Discuss the various steps in the research process for institutional research projects
- Share an institutional research business process flow which infuses quality aspects



SOUTHERN AFRICAN ASSOCIATION FOR INSTITUTIONAL RESEARCH

Purpose and Scope of IR



IR = research and analysis *about* the institution and its context *for* the institution which informs planning, decision-making and strategic and operational management. This is achieved through undertaking commissioned and self-initiated quantitative and qualitative research, analyses, briefings, benchmarking studies and environmental scanning, with the aim of enhancing *evidence-based* management, planning, decision-making and organisational performance and effectiveness.

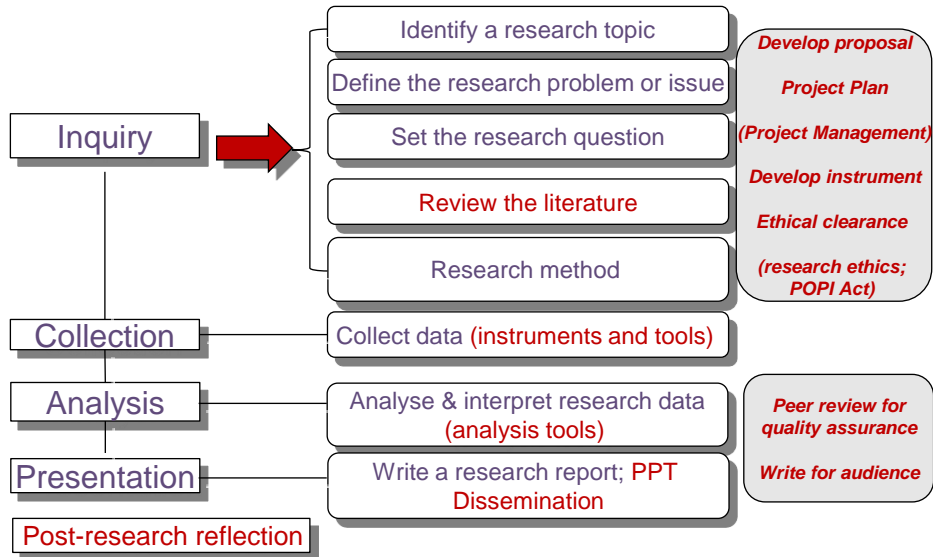
Purpose and Scope of IR



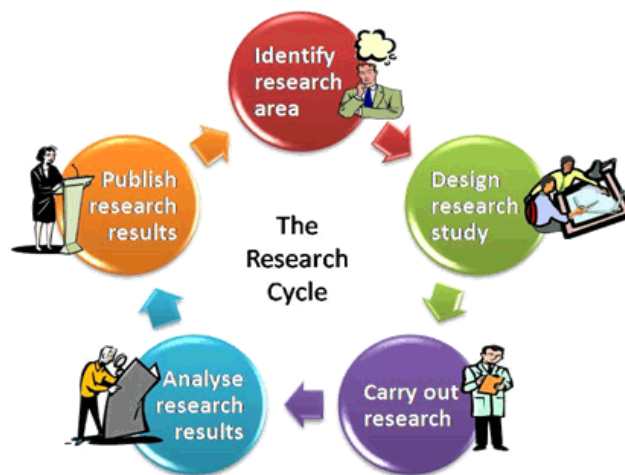
The findings of institutional research enable planners, decision-makers and managers to utilise relevant evidence in order to execute strategy and optimise institutional performance and effectiveness – evidence-based decision support.

Institutional research aims to make the institution intelligible to itself by adding strategic analytic value, meaning and context to information in order for management to make informed decisions and plan effectively.

Research process models



Research process models





Unpacking the steps



Conceptualisation

- Obtain **conceptual clarity** from relevant clients and stakeholders about the expected research and an understanding of the broader context – *contextual intelligence*.
- Establish the research **purpose** and **question**.
- Determine the research **scope** and manage **expectations**.



Unpacking the steps



Conceptualisation

- Discuss the preferred **methodology** or research design and **sampling** approach:
 - Quantitative, qualitative or mixed methods
 - Surveys, focus groups, face-to-face interviews, case studies
 - Sampling approach (random, non-random such as purposive & snowballing techniques, etc)



Unpacking the steps



Conceptualisation

- Undertake a **review of the literature** (*conceptual models, theoretical frameworks, best practice*) – adds credibility and rigour.
- Discuss the **timeframes** for key deliverables such as the proposal, draft report, final report, etc.
- Discuss the **nature** of deliverables (e.g. narrative report, executive summary, PPT presentation).

*Commissioners of research must play an **active** role in conceptualising the research. Their involvement and support will give impetus to the research, enable buy-in and ensure that the results are disseminated at the appropriate forums for maximum **impact**.*



Unpacking the steps



Research proposal and Project plan

- Synthesise and **integrate** all preparatory discussions into a **concise proposal** which maps out the literature, research question, the aim/purpose, the methodology or research approach/design, analysis, reporting and deliverables.
- It is essential for the proposal to include a **high-level project plan** (start date, key activities, milestones/targets and completion date) for those who have commissioned the research and a more detailed plan for internal purposes.
- The proposal should be **peer-reviewed** as part of **quality assurance**



Unpacking the steps



Research project management

- A project management tool can be used as a basis for the preparation of these project plans.
- The management and coordination of any research project should be undertaken by a **dedicated project team**, with a project leader to drive the project.
- Team members are equally responsible for the effective and efficient **coordination** and **management** of the research.



Unpacking the steps



Research project management

- Project meetings must be held **regularly** to ensure that progress is being made and that **milestones** and **targets** are being adhered to.
- Given the nature of research, there will be instances when milestones and targets have to be shifted, usually due to **dependencies** or **inefficiencies**.
- As far as possible, the project team must ensure that the research is completed by the pre-determined **completion date** or, where necessary, to **renegotiate** timeframes with clients.



Unpacking the steps



Research instruments and Tools

- After the proposal, it is useful to develop a **draft instrument** for the research, either a **questionnaire** for a survey design or a set of qualitative questions to frame more qualitative research such as focus groups or face-to-face interviews – **structured or unstructured interview guides**.
- It is important to determine the **reliability and validity** of instruments, usually through piloting, stakeholder input and/or statistical tests. This ensures a good **quality** instrument.



Unpacking the steps



Research instruments and Tools

- Furthermore, it is appropriate at this stage to identify the relevant software tools which can be used for the research (e.g. survey software such as Survey monkey or Qualtrics or qualitative software such as Atlas.ti).
- Paper-based approaches for surveys can also work well for particular circumstances despite administration being more laborious.



Unpacking the steps



Ethical clearance

- Following the completion of the research proposal, project plan and instrument, it will be possible to begin the **ethical clearance** process.
- Ethical clearance is an **integral** part of the research process. Where research involves human subjects such as is typically the case with institutional research (*students and staff*), then all **research ethics protocols** must be adhered to.
- Ethical clearance must be seen as **best practice** and not as burdensome – it is no longer just for “academics”. Institutional researchers should not be exempt.



Unpacking the steps



Ethical clearance

- Institutional researchers may also like to make a **scholarly** contribution where this is possible. Where the intention is to publish the research in an academic journal and/or present it as conferences/workshops, then ethical clearance is a requirement – and also **permission to proceed** with the research.
- The ethical clearance processes at institutions may vary, however, an **expedited process** should be advocated given the nature of institutional research, which in most cases needs to be delivered within specified timeframes for management decision-making.



Unpacking the steps



Ethical clearance

- Research can be done for management purposes only
- Anonymity, confidentiality, informed consent, intentions, data storage, data presentation (aggregated)
- POPI Act



Unpacking the steps



Data collection

- **Survey design** – upload questionnaire into survey software and activate survey. Alternatively print paper-based versions for distribution and manually code and capture data.
- **Qualitative design** – conduct focus groups or interviews using structured or unstructured qualitative interview guides.



Unpacking the steps



Analysis

- Employ the relevant analysis tools to undertake *quantitative analysis* (Excel, SPSS, SAS, etc) or *qualitative analysis* (Atlas.ti, nvivo).
- Inferential and/or multivariate analysis can be undertaken if the research lends itself to this – explore the significance or strength of relationships.
- Analysis should be undertaken with the *audience* and research *questions* in mind – *tables and charts* are common ways of representing data, with *infographics* also becoming popular as a data presentation method.
- Aim is to provide *meaning and context* to data – *so what?*



Unpacking the steps



Research report & Presentation

- Write for the *audience* – management, for example, prefers short and succinct reports with an *executive summary*.
- Report must be *peer reviewed* to ensure *technical* accuracy and *conceptual* soundness.
- Where necessary, the report should include a section with *recommendations*, particularly highlighting aspects which are *actionable* – this will speak to the “*so what*” question and “*impact*”



Unpacking the steps



Research report & Presentation

- Highlight the **consequences** and **implications** of the findings for the university
- The report should **integrate** or **refer** to the findings of other relevant research reports – “*pulling various pieces of the puzzle together*”.
- It should provide an indication of the **way forward** or opportunities for **future research**



Unpacking the steps



While IR will illuminate areas for improvement through research and analysis and communicate findings effectively, the institution has to effect the necessary changes in policy or practice in a spirit of organisational learning and improvement.



Unpacking the steps



Post-research reflection

- This **final step** allows the research team to **reflect** on the research process – informal.
- Strengths can be identified (*what worked*) and these can become best practice for subsequent research projects.
- Challenges and limitations can be discussed (*what did not work*), together with how these were managed or should have been effectively managed.
- Opportunities for further research on the same topic can be identified, particularly where “gaps” in information have been identified.

Criteria for selecting research



Urgency

- Important to establish the urgency of the research. This will guide and inform effective prioritisation, planning and execution.
- An urgent project can be defined as one which management defines as “must be done” and where the timeframes are relatively short and inflexible – “a critical deliverable”.

Criteria for selecting research



Urgency

- In this instance, institutional research staff must work together to ensure effective delivery within a short space of time.
- One does have the option of negotiating more reasonable timeframes in order to ensure that the quality of work is not compromised – research is after all a process.
- However, it might also be that it is not possible to adjust timeframes, particularly when management is under pressure to report on the key findings at Senate or Council or at other critical committee structures.

Criteria for selecting research



Relevance

- Is the research aligned to the strategic goals and objectives of the university?
- Is the research going to guide and inform management about university processes and practices?
- Is this institutional research as opposed to discipline-specific research or reflexive research?
- Is the research topical? Is it current and emerging from recent developments in the higher education environment?

Criteria for selecting research



Clarity

- Obtaining conceptual clarity about the research is crucial.
- Without this, the entire research process will be misguided and will result in research which does not serve the intended purpose.
- Research elements such as the research question/topic, nature, purpose and intended outcomes must be absolutely clear prior to commencement of any work.
- Conceptual clarity can be obtained by scheduling a briefing meeting with the relevant stakeholders/clients to clearly define the elements mentioned.

Criteria for selecting research



Time

- Given the number and range of research projects on the IR agenda at any given time for a particular year, it will be necessary to determine if additional or new research can be prioritised or whether it is deferred to the following year.
- In the case of management requests, there will be less flexibility.
- IR staff will need to prioritise this research above research which is intuitively and proactively identified.
- Balancing act!

Criteria for selecting research



Tools

- It will be important to establish whether the IR team has access to the tools needed in order to undertake the research.
- These include tools such as survey software for online surveys, statistical tools for quantitative analysis, qualitative software for qualitative analysis, audio-recorders for qualitative research, and other tools deemed necessary.

Criteria for selecting research



Capacity

- We are always under “construction”, learning, growing, developing & maturing into our role as institutional researchers.
- Need to determine whether or not we have the necessary skills and knowledge (capacity) to undertake any particular research.
- Particularly relevant when we are requested to undertake research for which the necessary skills and knowledge may be lacking or underdeveloped.
- Examples could be evaluation research (e.g. programme evaluation), predictive analytics or some types of qualitative research (e.g. case studies). It will be important to develop these capacities over a period of time. IR offices can also consider outsourcing some research to external consultants with the relevant expertise, where the budget allows for this.

Institutional research business process flow

