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RESEARCH METHODOLOGY FOR POLICY MAKERS

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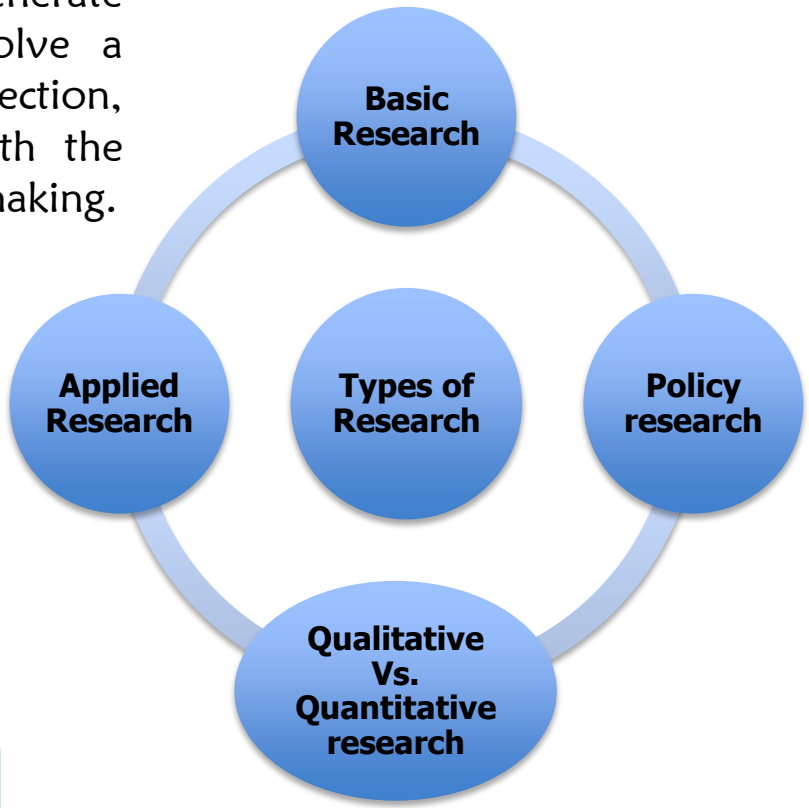
Outline

- Research and Research Methodology
- The Research Process
- Academic vs Policy Research
- Types of Policy Research
- Triggers of Policy Research
- Features of Policy Research
- Stages of Policy Research
- Factors to Consider in Policy Research and Analysis
- Role of Literature Review in Research
- Analytical Techniques in Research
- Summary and Conclusion

What is Research

Research is a scientific inquiry into a phenomenon to generate new knowledge, validate existing knowledge or solve a problem through a systematic and orderly collection, organization, and analysis of information (data) with the ultimate goal of making the findings useful in decision-making.



Key Features of Research

Systematic
- Structured with specific steps to be taken in a specified sequence.
- Does not rule out creative thinking.

Objective
- Guided by rules of logical reasoning.
- Induction and deduction.

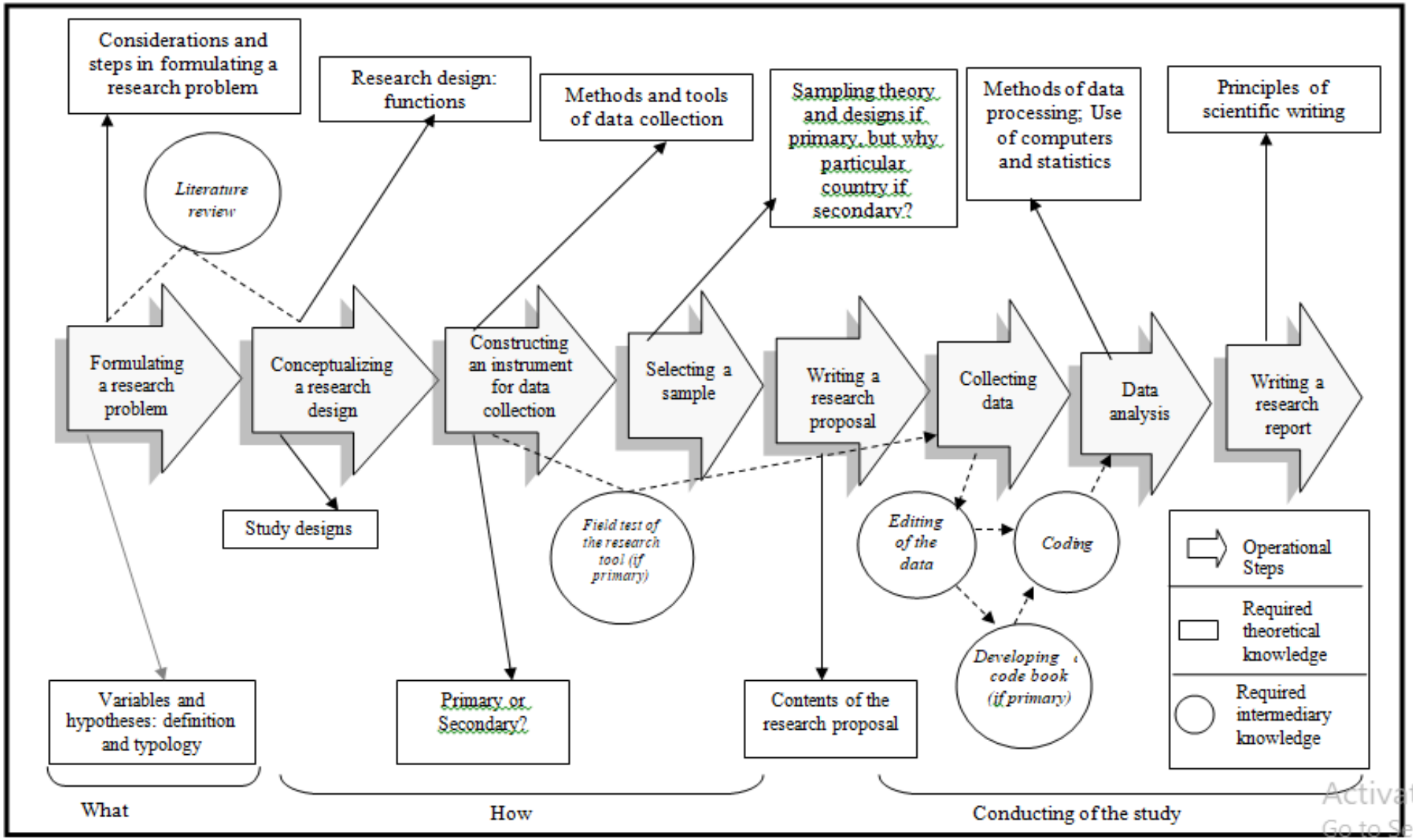
Empirical
- Related to one or more aspects of a real situation.
- Data serves as basis for external validity of results.

Replicable
- Results can be verified by replicating the study
- Therefore, builds a sound basis for decision making.

Research Methodology

- Research is a methodical system of inquiry
- Research methodology is an explanation of how a researcher intends to carry out his/her research.
- The approach taken to ensure reliable, valid results that address the research aims and objectives.
- Comprises data to collect, where, how and forms of analysis.

The Research Process



Role of Academic and Policy Research in Policy Analysis

Weimer and Vining (1989) compared "academic research," "policy research," and "policy analysis."

- Academic research focuses on constructing and testing theories for the purpose of understanding society, using rigorous methods to find the "truth."
- Policy research is the practice of trying to analyze the effects of public policies or projects already in place, e.g. cost-benefit analysis
- Policy analysis is the systematic comparison of policy alternatives to inform a decision with a short time window.
  - deals with present public policy problems.
  - can synthesizes academic and policy research to compare alternative public policy options and project their impacts for specific public policy decision makers.
  - sometimes housed directly within government offices

Academic vs Policy Research

Academic	Applied/Policy
❑ Questions tend to be more conceptual ❑ Seeks to add to the larger "body of knowledge" ❑ Can take some time to complete ❑ Spend time to establish what is already known ❑ Emphasis placed on the adopted method and how results relate to existing knowledge ❑ Tends to be theoretically focused ❑ Explicit steps and procedures ❑ Findings are usually made public ❑ Results usually spur questions and ideas for future research ❑ Evaluated through peer review by academic discipline standards ❑ Shared through scholarly journals, academic conference presentations and other publications like books	❑ Problems tend to be more practical ❑ Seeks to find solutions to immediate and specific problems ❑ Emphasis is placed on the specific answer for specific questions ❑ Time is often of essence ❑ Tends to be organizationally focused ❑ Flexible, situational ❑ Findings are usually kept private ❑ Results are usually used internally for decisions and strategy ❑ Evaluated by client-organization and/or industry standards

Types of Policy Research

We can identify 4 types:

- **Surveillance/monitoring:** Designed to systematically and constantly track developments in the economy and society.
  - with a view to identifying potential opportunities and challenges well in advance of their emergence
  - to allow for the design of appropriate policies and programmes to effectively deal with the situation.
- **Evaluative:** To analyse and evaluate impact of specific policies and programmes against the background of the intended effects.
  - and identify the unintended but desirable effects which should be consolidated,
  - while also identifying the unintended and undesirable effects that must be ameliorated.
  - May be ex-post or ex-ante.

Types of Policy Research (Cont'd)

- **Prognostic:** Designed to analyse the developments in the relevant aspects of the economy and society at regular intervals.
  - with a view to predicting the future direction the system may take under alternative policy regimes and/or evolving circumstances.
- **Prospective:** To analyse the developments in the relevant aspects of the economy at regular intervals
  - with a view to predicting the future direction the system may take under plausible circumstances
  - that are largely outside the control of policy makers

Triggers of Policy Research

- **Demand-Driven:** when there is a demand for advice from policy makers/institutions on a particular need.
- **Supply-Driven:** unsolicited, interest-driven, agenda driven etc. Done base on interest of stakeholders on a particular issue.
- **Purposive:** associated with a specific issue of action from the beginning to the end.
- **Accidental:** unintended, adaptation of regular research to policy needs or proceeds, teasing out policy in implications from a study or thesis.

Key Features of Policy Research

- Policy research is geared towards addressing a public good, to resolve, alleviate;
- Linking/feeding into a policy making process;
- Pragmatic- what will work and what will not work, practical recommendations;
- Specify the needs to be addressed at every stage. (action-oriented)
- Moving away from abstraction to real life action.
- Has to be effective communicated.
- Tailor according to the needs of policy makers
- Fast-paced, little time, needs quick thinking, quick action;
- To be adopted, the researcher should acknowledge the power and challenges of policymaker in the research design, presentation and language

Stages of Policy Research

Three (3) stages:

- **Negotiation Stage:** The entry stage where knowledge needs to be shared to create an agreement to avoid discrepancies.
  - time line and relevance of the research are also specified.
  - creating a common ground for the researcher and the policy maker,
  - a clear understanding of the needs and expectations of policy makers, building a relationship,
  - clarifying the policy issue to be addressed and posing the research problem.
  -
- **Analytical stage:** Stage where the actual research takes place
  - gathering data, surveys, interviews, questionnaire administration, and analyzing data to generate findings.
  - objectives and purposes are fulfilled and recommendations teased out.
  - overall output is a research report.

- **Communication Stage:** Presentation of the findings to the policy makers.
  - more of engagement and dialogue than presentation.
  - convincing policy makers on the applicability and relevance of the recommendations.
  - executive summary is useful, so also are analysis of alternative scenarios and possible outcomes.

Factors to Consider in Policy Research and Analysis

1. **Relevance of Literature in Policy Research**
2. **Data Analytical Techniques**
3. **Qualitative vs. Quantitative Research**
4. **Forms of Research Designs**
5. **Sources of Data**
6. **Sample and Sampling Methods**
7. **Types of Data (Arrangement)**
8. **Levels/Scales of Measurement**
9. **Statistical Hypothesis Testing**
10. **Concept of Variable Dependence (dependent and independent variables) etc**

We look at the first 2 in this presentation

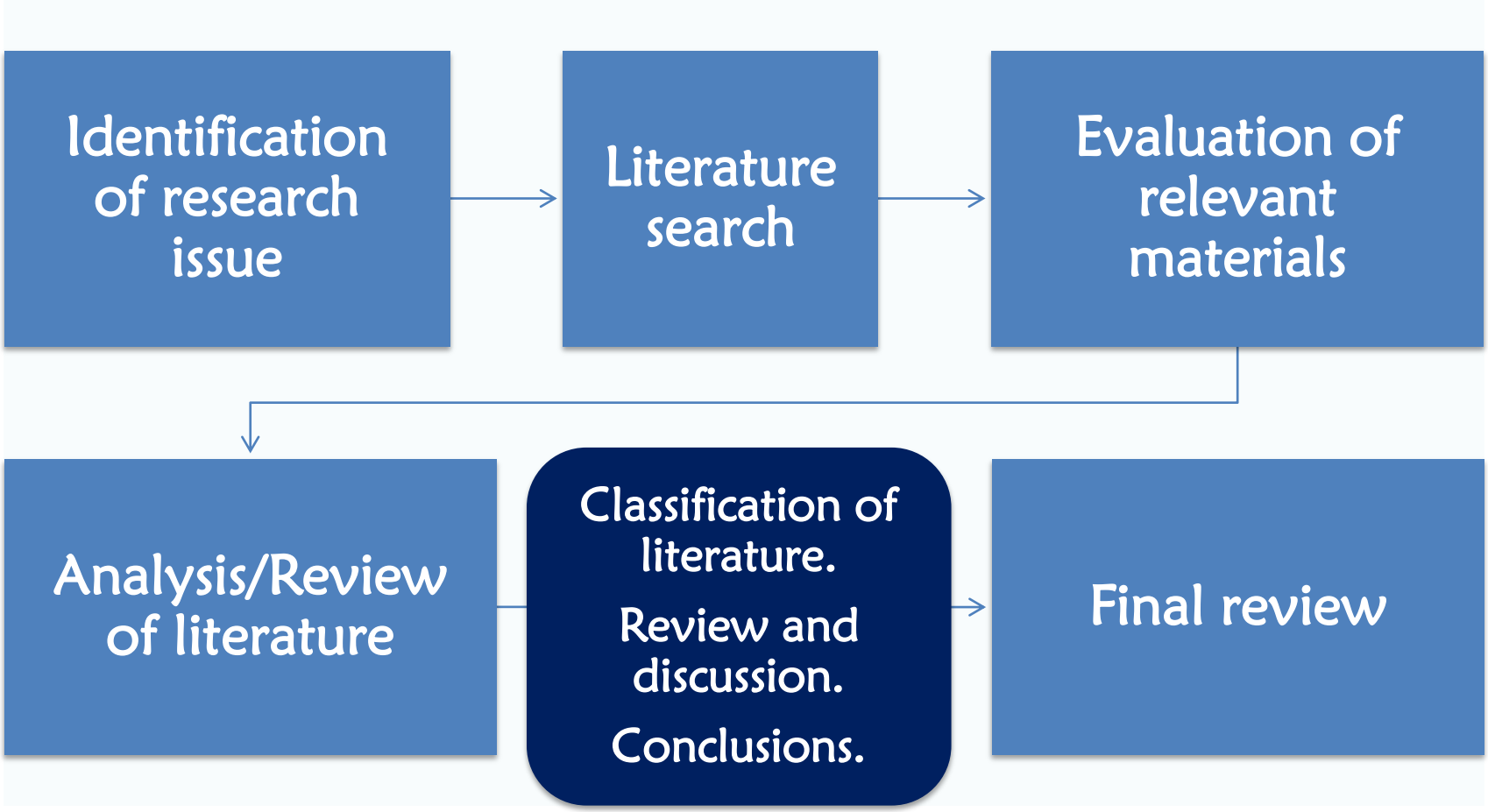
Role of Literature Review in Research

Literature review is the compilation, classification, and evaluation of what other researchers have written on a particular topic.

To:

- Establish the state (frontier) of knowledge on an issue
- Seek clarity to display understanding on an issue
- Learn how a body of research has evolved
- Identify previous approaches to studying an issue
- Describe areas of convergence and divergence among past studies and ideas
- Provide readers intellectual context and motivation for one's original research
- Situate one's research and contributions among others

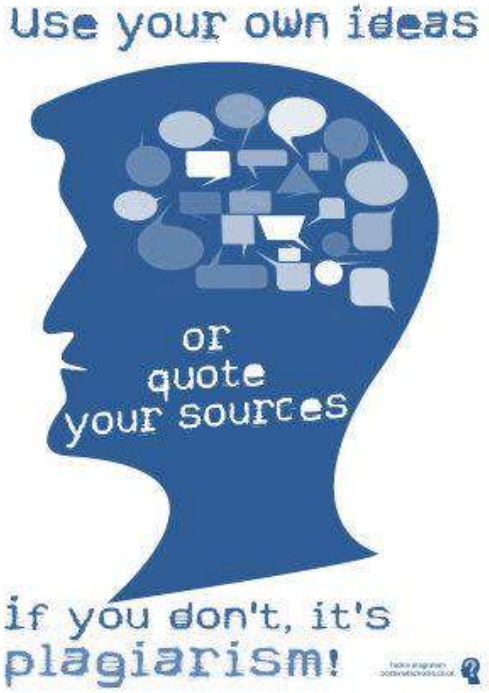
Steps in Conducting Literature Review



Some Success Factors in Literature Review

Close attention should be paid to the following during literature review:

- ❑ Author(s) credentials/background
- ❑ Quality of journal where an article is published
- ❑ Evidence-backed research and objectivity by author
- ❑ Conclusion deriving from data presented
- ❑ Convincing and plausible argument offered.
- ❑ Consensus among different authors and plausible explanation for divergence
- ❑ Authors contribution to understanding the issue of interest



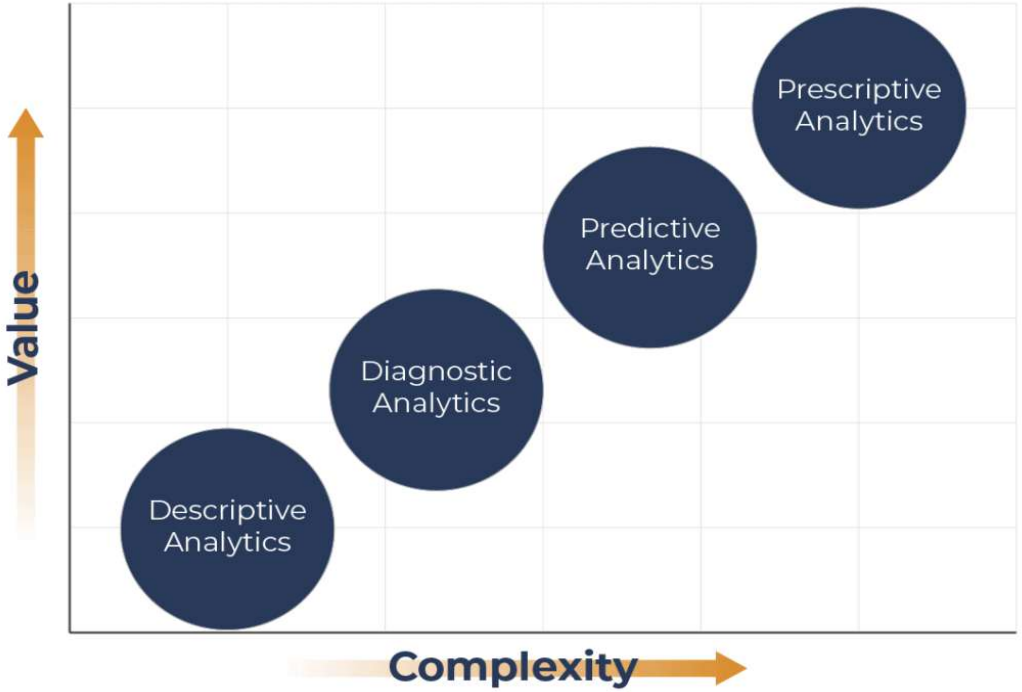
Analytical Techniques in Research

Policy Research often requires some analytical techniques

They are used to induce the underlying inference from data

Can be classified into four (4) broad types:

- Descriptive
- Diagnostic
- Predictive, and
- Prescriptive.



Descriptive Analytics: What happened?

- This is the first step in all analysis
- It is when an assessment of data, often historical, is used to answer the fundamental question "what happened?
- Looks at the events of the past and tries to identify specific patterns within the data.
- It is done by ordering, manipulating, and interpreting raw data from various sources and turn them into valuable insights
- Allows us to present our data in a meaningful way; making our data organized and ready for further analysis.
- Often used are basic description of the data like charts, tables and other basic descriptive statistics

Diagnostic Analytics: Why did it happen?

- This builds on the descriptive techniques to answer the question, "Why did it happen?"
- Here we drill-down into the data to understand patterns and factors that can explain why things happen.
- It is an in-depth insight into a given problem to identify anomalies and determine casual relationships in data
- Diagnostic analytics primarily uses likelihoods, probabilities, and distribution of outcomes.
- Examples include some data mining and correlation techniques

Predictive Analytics: What is likely to happen?

- Predictive analytics go further to answer the question "What is likely to happen?"
- Once we identify why events happen, we can predict which actions would achieve a desired result.
- It involves techniques such as regression analysis, multivariate statistics, pattern matching, predictive modeling and forecasting.
- They require large volume of data and deep understanding of statistics and programming languages.

Prescriptive Analytics: What should be done?

- Prescriptive Analytics attempt to answer the question "What should be done?"
- It is most complex and often requires that analyses at the first three stages are accurate.
- The prescriptive analysis explores several possible actions and suggests actions depending on the results of descriptive and predictive analytics of a given dataset.
- It involves techniques such as graph analysis, simulation, complex event processing, neural networks and machine learning.
- Simulating the future, under various sets of assumptions, allows scenario analysis - which are combined with different optimization techniques

Analytical Tools

- Analytical tools involve computer applications and software used to perform analytical techniques
- They bring efficiency, accuracy to the process of analysis and are generally cost-saving
- There are several of them available, each with its own set of functions.
- Few of which are:

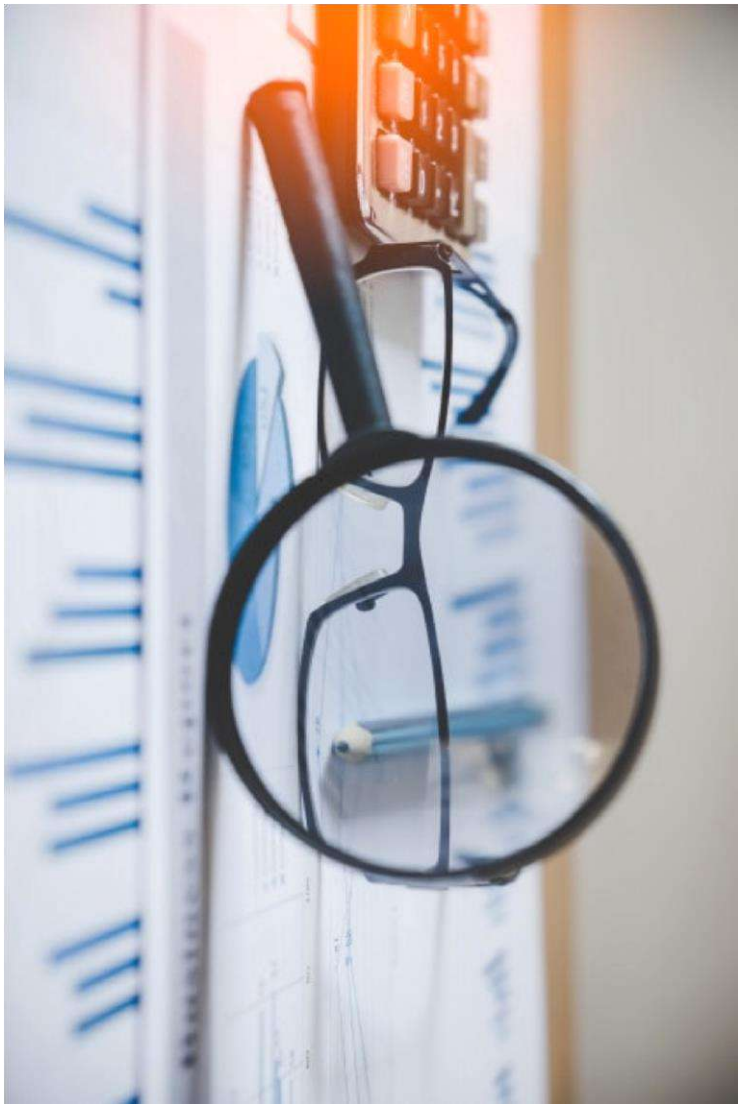
- Excel
- Tableau
- Power BI
- SPSS
- SAS
- STATA
- Eviews
- R
- Python
- SQL

The choice of tools will depend on some of the following:

- The organisation's requirements and data analytic expertise (e.g. coding vs point-and-click interface)
- The need for visualisation
- Nature and volume of data collected (e.g. structured vs unstructured)
- Pricing and licensing (subscription-based vs open source)

Summary and Conclusion

- **Research is a methodical system of inquiry.**
- **Research methodology is an explanation of how for a researcher.**
- **A policy researcher needs to understand and apply the process from formulating a research problem to producing a research report.**
- **Academic and policy research are reinforcing, but while the former tends to be conceptual, the latter is more practical.**
- **We need policy research to monitor, evaluate, predict and create scenarios about development in the society.**
- **Such research can be commissioned by policymakers or extractable from academic research.**



Summary and Conclusion (Cont'd)

- **A researcher working for policymakers needs to possess a clear understanding of their needs and expectations and communicate in an acceptable manner.**
- **Among several other factors to consider in policy research are the issue of literature and analytical techniques.**
- **While one needs to review relevant literature to guide a study, they should be appropriately cited.**
- **Also, there are many analytical tools and techniques available to policy researchers, depending on whether their interest is in Descriptive, Diagnostic, Predictive, or Prescriptive analytics.**

Thank you!

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...making data intelligent

Analysts' Profile

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Analysts Data Services and Resources
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Outline

Who we are

Guiding Principles

Our Services

- Economic Advisory
- Economic Research
- Data Processing & Analytics
- Anastat Subscription & Database Construction
- Research Publication
- Capaciy Development

About Analysts' Data Services and Resources

- ADSR Ltd is a Data and Research Company that provides accurate data, information and analysis for intelligent investment, academic and policy decisions.
- ADSR Ltd boasts one of the largest structured databases for corporate, academic and social data and we are specialists in data collection, aggregation, processing and analytics.
- We are obstinate in our belief that data is useless on its own and Information is at best, value-neutral;
  - but informed thinking and a disciplined use of appropriate tools can be engaged to adeptly manipulate raw data and bring about intelligence that would fuel growth and development.
- Data can be Intelligent and we are on a quest to prove this on the African Continent through the provisions of economic advisory and research, data analytics and Anastat database.

Analysts Data Services and Resources
...making data intelligent

Guiding Principles

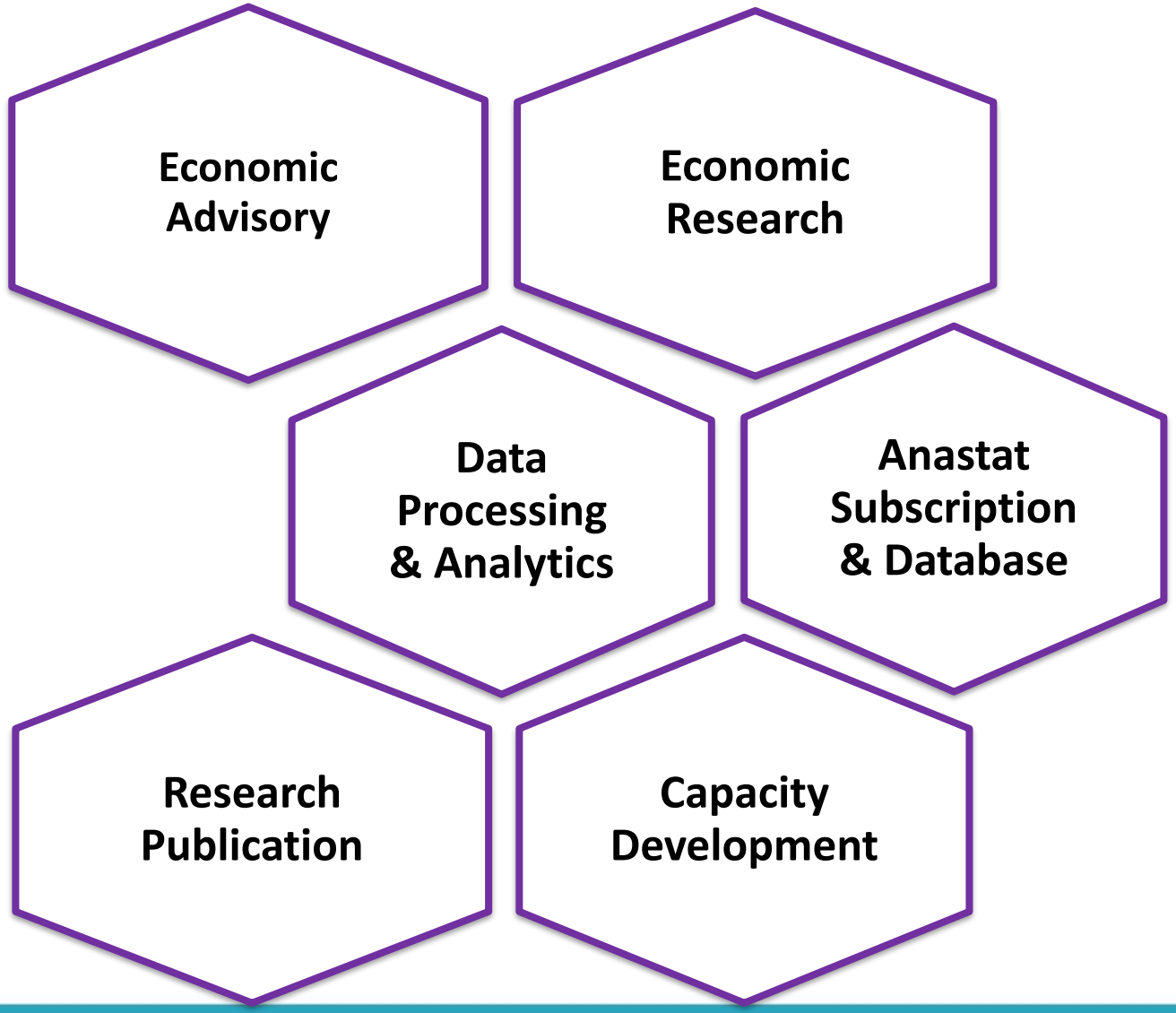
Motto
…making data intelligent

Vision
To be Africa's Premier Data, Research and Intelligence Company

Mission
''To revolutionize the way data is perceived, used, stored and applied on the African Continent; thus fostering growth and development''

Core Values
Analytical (…approach to issues)
Diligence (…in handling tasks)
Strategic (…in thinking and delivery)
Respect (…for all stakeholders)

Our Services



Our Services

Economic Advisory

- Macroeconomic monitoring and Advisory
- Macroeconomic forecast
- Research Advisory

Economic Research

- Executive brief intelligence
- Economic and financial modelling
- Industry Report

Data Processing & Analytics

- Survey design
- Data collection
- Data analysis

Our Services Contd.

Insights & publication

- Analysts Weekly
- Analysts Monthly
- Analysts Quarterly

Anastat Subscription & Database Construction

- ADP, AVD, AMP & AVL
- Anastat data platform & library
- On site / Off site database construction

Capacity Development

- Analysts Academy
- Master class series

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Thank you

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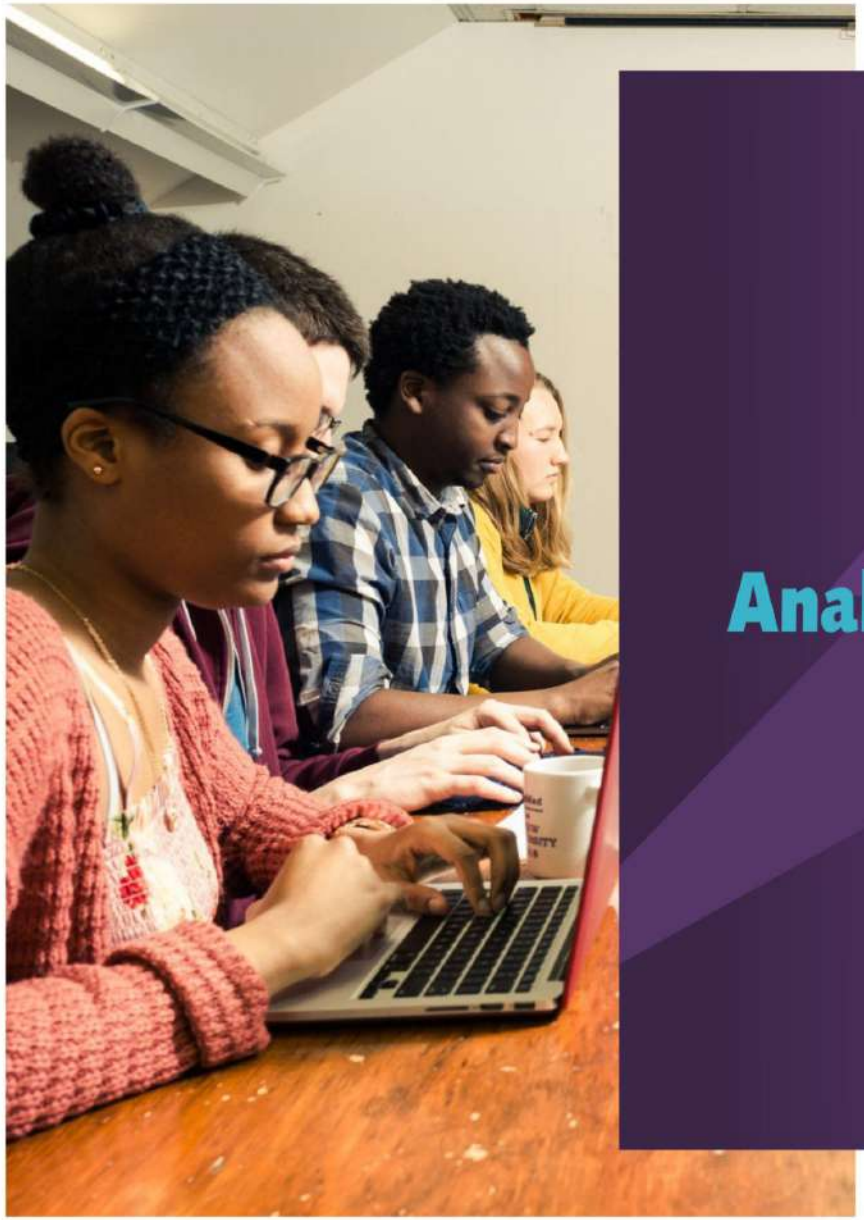

2022 Analyst's Academy Programme

Who We Are

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Vision

"To be Africa's Premier Data, Research and Intelligence Company"

Mission

"To revolutionize the way data is perceived, used, stored and applied on the African Continent; thus fostering growth and development"

Services

ADSR has a range of services and products which are organized according to the following:

- Economic Advisory
- Economic Research
- Financial Modelling
- Survey Research
- Data Processing and Analytics
- Anastat Subscription and Database Construction (Anastat)
- Research Publications

ANALYSTS' ACADEMY TRAINING PROGRAMMES

At the Academy, we offer a wide range of training programmes aimed at improving learning and skills in the areas of research and report writing, economic analysis, financial markets modeling and corporate analysis, , survey research and data analysis, econometric modeling as well as data science and analytics. Our training programmes are designed to deliver relevant knowledge in both theory and practical applications to participants drawn from industry, policymaking and academic institutions.

Mode of delivery

Lectures are delivered and coordinated by experts in the relevant fields while special attention is paid to ensuring that classes are interactive using relevant case studies. Specifically, participants are taught using practical and real-life examples and the courses are designed to optimize class assessments and group work.

We offer both in-person and online classes for all our courses. The in-person classes are held in our facility at **Analysts' House, opposite University of Ibadan 2nd Gate, Ibadan, Nigeria**. Interested institutions may also contact the Academy to arrange training for participants at locations of their choice. Further, we have arrangements for weekend classes for participants that are unable to attend the weekday's pre-scheduled classes.

Applicable software

Training sessions, where applicable, entail the use of relevant software such as; Ms. Excel, Power BI, Ms. Access, Ms. SQL Server, MySQL, NoSQL, Python, Hadoop, PAST, SAS, SPSS, STATA, Tora, TSP, R, MATLAB, NVIVO, among others, to enhance participants hands-on experience.

Course fees and arrangements

All courses have fees to be paid by each participant, covering the cost of the training, course materials, tea break, lunch and the certificate. However, an organisation planning to send multiple participants for a course may contact the Academy to seek the applicable fees reduction. Also, those that need to travel to attend the courses may contact the Academy to obtain guidance on travel and accommodation arrangements.

2022 programme calendar

This programme calendar describes the available courses for the 2022 calendar year, specifying for each course the description and content, target audience and qualification as well as the objectives and course duration.

In addition to the various pre-scheduled courses, ADSR also offers a range of other customized courses to meet the special needs of our participants and their institutions. Each of these courses is taken by experts with both theoretical and practical knowledge on the relevant topics.

We would therefore be glad to see you attend our training programmes which we are confident will meet and exceed your expectations.

AVAILABLE COURSES FOR 2022 CALENDAR YEAR

PART I: RESEARCH AND REPORT WRITING COURSES

- Research Methodology
- Introduction to Report Writing
- Executive Speeches and Intelligence Reports
- Introduction to Qualitative Research
- Survey Research Design and Analysis

PART II: ECONOMIC ANALYSIS COURSES

- Macroeconomic Monitoring and Diagnostics
- Macroeconomic Accounts Statistics
- Economic Impact Analysis
- Economic Analysis of Merger and Competition
- Productivity and Efficiency Analysis
- Introduction to Product Demand and Elasticity Analysis

PART III: POLITICAL ECONOMY AND POLICY ANALYSIS COURSES

- Political Economy and Context Analysis
- Policy and Regulatory Impact Analysis
- Programme Monitoring Evaluation and Learning

PART IV: FINANCIAL MARKETS MODELLING AND CORPORATE ANALYSIS COURSES

- Financial Markets Activities and Regulation
- Equity Valuation
- Asset Pricing Models and Applications
- Commodities and Derivatives Markets
- Corporate Governance
- Environmental, Social and Governance Measurement
- FinTech Operations and Regulation
- Application of Digital Transformation to Organizations

PART V: ECONOMETRIC MODELLING COURSES

- Applied Time series Modeling and Forecasting
- Panel Data Models
- Macroeconometric Modeling and Forecasting

PART VI: DATA SCIENCE AND ANALYTICS COURSES

- Basic Data Analysis for Business and Policymakers
- Diagnostics and Predictive Analytics
- Introduction to Python
- Introduction to R
- Database Management using SQL
- MS Excel for Data Management and Analysis
- Business Intelligence, Visualization and Dashboard Reporting

SCHEDULED TRAINING CALENDAR

S/N	Course title	Course Code	Course fees (NGN)		Duration (days)	Calendar Days											
			In-person+	Virtual		JAN*	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.	Research Methodology	A01	79,500	59,500	5			7-11			6-10			5-9			5-9
2.	Introduction to Report Writing	A02	39,500	29,500	2			1-2			6-7			1-2			5-6
3.	Executive Speeches and Intelligence Reports	A03	39,500	29,500	2					5-6						2-3	
4.	Introduction to Qualitative Research	A04	39,500	29,500	2				4-5					8-9			
5.	Survey Design and Analysis	A05	49,500	37,000	3		7-9			2-4			3-5			8-10	
6.	Basic Data Analysis for Business and Policymakers	E01	49,500	37,000	3	2-5	4-6	1-3	5-7	2-4	1-3	4-6	1-3	5-7	3-5	1-3	5-7
7.	Diagnostics and Predictive Analytics	E02	79,500	59,500	5	10-14	4-8	8-12	5-9	10-14	6-10	11-15	8-12	12-16	10-14	7-11	12-16
8.	Introduction to Pyth006Fn	E03	49,500	37,000	3		7-9		12-14	8-10		18-20			17-19	14-16	
9.	Introduction to R	E04	49,500	37,000	3		14-16	18-20			13-15		15-17		24-26	21-23	
10.	Database Management using SQL	E05	49,500	37,000	3		13-15		21-23		16-17		22-24			28-30	
11.	MS Excel for Data Management and Analysis	E05	39,500	29,500	2	16-17	25-26	11-12	29-30	27-28		21-22	25-26	19-20	27-28	10-11	19-20
12.	Business Intelligence, Visualization, and Dashboard Reporting	E06	39,500	29,500	2			25-26	20-21	8-9		25-26		21-22		14-15	
13.	Macroeconomic Monitoring and Diagnostics	B01	79,500	59,500	5									19-23			
14.	Macroeconomic Accounts Statistics	B02	79,500	59,500	5		5-9				13-17						
15.	Economic Impact Analysis	B03	79,500	59,500	5	11-15				11-15				26-30			
16.	Economic Analysis of Merger and Competition	B04	79,500	59,500	5			22-26						26-30			
17.	Productivity and Efficiency Analysis	B05	79,500	59,500	5						20-24					14-18	
18.	Introduction to Product Demand and Elasticity Analysis	B06	79,500	59,500	5			10-14	12-16				22-26				
19.	Applied Time Series Modelling and Forecasting	D01	79,500	59,500	5	17-21		21-25		13-17		4-8			3-7	21-25	
20.	Panel Data Models	D02	79,500	59,500	5	24-28		14-18		23-27		11-15			10-14		12-16
21.	Macro Econometric Modelling and Forecasting	D03	79,500	59,500	5		15-19					18-22			17-21		
22.	Financial Markets Activities and Regulation	C01	49,500	37,000	3		22-26					6-8	29-31				
23.	Equity Valuation	C02	79,500	59,500	5				19-23			25-29			24-28		
24.	Asset Pricing Models and Applications	C03	79,500	59,500	5			15-19								14-18	
25.	Commodities and Derivatives Market	CO4	79,500	59,500	5				22-26		27-1					21-25	
26.	Corporate Governance	C05	39,500	29,500	2		15-16				27-28				17-18		
27.	Environmental, Social, and Governance Measurement	C06	39,500	29,500	2					20-21					19-20		
28.	Fintech Operations and Regulations	C07	49,500	37,000	3		7-9							19-21			
29.	Application of Digital Transformation to Organizations	C08	39,500	29,500	2		29-30								26-27		
30.	Political Economy and Context Analysis	F01	79,500	59,500	5			15-19			13-17						
31.	Policy and Regulatory Impact Analysis	F02	79,500	59,500	5			22-26			18-22			12-16			
32.	Programme Monitoring Evaluation and Learning	F03	79,500	59,500	5			28-31			25-29			19-23			

***Numbers under the months of Jan-Dec are calendar dates**

+ In-person classes are held in our facility at Analysts' House, opposite University of Ibadan 2nd Gate, Ibadan, Nigeria

Connect with us

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