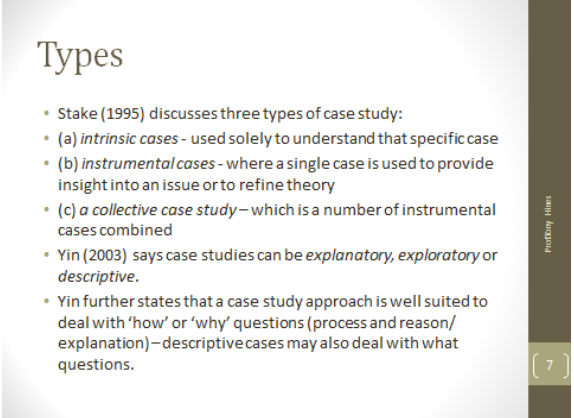
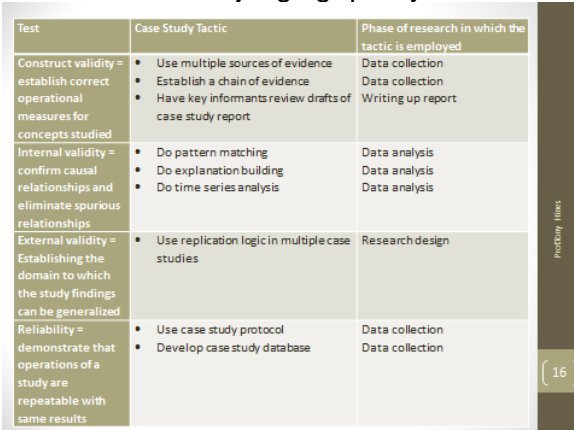


Ten Things to Know About Case Study Research	Some answers – things learned today	Things to Follow up in my own work															
<p>1. Types of case study research: what is the purpose of a case study? For example, is the intention verification or theory building?</p>  <p>Types</p> <ul style="list-style-type: none"> Stake (1995) discusses three types of case study: <ul style="list-style-type: none"> (a) <i>intrinsic cases</i> - used solely to understand that specific case (b) <i>instrumental cases</i> - where a single case is used to provide insight into an issue or to refine theory (c) <i>a collective case study</i> – which is a number of instrumental cases combined Yin (2003) says case studies can be <i>explanatory, exploratory</i> or <i>descriptive</i>. Yin further states that a case study approach is well suited to deal with ‘how’ or ‘why’ questions (process and reason/ explanation) – descriptive cases may also deal with what questions. 	<p>Purpose could be:-</p> <ul style="list-style-type: none"> to study a single case in depth (intrinsic or instrumental cases) to study a number of cases, analyse and compare them (collective or multiple case studies) to describe, explain and explore phenomena to build theory to verify or test theory 																
<p>2. Planning case designs and how these fit with the types of knowledge you want to generate. What are the criteria for judging quality?</p>  <table border="1"> <thead> <tr> <th>Test</th><th>Case Study Tactic</th><th>Phase of research in which the tactic is employed</th></tr> </thead> <tbody> <tr> <td>Construct validity = establish correct operational measures for concepts studied</td><td> <ul style="list-style-type: none"> Use multiple sources of evidence Establish a chain of evidence Have key informants review drafts of case study report </td><td> Data collection Data collection Writing up report </td></tr> <tr> <td>Internal validity = confirm causal relationships and eliminate spurious relationships</td><td> <ul style="list-style-type: none"> Do pattern matching Do explanation building Do time series analysis </td><td> Data analysis Data analysis Data analysis </td></tr> <tr> <td>External validity = Establishing the domain to which the study findings can be generalized</td><td> <ul style="list-style-type: none"> Use replication logic in multiple case studies </td><td>Research design</td></tr> <tr> <td>Reliability = demonstrate that operations of a study are repeatable with same results</td><td> <ul style="list-style-type: none"> Use case study protocol Develop case study database </td><td> Data collection Data collection </td></tr> </tbody> </table>	Test	Case Study Tactic	Phase of research in which the tactic is employed	Construct validity = establish correct operational measures for concepts studied	<ul style="list-style-type: none"> Use multiple sources of evidence Establish a chain of evidence Have key informants review drafts of case study report 	Data collection Data collection Writing up report	Internal validity = confirm causal relationships and eliminate spurious relationships	<ul style="list-style-type: none"> Do pattern matching Do explanation building Do time series analysis 	Data analysis Data analysis Data analysis	External validity = Establishing the domain to which the study findings can be generalized	<ul style="list-style-type: none"> Use replication logic in multiple case studies 	Research design	Reliability = demonstrate that operations of a study are repeatable with same results	<ul style="list-style-type: none"> Use case study protocol Develop case study database 	Data collection Data collection	<p>Criteria are the same as for all ‘good’ social science research. Choose case or cases carefully. Single case study is usually selected with a purpose in mind. It could be a ‘typical case’, a ‘critical case’ an ‘extreme case’.</p> <p>Multiple cases may require a sampling logic and criteria for selection but again it will depend on purpose. Yin (1994) offered some guidance which focuses on the following:-</p> <p>Construct validity = establish correct operational measures for concepts studied</p> <p>Internal validity = confirm causal relationships and eliminate spurious relationships</p> <p>External validity = Establishing the domain to which the study findings can be generalized</p> <p>Reliability = demonstrate that operations of a study are repeatable with same results</p>	
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3. Is it possible to combine methods within a case design? Ontological and epistemological considerations.	Yes and researchers often do this. Your choices will be shaped by your preferences maybe based on 'world-views' and the questions being addressed. For example, I have used sensemaking, repertory-grids and cognitive maps as tools to elicit data inside case studies. You have to be clear about what you want to achieve e.g. what type of knowledge you wish to contribute.																						
4. What are the different data sources to inform case study research? For example, qualitative and/or quantitative data and there is also growing interest in using visual data in addition to documents, archival records, interviews, direct/participant observations and artefacts.	<table><tr><th>Applicable to all cases</th><th>Source Data</th><th>Strength</th><th>Weakness</th><th rowspan="6">Predicting biases</th></tr><tr><td rowspan="5">Data Collection</td><td>Observation</td><td>Contextual Realtime</td><td>Time consuming Bias possible because of observation</td></tr><tr><td>Documentary</td><td>Exact Repeated reviews Unobtrusive Broad in scope Confirmatory</td><td>Difficult to accessor retrieve Bias in selection Report bias</td></tr><tr><td>Archival records</td><td>Same as documentary</td><td>Same as documentary</td></tr><tr><td>Interviews:-<ul style="list-style-type: none">• Open ended interviews• Focused interviews• Structured interviewsSurveys</td><td>Focus on case study Insightful</td><td>Bias if questions are poorly constructed Response bias</td></tr><tr><td>Physical artefacts</td><td>Insightful for technical operations or cultural features</td><td>Selectivity Availability / access</td></tr></table>	Applicable to all cases	Source Data	Strength	Weakness	Predicting biases	Data Collection	Observation	Contextual Realtime	Time consuming Bias possible because of observation	Documentary	Exact Repeated reviews Unobtrusive Broad in scope Confirmatory	Difficult to accessor retrieve Bias in selection Report bias	Archival records	Same as documentary	Same as documentary	Interviews:- <ul style="list-style-type: none">• Open ended interviews• Focused interviews• Structured interviews Surveys	Focus on case study Insightful	Bias if questions are poorly constructed Response bias	Physical artefacts	Insightful for technical operations or cultural features	Selectivity Availability / access	
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5. How do I choose an appropriate sampling strategy? Single or multiple cases, purposive, theoretical or representative sampling?	You can select a single case where the phenomenon you wish to study is present. Extreme or critical cases are appropriate for this purpose or sometimes researchers choose a representative case. Representative case sampling is more appropriate when you wish to examine a phenomenon in different settings according to your defined research design criteria.	Articles highlighted for further reading will help you with your choices and justification.																					

Type of case study	Advantage	Disadvantage	Prof Tony Hines
Single case	Study in depth and for many purposes a single case is sufficient. See intrinsic and instrumental case studies.	Argued by some to limit generalizability but this is only a problem if generalizability was an aim or purpose of the study. The same goes for representation.	
Collective cases	Multiple cases may help with external validity when justifying a study. These are often representative cases selected to meet specific criteria to comment and generalize on a phenomenon observed across cases.	Requires more time and resources and there is not time to do in-depth cases beyond a small number. Again depends on purpose.	
Retrospective cases	Possible to use archival data and historical reports of events – assuming access is possible.	Difficulties may arise examining/interpreting historical data. Memory loss over time if respondents are using recall in response. Cause and effect may difficult to determine if that is a purpose	
Longitudinal cases	Studied in process in the flow of time so may have advantages over retrospective cases.	Take a long time to do. Sometimes difficult to maintain interest or indeed in the case of organizational research – organizations cease to exist or change purpose.	(11)
<h2>Sampling in case research</h2> <p>This depends on the type of approach taken.</p> <p>Purposive sampling is used when you want to generate or test explanatory frameworks in a qualitative case study (Patton 2001).</p> <ul style="list-style-type: none"> ▪ Extreme or deviant cases ▪ Critical cases ▪ Intensity case ▪ Typical case ▪ Maximum variation cases ▪ Criterion sampling ▪ Confirming and disconfirming cases ▪ Theory based sampling ▪ Politically important or sensitive case sampling <p>Patton, M. Q. (2001) <i>Qualitative evaluation and research methods</i>, London: Sage.</p>			(14)

<p>6. Doing case research – what does it involve? How can I ensure rigour? What are the benefits? What are the risks? How long does it take?</p>	<p>Case research is time consuming and requires careful consideration at each stage of the process to be done properly. You need to plan from the moment you think of the phenomenon to study and the research questions you want to answer. It requires attention to detail. It requires justifications for the choices you make to be made explicit in your research reports (Papers, Thesis). How long a case study will take depends on the type of case study approach you take (single or multiple designs), the types of analysis you do and the level of detail required. Good cases take time to plan, to choose, to gain access, to find the right data sources, to do, to analyse and to write up. The rewards can be great. You may get satisfaction from studying a single case in depth or from designing a study with multiple cases. Doing 'good social science takes time'. You can be creative and innovative in the way in which you set about the task.</p>	
<p>7. How does a case design limit knowledge claims? Is case research generalizable? How does it contribute to our knowledge/understanding of management practice? How can case research build theory? We will consider a philosophical justification for choices we make.</p>	<p>This is the generalizability problem that Flyvberg and others refer to.</p> <p>Your selection of case (cases), the purpose and the research design place boundaries around your work. In doing so they also place boundaries around what you are able to know and limit the claims to knowledge that you are able to justify.</p> <p>You can build theory with case research as Eisenhardt suggests. You can verify or test theory as Voss suggest. You can contribute to understanding phenomenon in depth as Stake states. Ethnographers have a record of working with field studies that are essentially a single case.</p>	
<p>8. How do I analyze case evidence? Ensuring that there is a chain of evidence to justify claims. Some practical suggestions will be offered to delegates, linear analytic, comparative, multiple, chronology, and theory-building amongst them.</p>	<p>Miles and Huberman (1994) refer to chains of evidence and emphasise the importance of tables to display data and present analysis visually. Revise original propositions in the light of case evidence. Develop hypothesis if appropriate from which to do further research based on cases. Develop a theory to test. Let the case speak for itself a common strategy in descriptive case research.</p>	

Research stage	Realist (Yin)	Relativist (Eisenhardt)	Constructionist (Stake)
Design	Prior	Flexible	Emergent
Sample	<30	4-10	1 or more
Analysis	Across case	Both cross case and within case analysis	Within case
Theory	Testing validity / verification	Building theory	Action
Applicable to all	Source Data	Strength	Weakness
Data Collection	Observation	Contextual Real time	Time consuming Bias possible because of observation
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	Physical artifacts	Insightful for technical operations or cultural features	Selectivity Availability / access

Prof Tony Hines

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Analyzing case data

Two main strategies:-

1. Rely on original propositions e.g. generated from literature and pattern match
2. Develop a case description a logic or framework by which to organize case data (e.g. a temporal narrative is one such way or a thematic analysis narrative)

These strategies require researchers to:-

- * Categorize
- * Tabulate
- * Recombine evidence to address initial propositions

Four dominant analytic techniques have emerged:-

1. Pattern Matching: compare empirical evidence to a prediction (outcome v expectation), or identify causal relationships between y (dependent) and x (independent) variable.
2. Explanation building – maybe to develop ideas for further study
3. Time series analysis – analogous to statistical time series to identify trends in data – sequencing a before b and b before c etc.
4. Program logic models – temporal schemes (pattern matching and events over time – time series analysis)

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9. How do I write the case report?
Writing the case report: chronology,

This will depend on the type of case research you do. Most qualitative case studies adopt a narrative form of presentation and

<p>how to structure the evidence and develop the narrative.</p>	<p>often case writing is structured chronologically to help make sense of events, processes or actions for the reader. Multiple case studies to verify or test theory are written differently and tend to be more objective in their style of writing.</p> <p>Two general approaches:-</p> <ul style="list-style-type: none"> • A single case in depth is usually presented as a narrative describing and/or explaining • Multiple cases are usually written up as single case narratives followed by some within case analytic commentary and then organizing a separate section or chapter to pull out cross case themes from the analysis of all cases. <p>Your writing approach will depend on the original aims/purpose of your case study (s). (description, explanation, exploration, theory building, verification and so on).</p>	
<p>10. How can I ensure that my case research is rigorous, relevant and will make a desired contribution to knowledge for my PhD? Think like a lawyer! Examples of rigorous case study research in different management and business disciplines and the contributions to knowledge they have made will be cited as examples.</p>	<p>By thinking evidence in relation to the claims of knowledge you are making. Also by following good practice in doing social science research following steps 1 to 9 above and addressing the issues carefully taking time to justify the decisions about the research design.</p>	

<p>Test</p> <p>Construct validity = establish correct operational measures for concepts studied</p> <p>Internal validity = confirm causal relationships and eliminate spurious relationships</p> <p>External validity = Establishing the domain to which the study findings can be generalized</p> <p>Reliability = demonstrate that operations of a study are repeatable with same results</p>	<p>Case Study Tactic</p> <ul style="list-style-type: none"> • Use multiple sources of evidence • Establish a chain of evidence • Have key informants review drafts of case study report • Do pattern matching • Do explanation building • Do time series analysis • Use replication logic in multiple case studies • Use case study protocol • Develop case study database 	<p>Phase of research in which the tactic is employed</p> <p>Data collection Data collection Writing up report</p> <p>Data analysis Data analysis Data analysis</p> <p>Research design</p> <p>Data collection Data collection</p>	<p>Prof Tony Hines</p> <p>{ 22 }</p>		

NAME _____ DATE ____/____/____