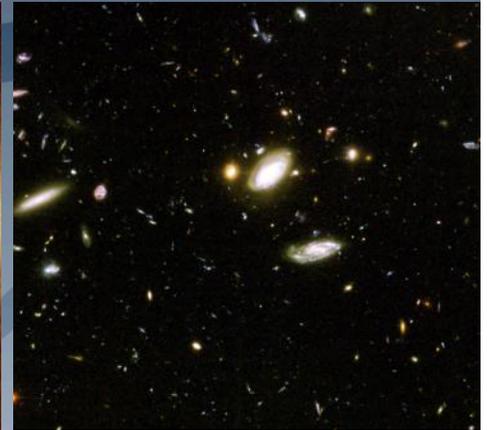


National Aeronautics and Space Administration



Astrophysics



X-ray Surveyor F2F Meeting

May 2016

Daniel Evans

X-Ray Surveyor Program Scientist

NASA Headquarters

Content



1. Defining the Study Team
2. What will NASA HQ do during your study?
3. Who/what are your NASA HQ resources?
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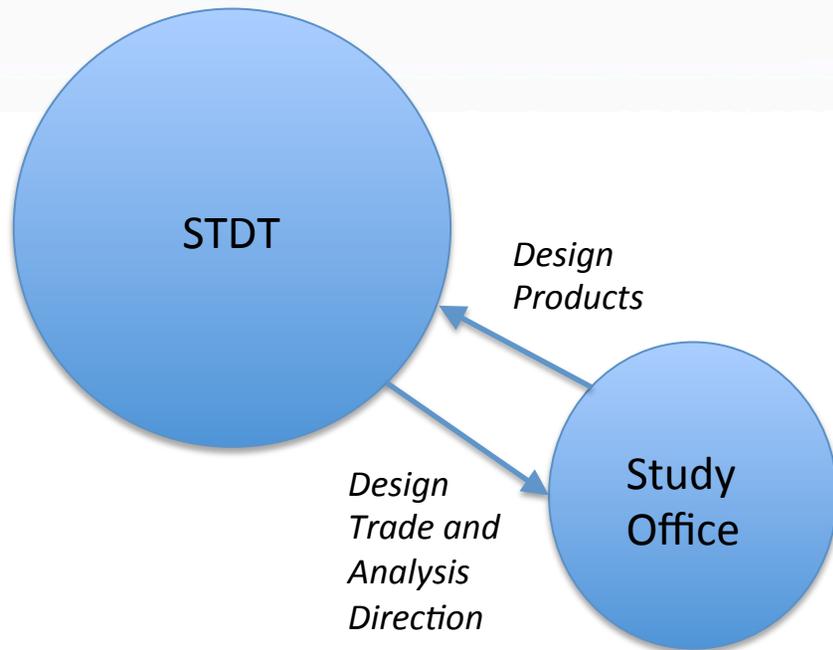
Roles and Responsibilities: A Team and Customer View



Legend:
Arrow points
To Customer



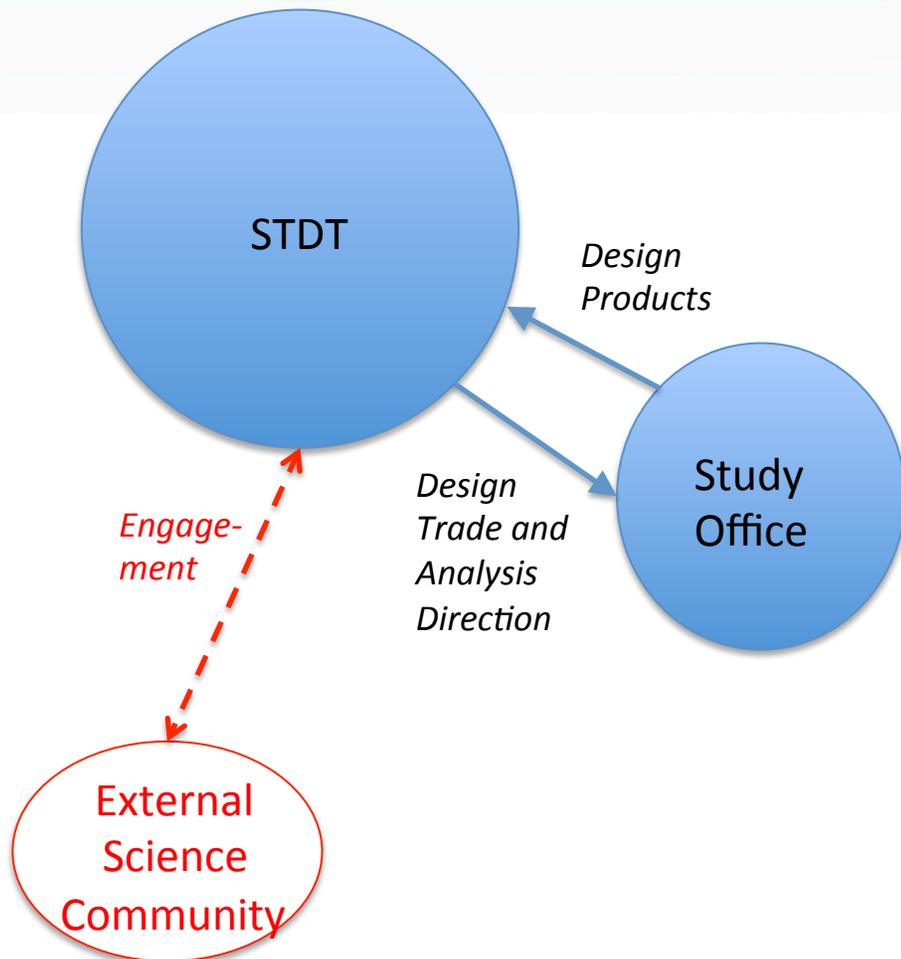
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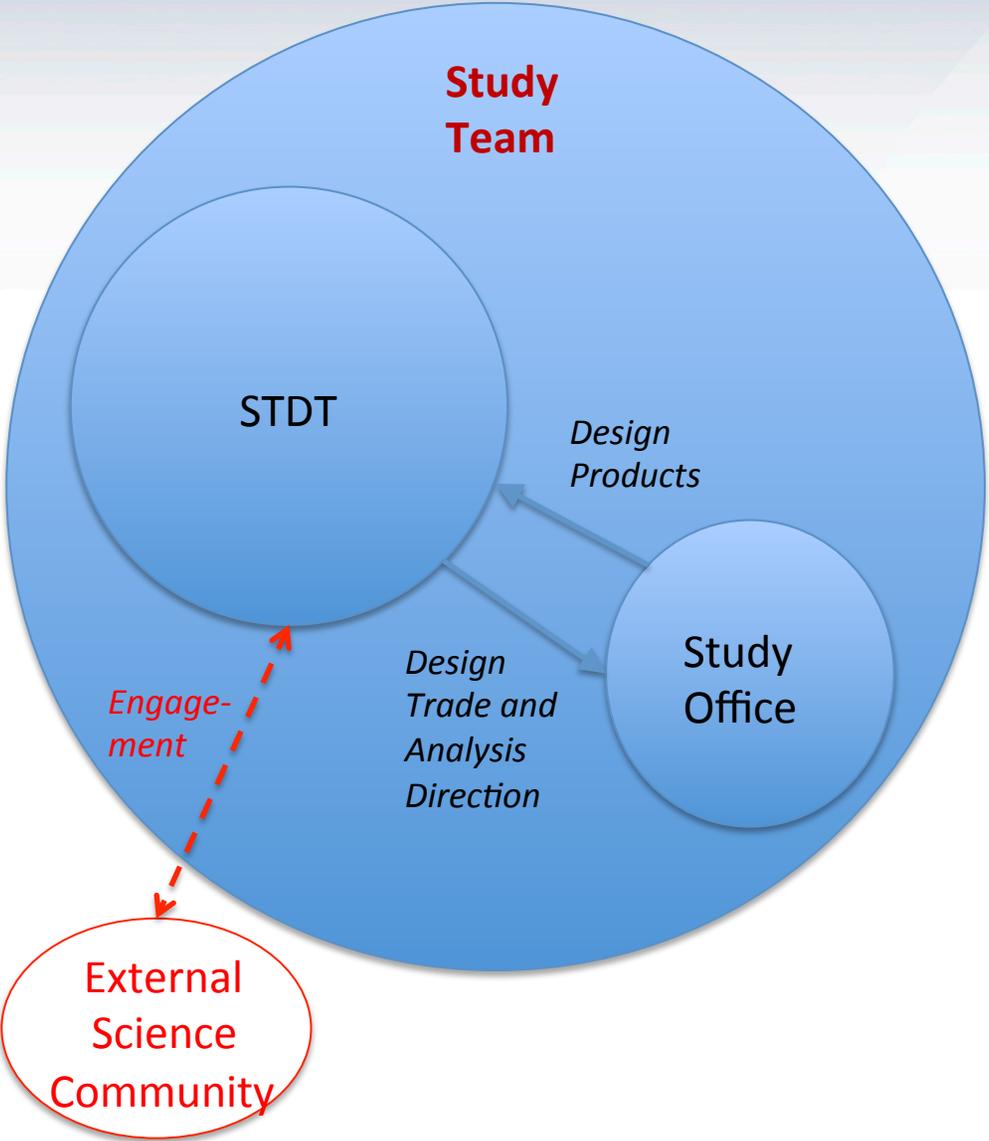
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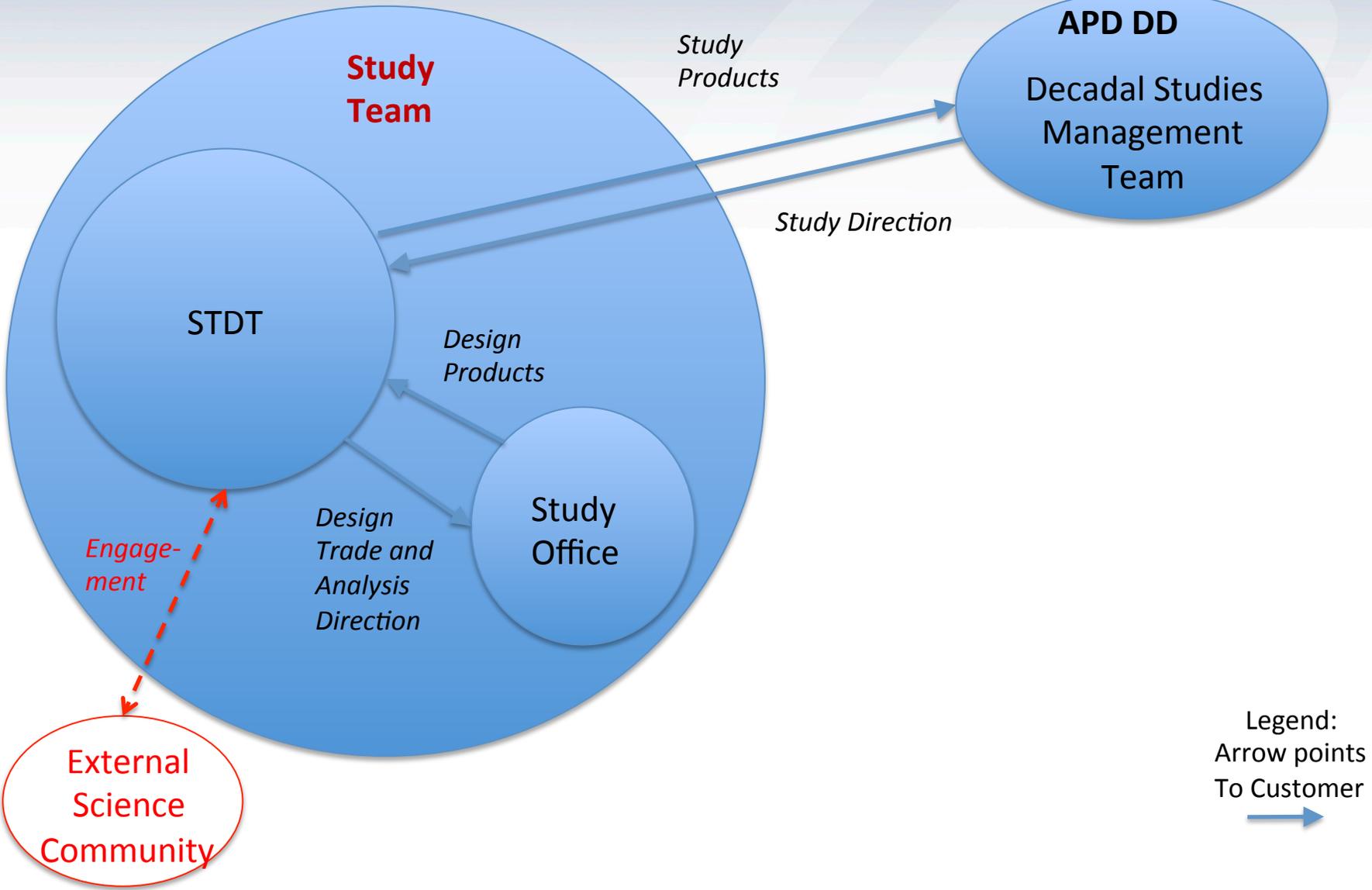


Roles and Responsibilities: A Team and Customer View

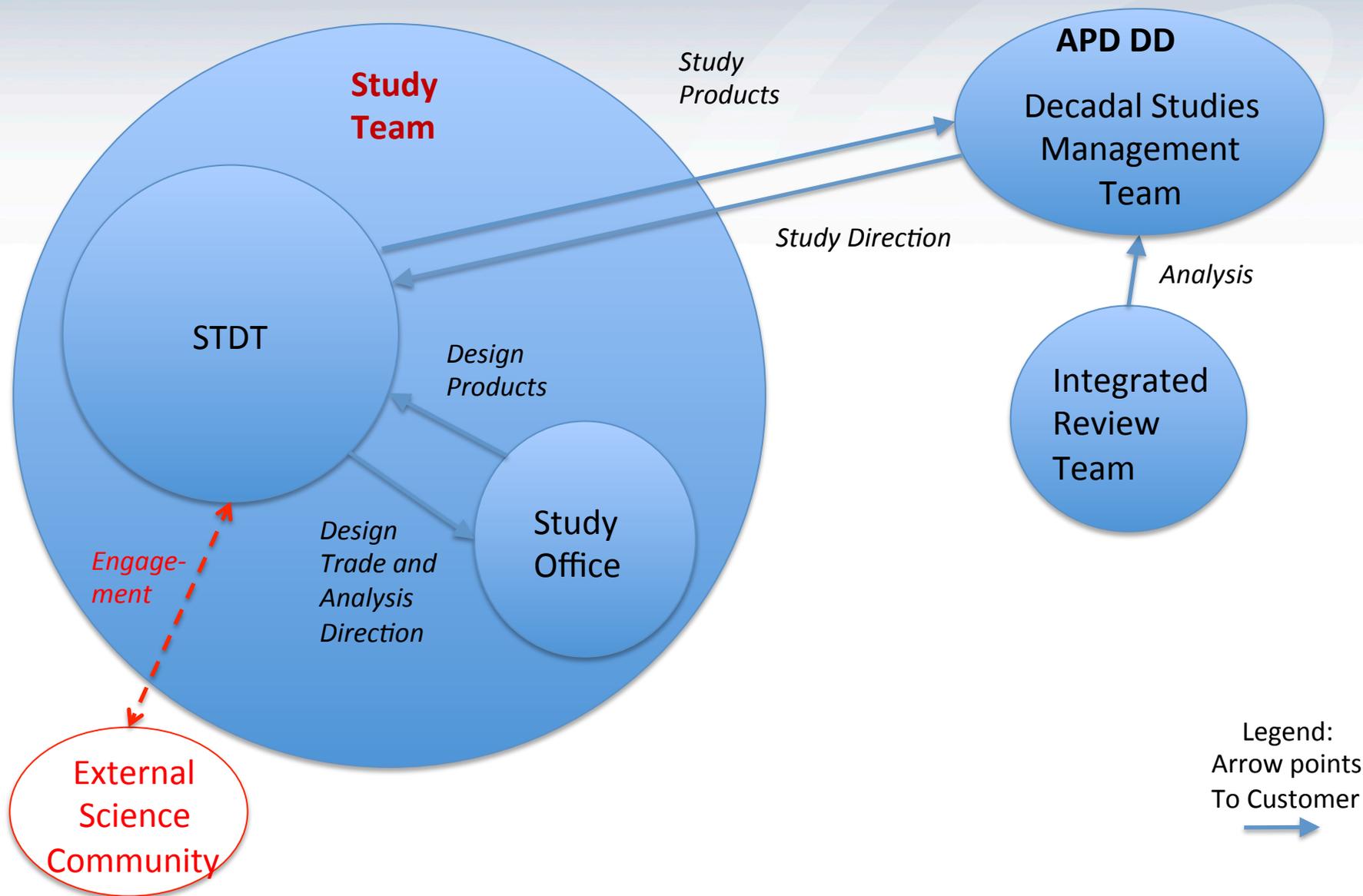


Legend:
Arrow points
To Customer
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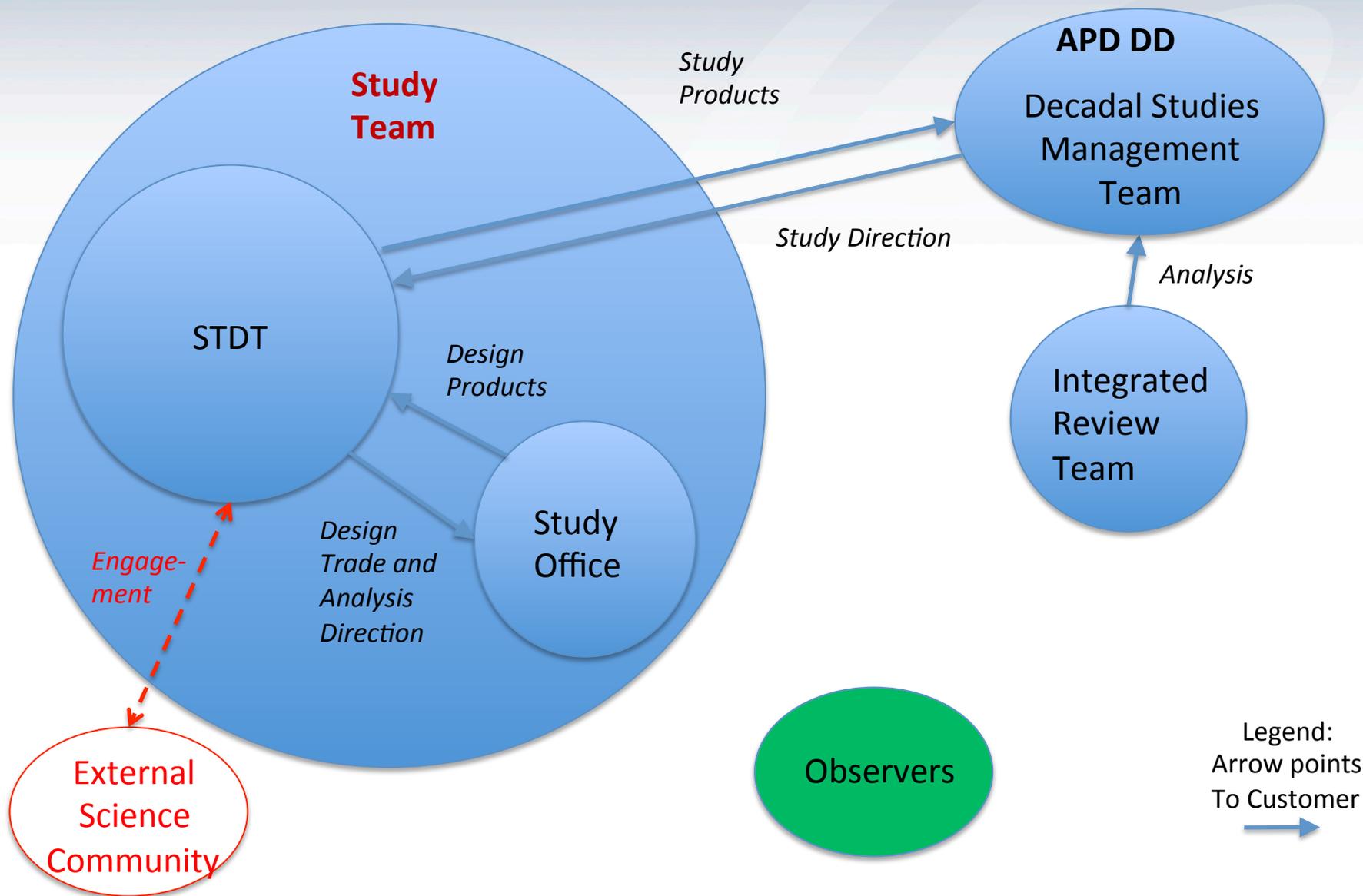
Roles and Responsibilities: A Team and Customer View



Roles and Responsibilities: A Team and Customer View



Roles and Responsibilities: A Team and Customer View



What Will NASA HQ Do During Your Study?



- Select STDT membership
 - <http://science.nasa.gov/astrophysics/2020-decadal-survey-planning/>
- Charter the STDT
 - <http://science.nasa.gov/astrophysics/2020-decadal-survey-planning/>
- Fund the Study Office
- Ensure the Study meets its obligations (cost, schedule, deliverables)
- Propagate Study findings into NASA strategy and programs
 - <http://science.nasa.gov/astrophysics/documents/>

Who/What are your NASA HQ Resources?



- Program Scientist: Daniel Evans
- Deputy Program Scientist: Lou Kaluziński
- Program Offices
 - Physics of the Cosmos (key POCs are Mooni Ahmed and Ann Hornschemeier)
 - Cosmic Origins
 - Exoplanet Exploration

What Will Your Program Scientist Be Doing?



- Act as your day-to-day spokesperson at HQ.
- Provide “big picture guidance” to the STDT via DSMT.
- Open doors within NASA to advance all four studies.
- Frequent contact with STDT leadership.
 - Standing telecons
 - Near-daily email exchange
- Serve as conduit of information exchange between STDT and Decadal Studies Management Team
- Does not act autonomously from the DSMT in managing the study teams or the conduct of the studies.

What Will Your Program Scientist Be Doing?



- Does not direct the STDT on how or what science case to include/exclude.
- Does not manage the STDT.
- Your Program Scientist can:
 - Nudge, cajole, urge, explain, provide interfaces, question, praise, critique, facilitate, concur, listen, think out loud, comment, wonder, review, represent, and defend your study to HQ.
- Does not act autonomously from the DSMT in managing the conduct of the studies.

Final Study Deliverables



The final study deliverable shall include:

- Science case for the mission
- Mission and observatory performance requirements that deliver these science capabilities
- Design reference mission, including straw-man payload trade studies conducted to arrive at the final mission concept
- Technology assessment:
 - Current status, at the time of submittal of the final report
 - Roadmap for maturation to both TRL-5 by the start of Phase-A and TRL-6 by the mission PDR
 - Phased resources needed to achieve the required technology maturity levels by the start of Phase A and by mission PDR
- Cost assessment, major technical, and risk burn-down plans as a function of science capability.
- Top-level schedule for major phases of development including a notional launch date (assuming entering phase-A as a post-WFIRST budget wedge opens) and top schedule risks.

Some Personal Observations



- Science Comes First.
- Your technology development roadmaps must be robust.
- Don't be afraid to 'blow up' your science case and re-examine everything.
- Consider the astronomical landscape in the 2030s.
- Your science case must be developed in the context of Athena.
- Community outreach is essential.

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