

Finding the Right Transition Path

Common Pitfalls in Commercialization



Agenda

What is Commercialization?

Transition Paths

- Government (Programs of Record)
- Government Primes
- Commercial

General Challenges of Transitioning

Challenges for Each Path

Selecting the Best Path for Your Technology

Proactive Planning for the Transition

Now That You've Achieved Commercialization

What is Commercialization?

Commercialization, also known as Phase III, is a broad term encompassing any kind of commercial activity (e.g. sales, licensing, investment), as well as transition activities (DoD, Government & Private Sector).

Commercialization provides additional advantages to both the Government and the Small Business.

Phase III is basically final development/production and uses external (non-SBIR) funding from government or private sources.

Phase III is unfunded.

- By statute, SBIR/STTR funding cannot be used for Phase III
- There are no set-asides for Phase III
- However, Phase III can be a non-competitive, sole-source contract

Given the timelines associated with the DoD budget development process, it is crucial to begin identifying Phase III funding with ample lead time. Early commercialization planning will also support the small business's ability to align its SBIR/STTR technology with acquisition program schedules and requirements.

Transition Paths

- Government (Programs of Record)
 - Programs and applications that the topic author envisioned when the original SBIR/STTR topic was conceived; these Government targets may have changed over time
- Government Primes
 - Companies that provide systems or subsystems to the DoD or government organizations
- Commercial
 - Technology is applied to commercial markets such as industrial or consumer, not DoD

Government Programs of Record

A Program of Record (POR) is an Acquisition Program which is a directed, funded effort that provides a new, improved, or continuing materiel, weapon, or information system or service capability in response to an approved need. Acquisition programs are divided into categories that are established to facilitate decentralized decision making, execution, and compliance with statutory requirements.

The Program of Record is as-recorded in the current Future Year's Defense Program (FYDP) or as updated from the last FYDP by approved program documentation (e.g., APB, acquisition strategy, SAR, etc.). When this happens, the program becomes a "line item record" in the budget -- hence the term "program of record".

Government Primes

Government Prime contractors bid on and win contracts directly from government agencies. After award, the Prime contractor company is the entity that is legally responsible for all aspects of fulfilling the contract, interacting with the government customer, managing subcontractors, and meeting all program delivery requirements. Both large and small businesses can serve as prime contractors.

Primes are usually focused on programs they are directly involved with or planning on pursuing. They may need a particular technology or technologies for specific applications; they are not interested in technology just for the technology's sake and ideally it is tied to a specific area of interest and/or program. Occasionally, they may invest in a technology or product prior to a program start or ramp-up.

Commercial

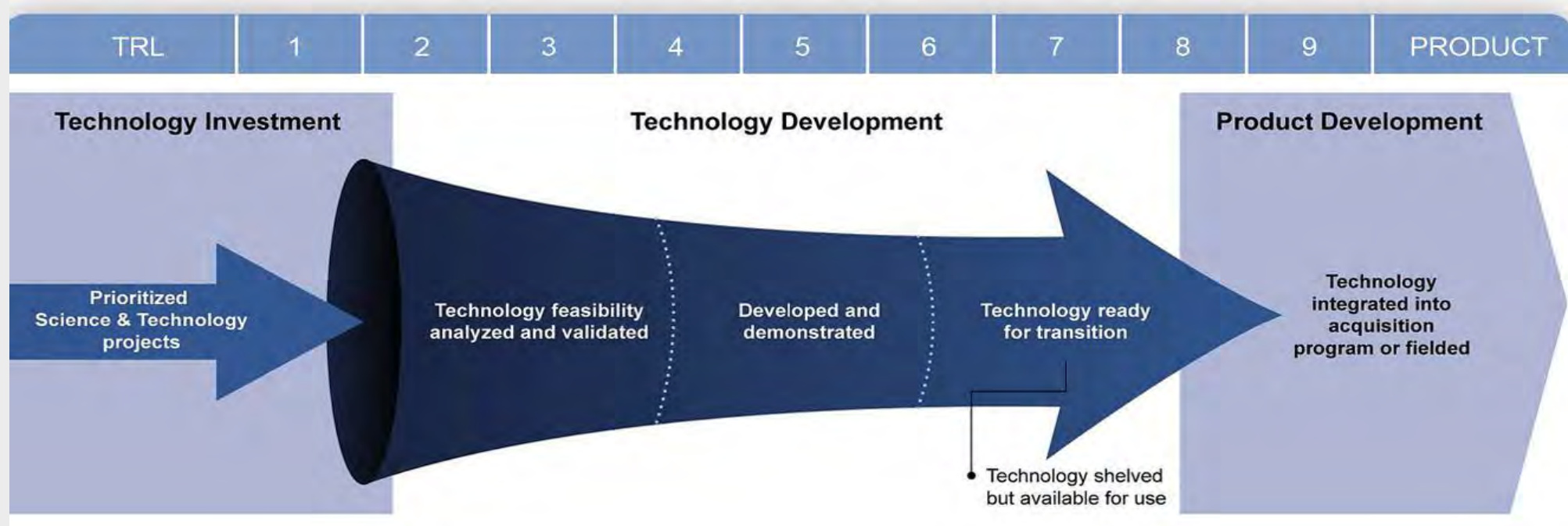
Commercial is essentially Non-Government markets and opportunities. These can include any customer company focused on one of a number of markets such as consumer, industrial, medical, energy, IT/cyber, etc.

Taken together with the definition of commercialization, which is “the process of developing products, processes, technologies, or services; and the production and delivery (whether by the originating party or others) of products, processes, technologies, or services for sale to or use by commercial markets”, there are a number of “offerings” you can provide to your targeted customer.

General Challenges of Transitioning

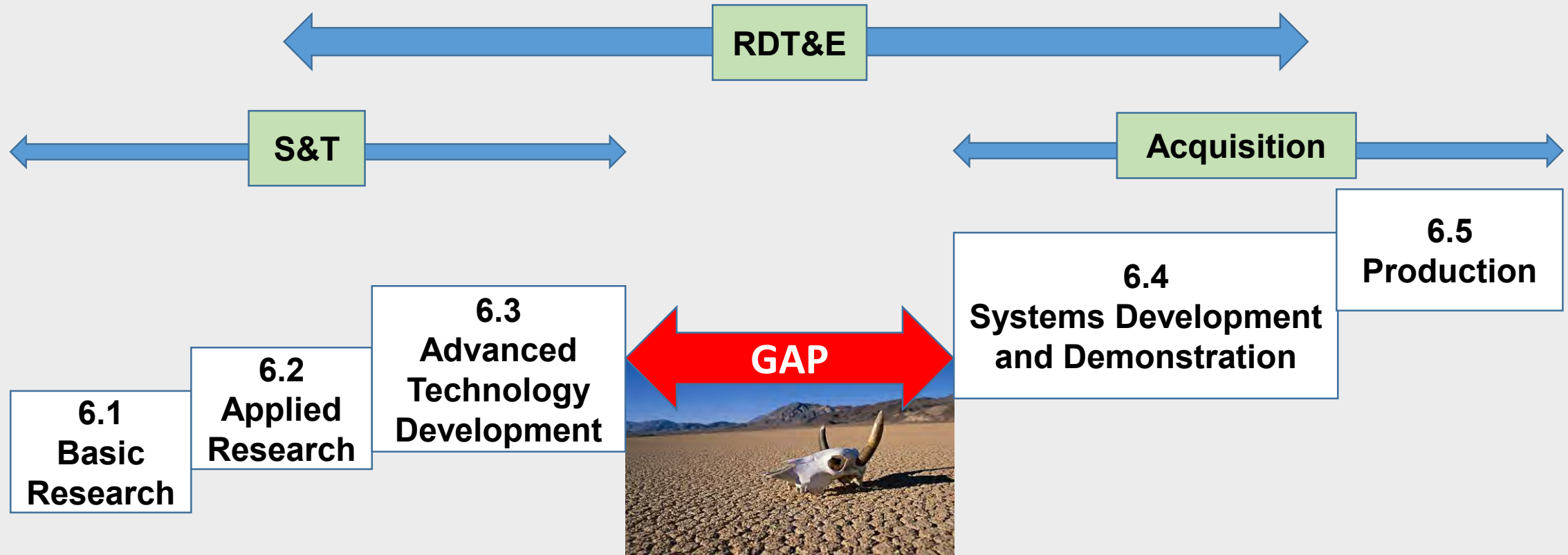
- There is no “one-size fits all” Technology Transition solution
- Obtaining Funding is difficult - there is a “Gap” in Funding, also known as the “Valley of Death” – when transitioning from technology development to product development
- Starting from scratch without a prior, existing customer relationship will take time
- Matching need with capabilities can add complexity
- Breaking the status quo can be challenging
- The small business may be perceived as a risk

What This Means to Your Company



Funding Shortfall or "Gap"

How It Translates to the “Color of Money”



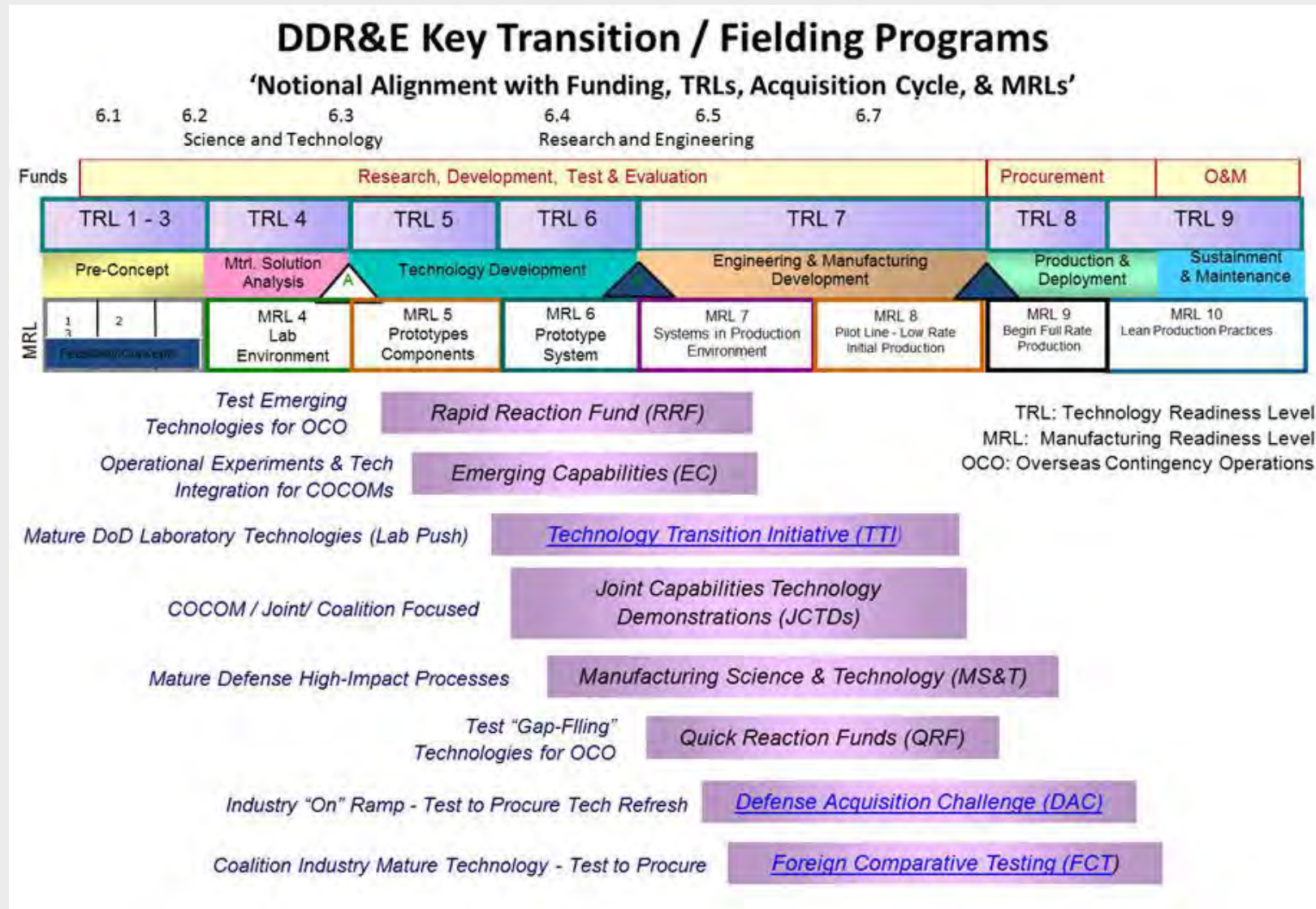
Valley of Death
(Technology Transfer “Gap”)

Crossing the Valley of Death “Gap”



Courtesy of Defense Acquisition University

Bridging the “Gap” with Funded Development



Challenges with Government Customers

- They don't know how to adopt, mature, and transition SBIR/STTR technologies into a POR and fielded systems through direct SBIR/STTR Phase III Awards
- No verification that SBIR/STTR technology can satisfy program requirements, as a prime or as a subcontractor to a prime, to determine if GFE is feasible
- Often don't include SBIR/STTR for insertion in their milestone review planning process
- No preparation of required Phase III procurement documents for delivery to the contracting officer
- Often do not search their service database for prior SBIR/STTR projects adaptable to meet program needs

Challenges with Government Customers – cont'd

- Very narrow charter and very specific programs within the Program Executive Office/Program Manager
- A Program of Record has budgeted funding associated with it, however the amount is limited/fixed in advance and what it is spent on may be restricted as well
- A POR is governed by a long-term plan – it therefore may not have schedule flexibility for technology insertion, as optimally desired by the small business

Challenges with Government Primes

- Sometimes there is a disconnect between Prime interests & needs and small business interests & capabilities
- Primes are dependent on Government contract money
- They may not have the fiscal flexibility to award the small business a contract directly themselves
- The timing of the product development may not fit their schedule
- They may have an alternative (or preferred) technology
- Credibility gaps – they don't know you, your company is too small, you've never done this before, etc.

Challenges with Commercial Customers

- Every one is different; if you are used to working with the Government and Primes, Commercial companies can be vastly different
- They may not be familiar with or relate to technology developed under a DoD program
- You may have to go through a learning-curve
- They will likely have a different contractor payment system (Hint – they may not pay as quickly as the Government)
- Reps and Certs are replaced with T's & C's (Terms & Conditions)

Selecting the Best Path for Your Technology

Assess the Market:

- Size and your potential share of the market
- Competition and pricing
- Barriers to entry

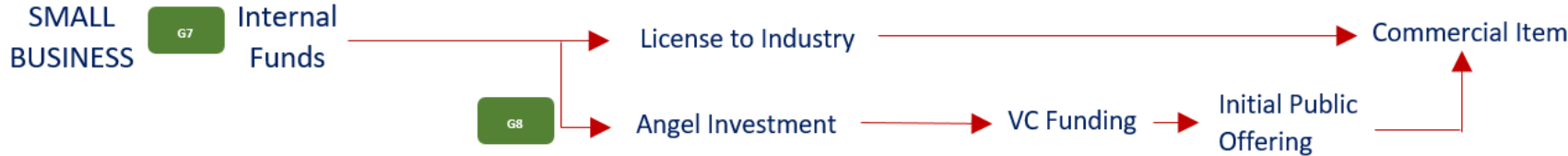
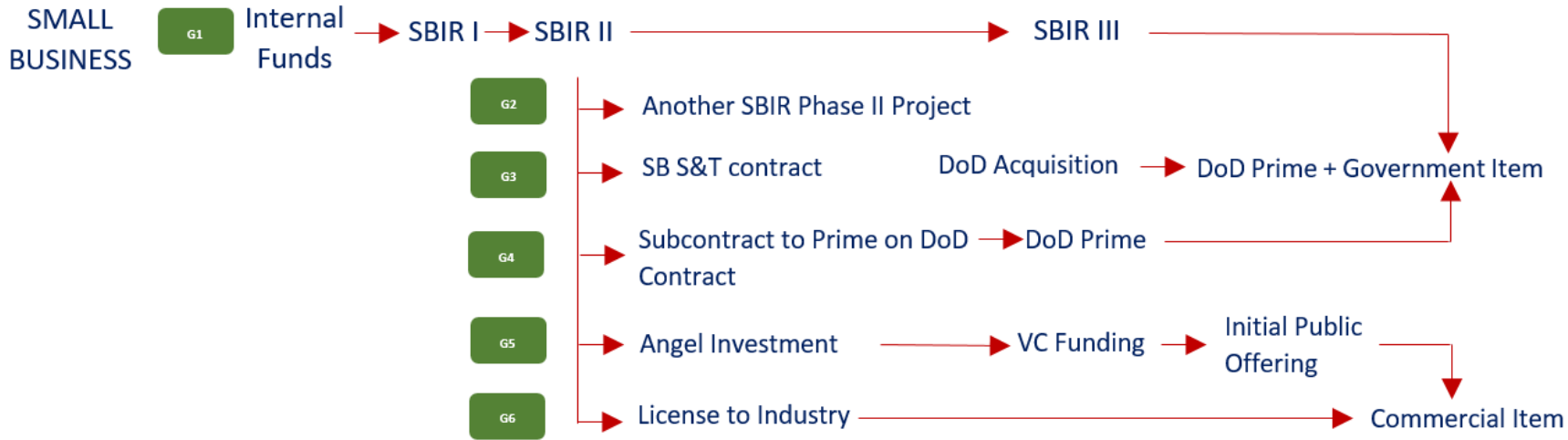
Determine the following for each possible path:

- Time-to-Market
- Revenue
- Profitability
- Need
- Value Proposition
- Customer acceptance

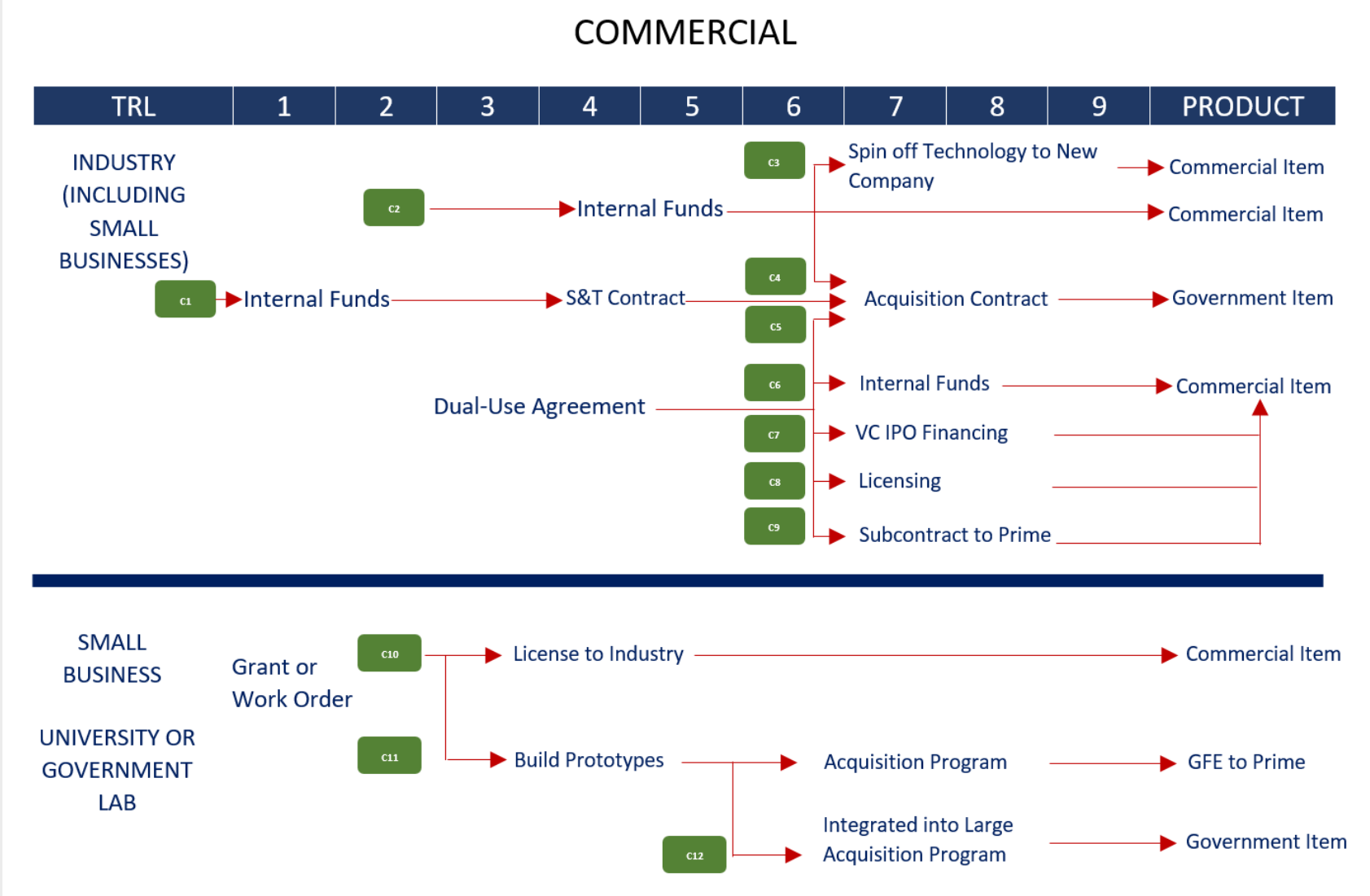
Government/Prime Transition Paths

GOVERNMENT PATH

TRL	1	2	3	4	5	6	7	8	9	PRODUCT
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Commercial Transition Paths



Proactive Planning for the Transition

Do your homework:

- Conduct research
- Locate the correct customer – and verify
- Determining and verifying the true customer need
- What is the correct Transition path?
- Verify funding availability
- Is your offering a “fit”? How do you know? Have you verified it?

Now that You've Achieved Commercialization

Congratulations!

Don't forget follow-up actions:

- Make sure you get credit for a Phase III success
- Notify the contracting officer; show that the effort derives from, extends, or completes a prior SBIR/STTR effort
- Your Commercialization Achievement Index (CAI) is calculated using the commercialization success of prior Phase II projects as reported by you; more successes increase your probability of future awards

Resources

SBIR/STTR Web Site (<https://www.sbir.gov>)

DoD SBIR/STTR Web Site (<http://www.acq.osd.mil/osbp/sbir/>)

FedBizOpps (<https://www.fbo.gov>)

Defense Innovation Marketplace
(<http://www.defenseinnovationmarketplace.mil/>)

Small Business Technology Council (<http://www.sbtc.org/>)

DoD Velociter Program (<http://dod.velociter.tech>)

Defense Technical Information Center (<http://www.dtic.mil/>)

- DTIC Budget Search (<http://www.dtic.mil/dodinvestment/>)



SBIR Beyond Phase II and Mentor Protégé Training Week



Finding the Right Transition Path

Questions?

A. J. Yarmie
ByteCubed, LLC
August 15, 2017
aj.yarmie@bytecubed.com