

How to Succeed in Business by Being a "Technology" Driver

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My Companies/Job

Failed:

- (desktop) microprocessor company
- wireless (non-power RF) IC company

#1 in Automotive

- not the Philips/Motorola of 1990
- CAGR driver
- why Qualcomm bought us!

Me:

- compact and statistical modeling

Perspective on 21st century Electronics

- semiconductors is a maturing industry
- systems driven
 - circuits are commodity building blocks
- key drivers (besides cost)
 - power
 - security (hardware and software)
 - 5G and beyond
 - ability to integrate (SIP)

A Reimagined Technology Landscape

- semiconductors are commodity technology
 - mostly foundries for < 90 nm CMOS
 - NXP still actively developing smart power, SiGe BiCMOS, MEMS, GaN technologies
- jobs and job functions change, and will continue to change
- succeed by driving, not just adapting

An Ideal Candidate

- core knowledge in science, math, numerics
 - this does **not** change fast
 - technology does, catch up on-the-job
 - clearly separates passenger from driver
- depth and breadth of knowledge
 - things do not happen in a vacuum
 - understand up-/down-stream processes
- communicates and collaborates well

Concluding Comments

- training and self-motivation help students hit-the-ground-running in industry
- expect to **learn** on the job, then see how to **improve** things, then **drive** key changes
- work collaboratively
 - it's effective, fun, and personally satisfying
- build a network in the technical community
- you will also do well financially