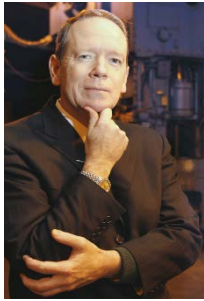


How Apple Can Make its iPhones in the U.S, Create Good Paying Jobs, and Make a \$1B Profit.

By Daniel B. Cunningham



It has been pleasantly surprising to see recent discussion about how to manufacture iPhones in the U.S., [an idea I introduced in 2012](#). It made sense then, and with today's continued high volume of iPhones and the maturation of the smartphone market that is demanding more and more customized features, it is a bigger goldmine than ever.

Satisfying American consumers, with our individual tastes, by making new iPhones in America are *four* gold mines, side by side; for consumers, for workers, for Apple, and for increased U.S. growth.

The iPhone is a perfect device to be manufactured in the U.S. The volumes are already huge because US consumers are demanding them. Fickle American consumers increasingly like to have products made exactly their way.

Consumers of America, get ready to be delighted! You can order an iPhone on-line, exactly how you want it, delivered to your door the next day. Order it customized with an extra-long life battery, 100% pre-charged, and an extra bright screen. You design it with a purple and pink polka-dot back, chartreuse front, and brushed stainless steel sides. All your current information will be downloaded to it (thank you, iCloud). Early the next morning, your new iPhone arrives at your door. You turn the new iPhone on, it is immediately fully operational. This is called mass-customization. And you never set foot into a retail phone store. Would you pay \$40-50 more dollars for a phone that arrives this way? Many would. China cannot complete with this scenario, but America can do it.

For workers, this flexible and automated manufacturing plant would supply a secure good living wage. How can that be? Continue or even increase these large volumes by continuously upgrading the iPhone to quickly supply what fickle consumers want most. Such a flexible and highly automated process would essentially cancel out the labor advantage China had in the past. The seamlessly integrated process, which would connect design, software, and high automation, and plug into a global supply chain, would be a great place to work and have a career, with cutting edge technologies to support success now and in the future. This factory will be highly automated with robots, and [as President-Elect Trump said" ...we'll make the robots too."](#) Yes, it takes times to build up the jobs for today and the future, but America can do it. Apple would be better off to be part of it.

As Apple adds more and more custom features that consumers desire it becomes more difficult for other competitors to keep-up, in effect building a moat around Apple to protect it. And Apple would get closer to its American customers. Memo to Apple CEO Tim Cook-the technology to produce mass-customized iPhones I have described here will come in very handy when you begin manufacturing Apple driverless cars. Anyone for a purple with pink polka-dot painted car?

U.S. growth would edge back toward [the 3% level that America has not seen at a sustained level this century](#). This is because the process I describe here is more productive than current manual iPhones assembly in China. After the last fifteen years of economic decline that rocked the heartland and [has left median real wages below 1999 levels](#), my observation is that discouraged workers are becoming eager to re-train for the jobs of today and tomorrow. American needs to elevate worker re-training to the level of the post WWII G.I. Bill.

[Some pundits that have written that the price of a U.S made iPhone would be much higher.](#) Studies have estimated that [an iPhone 6s plus cost \\$230 and sells for \\$749](#). The actual labor cost to make iPhones in China is a small part of the total cost, [bouncing around \\$4 to \\$10, with similar assembly labor for higher paid Americans projected at \\$30-40](#), which is about 5% more overall. But this labor cost is estimated by duplicating the Chinese method of manual assembly of a limited, repetitive assembly line. The American made iPhones I envision would be assembled and mass-customized overnight in highly automated and flexible plants, thereby reducing the unit labor cost, possibly to the same as China, or even less. (A Texas Google plant made Motorola Moto X phones, [but shut down when volumes reached only 20% of break-even volume](#).)

Other pundits have said the [supply chain in American is not as quick and powerful as in China](#). That may have been true when Apple was quickly ramping up, but with iPhone volumes maturing in the tens of millions of units, it is time to follow another huge success story, Toyota building cars in the U.S. [When Toyota announced in 1986](#) they were building their first US plant in Kentucky, there was little in the way of suppliers and tool & die support available. Toyota moved forward, starting with a mix of global and local suppliers. Over time, suppliers built up their local American supply chains. Toyota has never looked back, [becoming the largest car manufacturer the world in 2008](#). Apple can use Toyota's playbook, reducing potential political pressure. *Let me suggest this: make iPhones in America for Americans, and make iPhones in China for Chinese.*

Global supply chains mean that components are made all over the world. But once you start doing final assembly in a location close to its market, slowly but surely substantial component manufacturing, with the necessary skills, along with increasing design sophistication and detail, will migrate to be near the final assembly point.

Components already come from all over the world to China, so the logistics cost of getting the global supply to work with an Apple assembler in the American heartland will probably not increase cost, but could reduce cost.

How does Apple get an additional \$1 Billion in profit from making iPhones in America for Americans? It is not clear how many iPhones are sold in the U.S. yearly. A crude unit estimate could be [Apple's fiscal 2016 Q4 global iPhone sales of 45.5 million units times](#) the non-international sales of 38%, which suggest 69 million units sold in American per year. By delivering the value-add and overnight delivery that I described above, an additional profit of \$15 per unit (with a bit more for capital costs), and the \$1 Billion additional profit is now realized. With this kind of profit increase, Apple would not require special tax breaks.

Back in 2012, I suggested the heartland city of Cincinnati to the first American location to build iPhones. Airfreight terminals and shipping containers coming and going from all over the world, via the

Mississippi and Ohio rivers, would provide inexpensive transportation. [60% of the U.S. population is with 500 miles of Cincinnati](#), perfect for overnight deliveries of iPhones to customer doors. U.S. Senator Rob Portman, an early and strong supporter of my idea, wrote a letter to Tim Cook inviting Apple to build iPhones in the Cincinnati Region.

Building the iPhone in America for Americans is a four-way gold mine for U.S. consumers, workers, Apple, and U.S. growth. Not only are the benefits spread around, but it would be a shot in the arm for Americans to hear an announcement that this will happen, which is the kind of hope Americans are craving.

Daniel B. Cunningham is CEO of The Long-Stanton Group, which was named the Family Business of the decade in 2009. He is a leader-advocate for restoring the US economic growth rate to 3% to bring Americans together so that ALL Americans benefit. Mr. Cunningham is a graduate of Harvard University. He is member of **3% growth for ALL Americans.**