

Gradualism and collaboration must still be extoled as universal academic and societal values

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Short Communication

Scientific and technological developments are today considered as the most conspicuous characteristics of many developed nations, with the speed and efficiency of production and services having been enhanced considerably due to developments in automation and computer technology. The average global citizen can, for instance, hardly imagine how slow transportation and communication was some one hundred and fifty years ago. Also lost in today's digital universe is the commitment, patience, gradualism and humility that the scientist of yore endured to attain the present dizzying levels of technological advancement and efficiency gains. As the famous European adage goes, Rome was not built in one day. And even the biblical author's in¹ acknowledge the commitment, planning friendliness and humility of the ancient Romans (Europeans) who were known to be meticulous in work ethics and uninterested in cheap, selfish and vain glory.

Yet, many modern business organizations in the developed and developing world are run on a just-in-time philosophy, which implies that the components needed to produce a good or service should be available within a short notice, at the right place, price, quantity and quality. This philosophy has largely evolved in the manufacturing industry which typically requires a range of items in order to develop a product. In a just-in-time system, the activities of actors in the upstream side of the value chains are synchronized in such a way that inputs needed for production are available in good time whenever sought by the production unit. The activities in the downstream side of the value chain are essentially based on the view that delivery on time is the most critical success factor for vendors in competition.

Time-based and adversarial competition has nowadays found its way in almost every other facet of life. It is not uncommon to hear policy makers in developing countries talking of achieving ambitious economic growth targets within a short time span. Rapid growth sounds good for people who need goods and services to satisfy their immediate pressing needs. However, it is important to note that most of the hard goods we require for our growth come from relatively long production chains. For example putting one million hectares under irrigation within five years may sound melodious to a starving rural population, but it is practically impossible to actualize a project of such magnitude within such a timeframe. Apart from the enormous and complicated design task for such a venture, the specific materials and items needed to put the infrastructure in place require a lot of careful thought and time.

After failing to deliver projects on time, a good number of government officials in many developing countries have been heard complaining about lengthy procurement procedures. That is to say if the procurement procedures could be shortened, the projects could be realized faster. What a fallacy! There are, indeed, situations where you may have a lot of local currency ready to buy certain items but the items may not be available in the market. This may be due of shortage of raw materials, hiccups in the manufacturing processes, lengthy design procedures or too short a lead time.

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Shortage of foreign exchange is also a common reason why many projects cannot take off, even if we have billions of local currency. Indeed, true development is more about what we can make or produce on our own rather than what we can purchase from outside. This is a fact that many who work in the service sector and government bureaucracy have often conveniently ignored.

Many enterprises that have transformed themselves into giant conglomerates today have a very long history of logical incremental growth, which many business minds called organic growth. That is to say that their growth happened in slow, deliberate and sequential steps. For instance the discovery of electricity led to the arduous scientific experiments that created the electric bulb. It then took decades of serious experimentation to come up with the television, computer, the internet and mobile phones. All these devices were developed through the patience, determination, perseverance and tenacity of very humble scientists. Most of the scientists who developed them have died while relatively poor. But the services sector and governmental bureaucracy today use these products to facilitate just-in-time business, making colossal incomes in the process. The telecoms and banking industry are good cases to point.

Perhaps one sector that needs to go back to the time tested approach of logical incrementalism is the tertiary education sector. We have had a rapid expansion in the number of tertiary training institutions in the developing world during the past two decade, which suggests there is a huge demand for their products. However, most of the graduates are training for the service sector, whereas the ability to produce hard goods is still very limited. Service sector jobs also tend to pay more that agricultural, extractive and manufacturing oriented jobs. In Many developing countries, the wage growth in the services sector has also been faster that in the other sectors of the economy but career lifespan may be shorter. But the service sector hardly produces any hard goods, though it always has the money to spend. On a critical perspective, one can say that the services sector is responsible for the wage disparity dilemma and the unending unrest in the entire labour movement in most of the developing world.

The story is told of former bank manager who was headhunted to run a relatively successful car factory somewhere in Europe. The bank manager thought that the employees were not performing due to uncompetitive wages. So he increased their pay to match the wages in some blue chip corporations. About three years into his big-bang experiment, the cars he was producing became too expensive; he could not sell them and he had to close down the factory. The banker did not learn that valuable engineering products are created largely by perseverance in small but important steps of continuous improvement. Most engineers value recognition which comes from a good quality product than an incredibly expensive product that brings 'profit'.

For the national economy, gradual growth implies measured increase in the money supply while creating more stable jobs. Gradual growth ensures that a country's development projects do not leave a trail of expensive debts in their wake. It should be the hallmark of every development paradigm, because it guaranties value for money, industrial peace and macro-economic stability. Let us not

for once imagine that the level of development can be measured by the amount of money we keep in our bank vaults. Gradual growth targeting priority agricultural, extractive and manufacturing sectors would use modest increase in money supply to increase production of hard goods. This would enhance consumer price stability. That is the hope of the average citizen in any country. Otherwise just-in-time will become just-in-trench.

Acknowledgments

None.

Conflicts of Interest

None.

References

1. The book of 1 Maccabees 8:1–32; *A Eulogy of the Romans*.