PM World Journal *(ISSN: 2330-4480)*
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

Complexity Is a Fact of Life and Projects

Interview with Prof Lavagnon Ika [1,2]

Professor of Project Management
Founding Director, Major Project Observatory
Tefler School of Management, University of Ottawa
Ottawa, Ontario, Canada

Interviewed by Yu Yanjuan
Journalist, Project Management Review: PMR (China)
International Correspondent, PM World Journal

Introduction to the interviewee

Lavagnon Ika is Full Professor of Project Management (PM), Founding Director of the Major Projects Observatory, and former MSc Program Director at the Telfer School of Management (Ottawa). He holds an MSc and a PhD in PM from the Université du Québec.

Over the past 20 years, he has taught PM in both the French and English languages, in Canada, Europe, Africa, and the Middle East. He has supervised or advised more than 50 students and sat on many MSc and PhD committees all over the world.

---

[1] This interview was first published in PMR, Project Management Review magazine, earlier this year. It is republished here with the permission of PMR. The *PM World Journal* maintains a cooperative relationship with PMR, periodically republishing works from each other's publications. To see the original interview with Chinese introduction, visit PMR at http://www.pmreview.com.cn/english/

[2] How to cite this interview: PMR (2021). Complexity Is a Fact of Life and Projects: Interview with Prof Lavagnon Ika; *Project Management Review*; republished in the *PM World Journal*, Vol. X, Issue VII, July.

PM World Journal *(ISSN: 2330-4480)*
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

Prof. Ika's research focuses on 'how projects work', particularly in the Global South. He takes a great pride in studying global development projects. He looks into project success and failure, cost overruns and benefit shortfalls, complexity and project behavior (or misbehavior). He is the author of some 50 papers in peer-reviewed journals. His co-authored book on managing fuzzy projects in 3D is slated to be published in 2022 by McGraw-Hill.

He is Associate Editor for the International Journal of Project Management (IJPM), a member of the PMI Insights Academic Team, the IPMA Research Group, the International Journal of Managing Projects in Business (IJMPiB) editorial board, and of the Editorial Review Board of the Journal of African Business (JAB). His works have been funded by granting agencies such as SSHRC and FRQSC.

His efforts have been rewarded by awards such as the IPMA Research Award in 2017, the IPMA Contribution of a Young Researcher Award in 2012, IJMPiB Best Paper Award in 2017, and the Telfer's Established Researcher Award in 2021 and Innovative Researcher Award in 2017.

As a professor in project management, he enjoys learning. As he once put it, "I teach, so to learn." He said, "I am particularly lucky to be teaching in the project management field at the frontier between theory and practice that requires "complex types of inquiry" to tackle complex and world-scale challenges such as global poverty in Africa and climate change, perhaps for the greater good."

Interview

Part Ⅰ Project Complexity

Q1.   What are the factors that lead to complexity in project management?

Lavagnon Ika (Ika): Complexity is a fact of life. There is no escape. Think about the coronavirus pandemic and how it has upended our lives. Who would think that even after more than one year we'll still be struggling with this invisible, tiny but so powerful virus? So, you'd understand that complexity is part and parcel of projects, which are akin to a bet on the future.

While a myriad of factors can lead to complexity in projects, I would suggest that by and large they relate to three aspects: the intrinsic complexity of the project, the socio-political complexity of the setting, and the emergent complexity (or uncertainty) or the extent to which there are changes in the other two aspects over time. Take, for example, the Belt and Road Initiative and the vaccination rollout. They are complex projects which hold intangible, unclear or instable goals and/or take place in socio-politically complex contexts. My co-author and I call these types of initiatives "fuzzy projects" in our upcoming book at McGraw Hill next year.

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

Q2.   What are your tips on dealing with complexity in project management?

Ika: It has been suggested that 80% of the complexity of a project lies in intrinsic and socio-political aspects, and 20% in its emerging aspect. So, we should address these three aspects if we are to be successful. A sound project management plan is a good start to tame intrinsic complexity. Good context assessment and stakeholder engagement can help with socio-political complexity. A realistic risk management plan can help anticipate both welcome and unwelcome surprises and thus confront emerging complexity.

However, I would suggest a good response to complexity depends on the project type. Take iPhone 12 as a small product change project. The traditional "understand-reduce-respond" attitude to complexity might work as a good recipe. But it could fall short for the more complex projects such as iPhone 1 (a breakthrough) which need more creativity, experimentation, and iteration for their delivery. For these breakthrough projects, an "understand-embrace-adapt" attitude to complexity is more suitable, as the tip is to embrace, not reduce complexity. As you know, this latter attitude has proven more effective in dealing with the pandemic (e.g., economic and health responses by governments) and the mass vaccination (e.g., learning and adjusting to the emergence of variants for both vaccine development and vaccination rollout).

Part Ⅱ Project Failure and Success

Q3.   Based on your observation, why do mega-projects fail? What are the common reasons?

Ika: There are hundreds of reasons why mega-projects fail and it is a futile exercise to try to list them all. What we need in the face of complexity, according to Weick (an organizational scholar), is "profound simplicity". I concur with Weick. So, my research suggests three problem areas for megaprojects:

1) structural or political, economic, physical/geographic, sociocultural, historic, demographic, and environmental problems;
2) institutional or collusion/corruption, capacity building, lack of political support, too much political interference, governance, and principal-agent problems; and
3) managerial or initiation, planning, implementation, and monitoring and evaluation problems (including associated behavioral factors).

So, context, institutions and project management (including behavioral bias) may fail projects, as we have seen in the vaccination rollout, the COVID-19 vaccine development, the Big Dig Highway in Boston (US), the Crossrail project in the UK or the Philharmonic Hall of Paris (France), the Phoenix Pay System in Canada and many others.

Q4.   How do you think we should reduce the rework rate in construction projects?

Ika: Rework is a big challenge in construction projects, especially those of a large and complex nature. By some estimates, it can increase the cost of projects by a staggering

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

12%. That is at least what I have learned with my collaboration with specialists of the question such as Peter Love. However, in practice, emphasis has been put on safety at the expense of quality, in a sort of "either/or" framing. What is needed is again an "understand-embrace- adapt" approach, where the competing demands of "reduce rework/improve quality" and "improve safety" are considered complementary. Rework reduction is thus all about attending to competing demands at the same time, though there is a need to balance resource allocation.

Q5. How do you define project success?

Ika: Success is a daunting word. While nothing succeeds like success and every practitioner seems to recognize success when they see it, it remains a very difficult notion to define for scholars.

In simple terms, I would suggest project success is the formal and shared goal towards which project management teams work, at least as described in the project charter or plan. But the devil is in the detail. And context, time and stakeholder expectations matter.

Firstly, success is not just the opposite of failure. You may win success out of failure if you learn from it. For instance, had Microsoft not failed with Lotus 1, 2, 3, they would likely not have come up with the great Excel spreadsheets. And you may fail because you have been very successful and complacent. Secondly, context matters in that, as the vaccination rollout suggests, what works in the US might not work in Canada. Thirdly, you may not win success in all aspects of the project, not to mention deliver all stakeholder expectations. For example, the A380 aircraft was a technical success for engineers but a strategic failure for its funders. Fourthly, there are "success-failure" and "failure-success" projects. What appears a success in the short run, in terms of the old triangle of "time, cost, quality" might turn into a business disaster in the long run. This is the case of projects such as Google Glass or EuroDisney which end up disappointing stakeholders. Conversely, projects that are considered a failure just after their delivery have become resounding business case successes. Examples include the Sidney Opera House in Australia or the Rideau Canal in Canada. Fifthly and last, a project might be successful for its funders but become a nightmare for the community or the society as a whole due to its negative social and environmental ripple-effects.

PartⅢ Planning Fallacy

Q6. You've co-authored the article "Moving beyond the Planning Fallacy: The emergence of a new principle of project behavior". What does "Planning Fallacy" refer to? How to avoid "Planning Fallacy"?

Ika: This is a topic that keeps me awake these days. Consider the fiasco of the Canadian federal government's Phenix Pay System, a project that was delivered late and over budget in 2016, with a notoriously poor quality of service. The system is slated to be replaced, to take into account the "complexity of the public service pay system".

Looking back, such project misbehavior may be due to the tendency for promoters and

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

planners, at the time of decision making, to underestimate, deliberately or not, the duration, costs, and risks, and overestimate the benefits and odds of success of the project. Other disastrous examples include the 2004 Greece Olympic Games, the 2014 Brazil World Cup, The Boston Big Dig, etc.

The Nobel Prize Winner Daniel Kahneman and his colleagues coined this tendency for forecasts of project duration, costs, risks, and benefits to be close to best-case-scenarios, "the Planning Fallacy", and it has been popularized as a result of the influential work of Oxford Professor Bent Flyvbjerg and his colleagues on megaprojects. The Planning Fallacy may be "honest" due to optimism bias or "deliberate" as a result of strategic misrepresentation. Consequently, these projects should never have been started, at least according to Flyvbjerg and associates.

The Planning Fallacy is not just a theoretical concept. It comes with practical consequences as public sector decision making has been critically impacted. Clearly, strategic misrepresentation is difficult to detect as it requires decision makers to admit to a lie. So, efforts have been focused on dealing with optimism bias. To curb optimism bias, many governments now require that their project cost estimates be de-biased with an "optimism bias" uplift, based on a "Reference Class Forecasting", a risk management tool that considers the cost estimation of similar but past projects.

As impactful as the Planning Fallacy is in project management nowadays, it appears exaggerated, especially in the face of complexity and uncertainty. Indeed, as my latest research on a dataset of over 3,000 large-scale World Bank-funded projects shows, optimism bias might explain at best 25% of project underperformance. In other words, 75% of project underperformance might be explained by other factors such as scope changes, complexity and uncertainty. Worse, the Planning Fallacy proffers a gloomy view of projects, according to which they are bound to fail even before they get started.

Part Ⅳ Shared Leadership

Q7. What is your understanding of "Shared Leadership"? Will it become a new norm?

Ika: In the face of complexity and uncertainty, we cannot reduce leadership any more to snapshot images of a strong, heroic, omnipotent project funder, promoter, owner, sponsor or manager with their personal traits, styles, actions, and competencies. This is akin to superficial simplicity. Once again, we need profound simplicity. As we have seen in the vaccination rollout, one might be tempted to reduce the US logistical success to the sole (vertical) leadership of President Biden as the US government's goal of administering 100 million doses in 100 days was beaten by one month. But clearly, shared leadership between different stakeholders at different levels provides a winning approach. Leadership, both vertical (e.g., at the Biden administration and state levels) and horizontal (within the immunization teams on the ground), has made a great difference. Shared leadership should become a norm to deal with grand challenges such as global poverty reduction and climate change and other pandemics, which are by essence collaborative, multi-organizational, world-scale efforts.

PM World Journal (ISSN: 2330-4480)
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

Part V Philosophy and Projects

Q8. You've written about the metaphysical questions every project practitioner should ask. So to be brief, what are the questions? Why are they important?

Ika: Yes, a great topic. I have always been fascinated by philosophy. So I ask: Is the project really what it looks like? Is there any difference between what it seems to be and what it really is? And what is most real in the project?

These are metaphysical questions which may help us avoid taking the forest for the trees, and thus go beyond the multiple forms of the project's physical realities (like the screen of an iPhone) as we perceive them, and consider the project's metaphysics. In a way similar to philosophers when they ponder about the nature of reality, I proffer that the metaphysical position of project managers is not just limited to "their opinion" but it provides the foundation of everything they do in the project.

What is the bargain? If project managers try to uncover what lies beneath the project, then they will realize that two apparently distinct yet complementary mindsets in the understanding of projects and project management prevail: 1) thing-based understanding; and 2) process-based understanding.

Firstly, projects may fundamentally be seen as a constellation of "things". Project managers may hence view planning as the essence of project management, which is all about the life-cycle management of the project. Thus, a planned project management style prevails.

Secondly, projects may instead be a constellation of processes which ultimately emerges, flows, develops, grows, and changes over time. In this instance, the process of "managing" takes control and the essence of project management shifts to understanding the emerging context from both the project team and stakeholder points of view. Thus, an emergent project management style dominates and chance, happenstance, and unintended consequences shape project success or failure.

Part VI Results-Based Management

Q9. About "Results-Based Management (RBM) or Trap", why did you say Results-Based Management can be a trap?

Ika: Results-Based Management emerged in the 1990s as a philosophy to help deliver outcomes. RBM seeks to look beyond inputs, activities and outputs and puts a sheer focus on achieving results or outcomes.

Its intellectual basis lies in the New Public Management (NPM), a philosophy that has been behind the wave of efforts and reforms to improve public service delivery in the UK and the US, for example, since the 1980s. NPM celebrates the shift from an administrative or compliance culture where adherence to rules and procedures, though important, is not sufficient to deliver outcomes, to a managerial or performance culture,

PM World Journal *(ISSN: 2330-4480)*
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

where the overarching focus rests on achieving planned outcomes. The underlying idea is that more market orientation in the public sector will lead to greater cost-efficiency for governments, without having negative side effects on other socio-political considerations.

As you can see, this was way before the advent of the Benefits Realization Movement that we are enjoying in the project management field nowadays.

RBM commends a linear approach to project management with a dominant "plan your work and work your plan" philosophy. RBM focuses on two key functions: managing for results and tracking results. RBM uses three tools: the logical framework, the performance management framework, and the risk register. Not surprisingly, what RBM does best is tracking results at the expense of managing for results: too much emphasis on procedures and guidelines as the need for monitoring and evaluation overrides the need to actually make progress towards achieving project outcomes. The key performance indicators (KPIs) at times are akin to "smiling sheets", from presumably "happy" stakeholders or end-users about the project. There is not the same level of incentive for delivering outcomes, and project managers lack the tools they need for using project performance data to make decisions that will affect benefits realization. This is the Results-Based Trap or what I called elsewhere the "accountability-for-results" trap.

We should avoid a Results-Based Trap and not settle for what is easy to measure in the short term. This includes avoiding the classic case where "the operation has been a success but the patient died", that is delivering the project on time, cost, and quality and yet failing to achieve the business case expected benefits (e.g., The LA Red Line Metro).
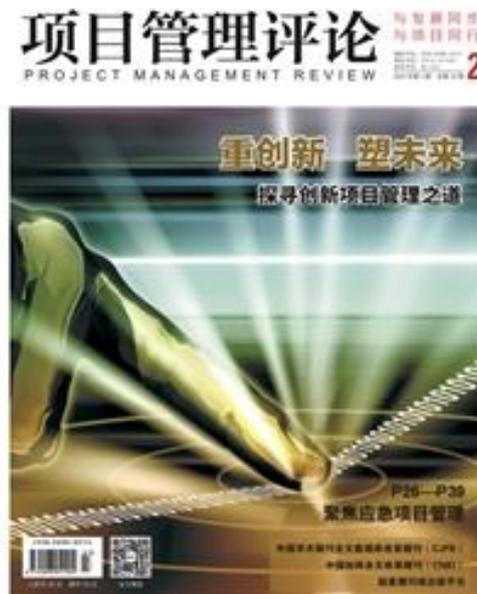
Part VII Future of project management

Q10. What do you believe are the impacts of COVID-19 on the project management profession? Are you confident about the future of the profession?

Ika: As COVID-19 has upended our lives, it has disturbed the delivery of many projects throughout the world and caused time and cost overruns, project cancellations, supply chain breakdowns, staff lay-off or furlough, and even bankruptcies and slow economic growth, and spurred distance working, as a result of on-site physical distancing measures.

But COVID-19 may be a game-changer for project delivery in the long term and I am confident the profession will adapt. Remote project management is here to stay. Project procurement may not be the same: There is a need to shy away from competitive bidding post COVID-19 and engage with shared value creation. Evidence indicates that the winning bid does not always deliver value for money. As noted earlier, an attitude towards embracing complexity and uncertainty is needed. Governments therefore need to work collaboratively with the private sector to generate such value and benefits. To this end, project risks should be shared, and creativity and innovation pushed to construct future-proof large-scale infrastructure assets. Societal impacts would become more salient as well as sustainability considerations.

PM World Journal *(ISSN: 2330-4480)*
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

To read the original interview and to learn more about PMR magazine, visit
http://www.pmreview.com.cn/english/

PM World Journal *(ISSN: 2330-4480)*
Vol. X, Issue VII – July 2021
https://pmworldjournal.com/

Interview with Prof Lavagnon Ika
by Yu Yanjuan, PMR
Interview

About the Interviewer

Yu Yanjuan

Beijing, China

Yu Yanjuan (English name: Spring), Bachelor's Degree, graduated from the English Department of Beijing International Studies University (BISU) in China. She is now an English-language journalist and editor working for *Project Management Review* (PMR) Magazine and website. She has interviewed over sixty top experts in the field of project management. Before joining PMR, she once worked as a journalist and editor for other media platforms in China. She has also worked part-time as an English teacher in training centers in Beijing. Beginning in January 2020, Spring also serves as an international correspondent for the *PM World Journal*.

For work contact, she can be reached via email yuyanjuan2005@163.com or LinkedIn https://www.linkedin.com/in/yanjuanyu-76b280151/