

# Top 10 Qs while Embracing Cloud

## - A CIO Edition

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During my many interactions with the CXOs, Technology Partners & Evangelists, Senior Business Sponsors, and Industry-Forum Leads - I have come across various concerns, inhibitions and perceptions about Cloud Adoption. I have also come across several articles that attempt to appreciate and (re)validate these views. The crux of the matter however is based on whether we have the right perspectives and data points for addressing any of these views, which form the basis of a “Belief-System”. In this whitepaper I have focussed on the ten most pertinent questions/clarifications that different stakeholders have about Cloud Adoption. There are no ‘right’ or ‘wrong’ answers here but rather it is about having the right perspective to the query and getting the data points interpreted correctly.

## The Top 10 Questions and My Views

### Q1. Cloud transformation is still a ‘concept-ware’; does it make sense for me to invest in Cloud?

**My View:** The Cloud, just like any other transformation theme, is a journey that provides opportunities for companies to be more ‘efficient’. A transformational initiative typically targets the following factors, based on the varying degree of its maturity level:

1. Change the game
2. Change the players
3. Change how it is played

Among the three above states, “changing the game” is the ideal target state and the Cloud’s aspirations are exactly in the same or similar direction.

The Cloud is no longer a “concept-ware”. It has significantly matured over the last three to four years to provide a clear roadmap for both business and technology.

It provides the following benefits to businesses:

1. Ability to enhance customer experience
2. Ability to provide competitive pricing
3. Ability to kick-start business in new areas in less time (rapid expansion)
4. Ability to instantly comply to regulations
5. Ability come up with new products leveraging the cloud platform

Today we have products and productized solutions (pre-fabricated and/or customized on-demand) that target this space.

The Cloud also provides the following benefits to technology:

1. Ability to optimize compute in all the OSI layers
2. Ability to handle and process huge volumes of data
3. Ability to foster re-use and change technology processes and governance
4. Ability to adopt one stack, one architecture
5. Accelerates open source adoption
6. Opportunity to clean up current IT estate
7. Ability to share applications, processes, services and data with ease

There are products, productized solutions and services (pre-fabricated and/or customized on-demand) in the market today that target these spaces in a focused manner or as an end-to-end service.

**“Cloud computing and its adoption will in fact give CIOs the chance once again to pursue the innovation discussion and in the bargain help devise new ways to take costs out of IT operations by casting the spotlight on inefficiencies.”** – A Quote from one of the very popular Blogging Forums. This is apt for not just the CIOs but also all C-level executives evaluating the cloud from their perspective. For e.g. an IaaS or a PaaS would be something for the CFO or the CIO to ponder about, while the advent of SaaS and BPaaS is making the CEO (re)think his market making and revenue generation strategies. In all probability, there is no CXO audience out there today who is not thinking about the Cloud and has not been part of the numerous discussions and debates on the future of the cloud and its impact on business and IT. It is a wave that is unavoidable especially considering the Cloud’s sustainable, long-term and tangible aspects – be it adoption or ROI – as compared to the earlier transformational waves,

The key thing to remember about the Cloud is its ability to offer transformational benefits in lieu of the (seemingly unavoidable) inefficiencies that exist in the system today. As mentioned earlier, the Cloud aims to **“change the game”** – and who can avoid that?

The Cloud impacts all kinds of businesses - be it a next-generation bank or a retail store – and it is very important that you evaluate this wave closely and adapt/adopt it based on your business needs.

## Q2. Is there a Cloud Maturity Model? If yes, how does that apply to me?

**My View:** Cloud transformation is a continuous journey characterized by the following distinct phases:

1. An initiation or kick-off phase
2. Early adoption phase
3. Institutionalizing phase
4. An evolving or continuous improvement Phase

Your journey depends on the answers to the following questions:

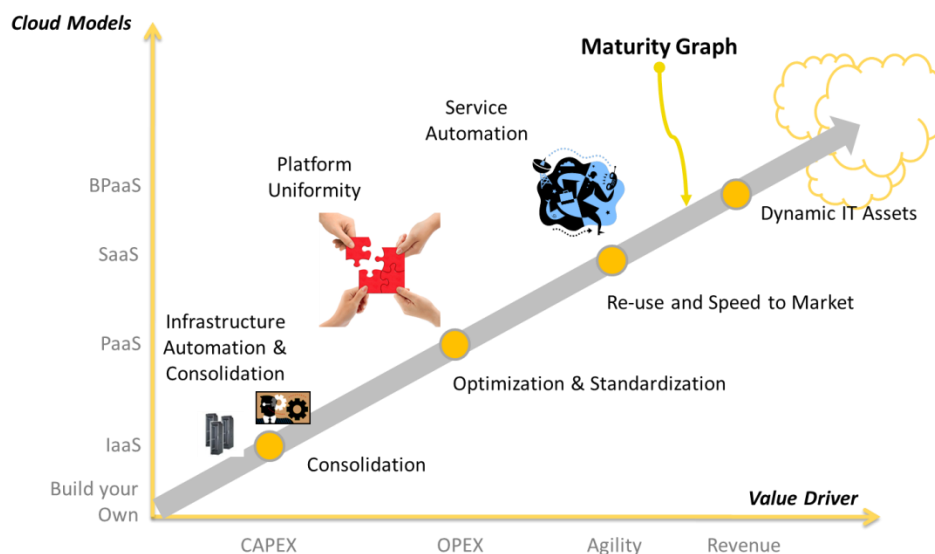
1. Where are you? (present state of business/IT)
2. Why do you want to adopt the Cloud? (This is a very important question!)
3. How do you plan to go about this?
  - a. Big-bang or co-existence approach
  - b. Architectural layer-wise
  - c. Business function-wise
  - d. Geo-wise



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Once you have the answers to the above questions, your path to the Cloud can be plotted accordingly and as you traverse through the important milestones in the curve, you will virtually progress through a maturity model.

A typical cloud maturity model is based on the technical maturity of cloud adoption.



**Figure 1 - Typical Cloud Maturity Model - Technology View**

Figure 1 represents the various stages of a typical trajectory. At every stage your returns are measurable and quantifiable.

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But this is just one perspective – the Technology View. There is also a Business View to this. As mentioned earlier, it all depends on your trajectory. For example, an Insurance organization embracing the Cloud business function-wise will have a maturity curve that might look something like this:

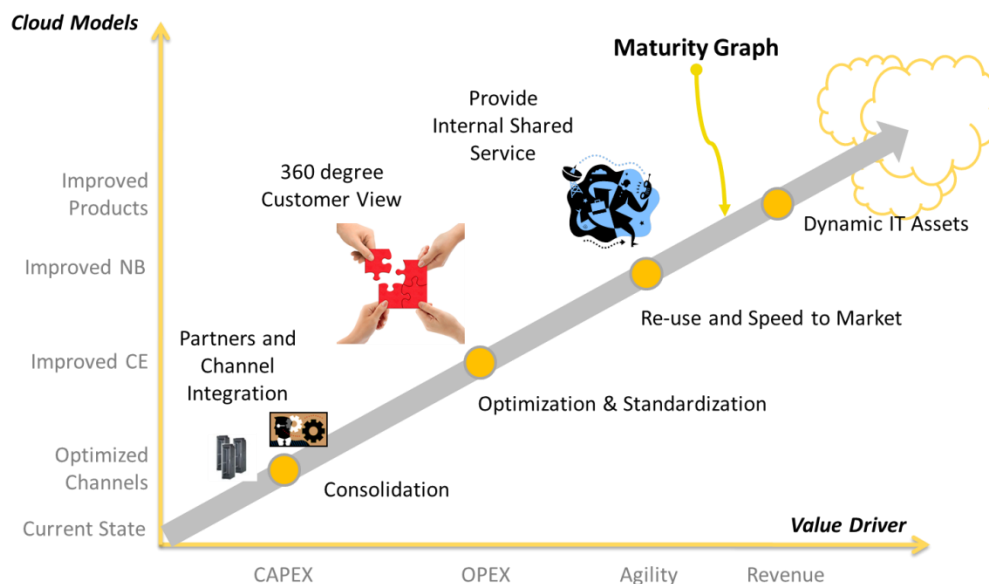


Figure 2 - Cloud Maturity Model - Insurance Industry

In this example, despite the value drivers remaining the same, the organization progresses from optimizing channels to improved products by leveraging the appropriate cloud platform (be it Infrastructure, Application or Solutions or a mix of all three). It is important to define the “journey first” and then derive a maturity-model out of it. This will help make the Cloud adoption more meaningful, quantifiable and in-line with your present and target state.

The key purpose of the cloud maturity model is to provide a meaningful and customized view of the Cloud journey and the progress based on certain best practices or cloud attributes at every defined milestone.

### Q3. Is there a trigger or tipping point for adopting cloud?

**My View:** There is no established pattern that best addresses this question. However any change requires a right “time” and “timing” which is very context driven and highly situational. Some of the thumb rules for this are as follows:

1. You are probably undertaking an IT estate overhaul – one of the commonly chosen timings for the Cloud.

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2. Just entering into an M&A situation – this is an ideal time for carrying out application portfolio consolidation and re-aligning your IT towards the Cloud so that it can sustain volume growth at minimal expenses.
3. SW licenses and contracts are approaching expiry – you need to decide whether a renewal makes sense or a transformational approach like the Cloud might give a fresh lease.
4. EOL of HW procured – one of the very popular timings to consider cloud adoption
5. You are re-looking your core business and product strategy – this is a good time for you to optimize your IT and align it with your business needs
6. Compliance to certain regulatory needs like Solvency II might indirectly influence cloud adoption
7. You are looking to expand your business to new geographies but do not want to incur capex for additional capacity – a great time for looking into cloud based services
8. You are a SMB banker who does not want to own IT and prefers to lease it so that you can start operations immediately with minimal CAPEX – you should look at cloud based business processes

While these are some of the useful ‘timings’ we have observed where cloud adoption has really helped our partners, there are also certain timings that need to be avoided as well:

1. You are already into an M&A which is incomplete, business-wise. Do not think about any kind of transformation at this point.
2. You have already done an IT portfolio assessment with recommendations that have not been implemented. You need to wait until you have appreciated the portfolio rationalization inputs completely.
3. You are offshoring your back office. Do not double up any transformational activity with that, the same needs to be done in a staggered way so that the effects can be appreciated separately.
4. You have a lot of business partners who are moving to cloud based platforms and you might as well make the same move. Cloud adoption is very context sensitive – validate the benefits for your adoption before making the move to the cloud.

There are other considerations like cash flow, market conditions, seasonal variations etc. that have an umbrella impact on any transformation journey, above and beyond the above considerations.

### Q4. Which is a good area to start evaluating this? Whom should I approach first?

**My View:** A transformation journey like the Cloud has no generalized starting point. It all depends where you are; how you are and where you target your move. For example,

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if you are a retail bank with 100,000+ customers and facing challenges with ensuring consistent customer experience then that's the trigger for you to start evaluating a move to the cloud. If you are a retailer with multiple channel partners resulting into inconsistent pricing structure – that's the area to hit. It all depends on your pain areas where you feel there's scope to improve efficiency.

Most technology article on the Cloud typically ask you to check your compute capacity utilization or your applications sustenance cost or offloading of the peripheral functions like payroll or HR to public domain services, etc. For that matter – these are THE area(s) to pick up first.

These factors are driven by different perspectives that different stakeholders have. There is no right or wrong perspective but the key thing is determining whether the starting point leads to:

1. Realizing indicative but measurable business efficiency (increase in revenue or earnings)
2. Defining a self-funding model (since the Cloud is self-propelled in nature)
3. Scaling of best practices to other business functions or technology areas
4. Re-using and sharing of assets (process, IT systems, platform, infrastructure & data)
5. Realizing indicative process efficiency (Optimize Operations and Change)
6. Identifying restrictions and limitations of your industry and partners

If your starting point caters to all the six levers, then you have had the best possible start. But just for the sake of generalization, a detailed business and IT portfolio assessment always gives an appropriate platform for you to look both backwards and forward in terms of finding the right candidate (be it infrastructure, platform, application, process or data) to start the journey. In the process, the above factors slowly get absorbed in your decision making.

Some people may argue that these points sound like “old wine”. The fact is although these principles have existed for a long time, there was no single, externally integrated but internally federated and enriched platform! We may call it technology innovation or our increased ability to assimilate and abstract X-in-a-box. In case you are taking the portfolio assessment route, then conducting a detailed exercise in this regard is highly recommended as a starting point. You can even leverage smart advisors in the market who have pre-fabricated platform to give you an integrated experience – right from data collection to business case recommendation. In case you have pointed concerns like improving cross-selling of products, then the following steps need to be undertaken:

1. Study the market you want to cater to.
2. Align your products with the findings.
3. (Re) appreciate your IT systems and business operations.
4. Do a Map-Gap analysis
5. Evaluate replacing or extending the processes and IT systems (to the Cloud)

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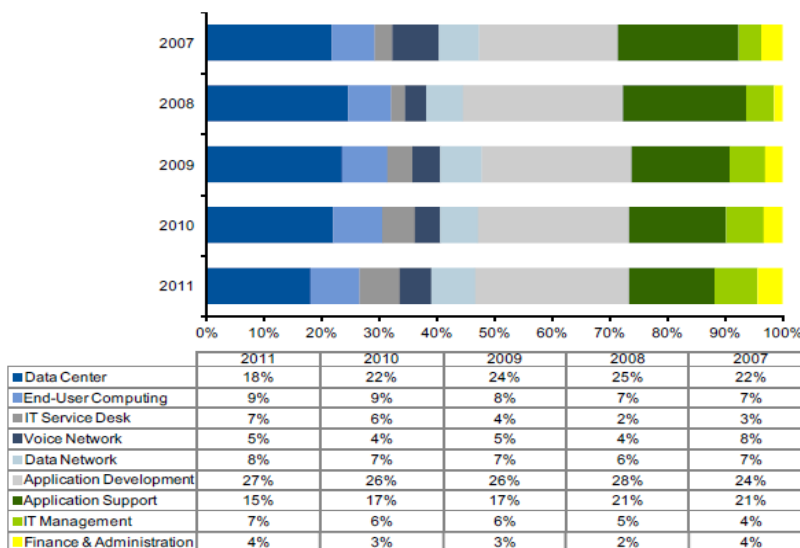
- Map the benefits of the Cloud to the ones which directly influence this problem.
- In this specific example, unifying federated data is the key and the Cloud enables this.

A team of your business domain experts coupled with an external Business advisor complemented by a Cloud Consulting group (internal or external) will be an ideal consortium to rely on who will provide you the required coverage.

### Q5. The Cloud is all about virtualization, but I spend more than 70% of my budget in my software applications and related components? Is there any play there?

**My View:** Let me answer this by first referring to some industry data made available by leading analysts.

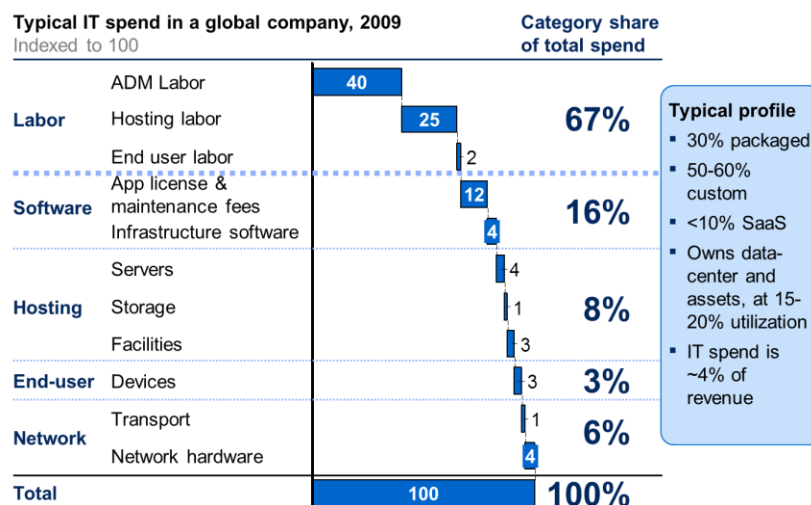
Figure 14. Insurance: Distribution of IT Cost by Technology Domain



Source: Gartner IT Key Metrics Data (December 2011)

A study done for the Insurance industry shows that about **50%** of the IT spends goes directly into maintaining and evolving applications, while the DC cost is 18%.

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SOURCE: Gartner, McKinsey IT metrics

67% of the typical CIO spends goes into managing labour or FTEs. However, based on our experience we believe 80% of that is purely devoted to applications.

These facts emphasize that spends in the applications arena is too significant to be left un-impacted by a transformation theme like the Cloud. In some cases, these initiatives may start with mere “**virtualization**” but the actual benefits remain unrealized unless the applications undergo the changes as well and leverage the “new” platform. If we carefully study the various motivators of cloud adoption, we typically observe the following factors:

1. Capital cost optimization and controlled operating expenses
2. Direct revenue generation and/or profitability measures at same or lesser cost
3. IT platform efficiency leading to “optimized cost of IT”
4. Efficient and agile business change management
5. Software engineering lifecycle efficiency

Both point #2 and #4 are directly dependent on applications, while the other factors have applications as the major drivers.

We believe that the Cloud is ALL about efficiency, which implies that it needs to impact where it really matters. And this means the area where the maximum spend is made today – **applications**. For a business whose revenue and earnings are directly tied to these applications, any disruption or change for betterment will result in the applications undergoing a meaningful transformation. It is only then we expect to leverage the full potential of the Cloud – and that is where your business case for the Cloud starts looking justifiable.

## Q6. Is the Cloud industry specific? If yes, what is in there for me?

- **For e.g. I manage IT in an enterprise with strict security compliance, is that a deterrent for adopting the cloud?**

**My View:** Yes, the Cloud is industry specific – not by its definition but by its means and ways of adoption. Let me take some examples here to explain this –

- ❖ A Telco Operator may want to adopt cloud services to improve customer experience and enable better understanding of customers. This provides an opportunity to cross-sell their products, as they have new products very often. If the Telco wants to have its non-core applications like HR and Payroll offloaded, thereby releasing some cash, it needs to leverage public business services (BPaaS) on a consumption basis so that it has a granular control on its expenses.
- ❖ An automobile manufacturer may want to leverage the Cloud for providing safety and productivity Information to its customers. In the Automobile segment, vehicle-heartbeat and route/traffic details are key customer experience levers and the Cloud provides a platform for this information to flow seamlessly. This is for a set of focused users with high degree of use and is often popularly referred to as “**Community Cloud**”
- ❖ A retailer uses a cloud platform to derive data for sentiment analysis of his products, figures out what brand sells most in the respective customer segments. Cloud based analytics is what makes immediate sense in this case.

What is important to note here is the variability of the uses cases and their needs – and then the way it gets mapped to the various facets of the Cloud to achieve the contextual goal. This makes the Cloud analogous to the very popular “Lego building blocks”. Individually the Lego pieces are designed to serve very distinct objectives, but when put together and depending on how they are joined they create different structures like bridges or even a house. If we think about the above uses cases, while the cloud platform provides these Lego pieces the bridge or the house is your industry based need. All you need to do is integrate, re-assemble and sometimes build on the top or re-use.

To answer the second part of the question, security is one such “Lego block”. It is inherent in every Cloud offering that is present – be it infrastructure, platform, application, process or data. Security is not a deterrent, but rather it has become much more implicit and obvious. The Cloud provides security even if you might not explicitly need it and has been internalized as part of the platform. This is especially true for

public platforms as the private ones allow you to bring-in/add custom “Lego-blocks” as you deem suitable.

### Q7. Does cloud help me protect my existing and future investments?

**My View:** Yes. It does.

A cloud based transformation journey looks at re-using and re-factoring your investments, it is efficiency in lieu of cost take-out. Some of the activities it never encourages are:

- ❖ Abandon an existing IT platform or business process. Instead provide a flexible platform where the same can be adapted
- ❖ Re-build and re-write everything. Instead enable Cloudification.
  - In some cases you might want to re-write simply because of the present state or the positioning and not because the Cloud mandates it.

Conserving existing investments help cloud business cases in terms of earlier breakeven, lower transformation cost and easy & less risky switchover.

Having said, it also depends on the present state of your estate and your processes. It might so happen that efficiency in a reasonable term might influence abandoning certain things – but such activities at the end of the day goes through the acid test of an ROI analysis. Hence for all practical purposes we can assume the Cloud aims to “conserve more than consume”.

### Q8. How much should I optimally spend on this to ensure a healthy sustainable balance sheet?

**My View:** You should spend only in the areas that give you one or both of the following:

- ❖ Immediate cost savings or quick-wins
- ❖ Builds a platform that will impact change in the near future (the change is transformational )

Some of the very popular activities that typically will lead to the above are:

- ❖ Prove the change – spend in PoC or Pilot



- ❖ Spend in figuring out the readiness of the present state (Application Portfolio Assessment and Cloudability Quotient)
- ❖ Spend in creating a case for business impacts such as prototyping a e-KYC software from public cloud services
- ❖ Plan for legacy transformation. Move and migrate out of legacy and very old technologies like Mainframe, VB, PB etc. to more standard platform like JEE or .NET – being more amenable to the Cloud
- ❖ Evaluate “Build vs. Buy” in Cloud adoption for your business and IT estate and evaluate corresponding pricing models
- ❖ Spend in tools and frameworks that can help fine tune your business case e.g. predictive pricing, etc.
- ❖ Undertake profiling exercises to figure out what it really takes to make the move

If you are spending money in these areas then you will never impact your balance sheet adversely. It also ensures you are getting ready with a very firm and ROI backed transformation spends.

### Q9. How do I measure my returns? Is it purely balance sheet?

**My View:** No it is NOT “ONLY balance sheet”. While there were way too many transformation initiatives in the last two decades that claimed cost reduction, we believe that the sale of the Cloud happens in other benefits it comes with. By the way, it also provides a commercial advantage which makes the story too compelling as compared to its predecessors.

What are those other factors?

1. **Direct revenue generation and/or profitability measures at same or lesser cost**
  - a. To name a few - consistent and enhanced customer experience, cross-bundling and upselling of products and services, intelligent and market analytics based new product design and launch, rapid and impromptu business expansion in new markets.
2. **IT platform efficiency leading to “optimized cost of IT”**
  - a. Not just **Hardware Virtualization**
  - b. Enables One Architecture, One Stack principle
  - c. Simpler in terms of skill management and technology obsolescence
  - d. Influences open source adoption leading to consolidated and simpler license and support regime
  - e. Fosters re-use and sharing of IT systems, business processes and data
  - f. Consolidation of roles and efficient governance with reduced overhead
  - g. Increased personnel productivity through efficient collaboration tools

**3. Efficient and agile business change management**

- a. Enables quicker response to business changes
- b. Rapid expansion into new markets (products, geographies)
- c. Quicker regulatory compliance leading to business assurance

**4. Software engineering lifecycle efficiency**

- a. Optimized and automatic provisioning and deployment – reduced change control and associated business downtime
- b. Integrated management and auto-provisioning of IT environment – optimized environment capacity and ease of switch-over
- c. Opportunity to reduce redundancy in terms of software assets
- d. Easy to train and on-board people for business operations

How do you measure these? While you cannot measure all in the same yardstick, you can measure them in the following categories of scale (you can of course set your own scores), that include but not limited to:

- ❖ Increased customer base with more numbers coming from cross-sell of products -> increased customer satisfaction and increased knowledge about your customer
- ❖ Lesser license overhead – simpler contracts, support at a much lesser cash outflow and stickiness risk
- ❖ Lesser sourcing issues in terms of skill, lesser number of roles to manage
- ❖ Change cost (goes down) and speed to change (goes up) – significant changes expected
- ❖ Process efficiency areas – deployment, provisioning of environments and applications, change control – time window & number of issues
- ❖ Occurrence of share and re-use of components –measure the number of internal / external shared services programs you are able to leverage
- ❖ Measure the current cost of ownership as against the previous measurement

## Q10. Every transformation has a social impact. Does this one also have? If yes, how do I address that?

**My View:** Yes, it does have social impacts in multiple layers. Like any other transformation theme, it is “the change” and “the ability to influence change” that ties it very closely to our social elements. Who are all those who get impacted? The Cloud is ALL about changing the GAME; hence it also affects the rules as well as the players – virtually the entire ecosystem. Some of the very common questions/apprehensions that you need to address, as you embark on this journey are as follows:

- ❖ Why are we doing this? – this is a very important question; make it as contextual, as possible
- ❖ Who are all those who will get impacted? Why?
- ❖ How do they (the impacted community) individually benefit?
- ❖ Where is the efficiency in this change?
- ❖ How is this expected to get rolled out?
- ❖ What are the immediate milestones and why are they being prioritized?

The key to success in any social change is “**communication & transparency**”. Training and enablement sessions, making people take part - are just few ways to achieve the same. Though this never warrants eliminating concerns completely, it does help you appreciate and contextualize as to what all you need to address here. This will also help bust some of the common myths about the Cloud’s social aspects:

- ❖ Another name for outsourcing
- ❖ Offshoring of work to cheaper geographies
- ❖ Reduce FTE capacity
- ❖ Compromise present people in Payroll for lesser liability
- ❖ ... It continues

We have seen that the inside-out buy-in is very important. It cannot be just a business decision, because then they can never be sustainable. Social support is an important lever for the success of a cloud enabled transformation journey.

## Summary

Cloud computing has become mainstream today. It goes without saying that this has a powerful impact on business and it is important that business and IT take the right decision and positioning in terms of leveraging the cloud platform. While the questions and clarifications will continue to evolve and get addressed, it is necessary that every stakeholder has the right view point about his/her own interests in this. How does this (the journey to the Cloud) help him/her win? It is only then we will start seeing the synergy - the most awaited convergence.

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Headquartered in Bangalore, India; Happiest Minds has operations in USA, UK, The Netherlands, Australia and Middle East

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## About the Author

**Dhiman Basu Ray** ([dhiman.ray@happiestminds.com](mailto:dhiman.ray@happiestminds.com)) is the **Director & Global Practice Head - Cloud and Application Transformation Business**. He brings more than a decade of Technology Consulting and Practice building experience in leading initiatives like SOA, Legacy Transformation and Cloud Adoption. Is capable of presenting a unique perspective by dovetailing Industry issues and Technology in his views and offerings. He is passionate about Cloud Computing and believes that, when leveraged in conjunction with Socials, Analytics and Mobility, it presents a unique opportunity to “Change the Game” – as they say. This integrated approach flavoured with specific Industry needs makes his recommendations so compelling. He is a Technology Evangelist and has mentored a number of Tools and Framework development initiatives in the Transformation space.