Revenue Sharing Models in a “Public Private Partnership” (PPP) Context

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ABSTRACT
This paper tries to bring out different revenue sharing models in a PPP deal between the government and private enterprise. Since the ability of the government to invest in to and run large e-governance projects may be limited, these models present a very interesting mix of risk and reward for the government as well as the private vendor.

Keywords: PPP; Public Private Partnership; Revenue Sharing Models, e-government.

1. Introduction
Since the availability of funds with state governments to implement e-governance initiatives is limited, governments are looking for PPP models to implement these projects. PPP initiatives not only save the costs for the government but also inject the much needed private sector efficiency in the government sector domain. While there is a need to create PPP deals, these need to be structured to ensure a win – win for all the stake holders. Some times it is also ambiguous whether the proposed PPP contract is, indeed in the PPP domain or not. For example, in one such project, the vendor gets paid on a yearly plan linked to certain productivity. While the payments might have been staggered, the model doesn’t construe a PPP structure. So, how do we exactly define Public Private Partnership?

While a number of definitions have been proposed for the PPP projects. The one that equally apportions the risk and reward to the government and the private vendor is considered the most appropriate. It is important for the governments and the private vendor in a PPP contract to share the risk and the return on the project. The governments should be ready to dilute their overall control over the project and should be ready to share the expected revenue with the private partner. The private partner, on the other hand, should invest in to the project in anticipation of the expected revenue. E’Seva kiosks for delivery of government services, toll payment based construction projects in the roads sector are good examples of well structured PPP projects. Projects where future revenues can be predicted fairly reasonably are likely to attract private partnership. If historical revenue data in respect of such initiatives is available then it may be in the interest of the project to share such data with the prospective vendors to encourage them to participate in PPP ventures with the governments.

A Public Private Partnership construes sharing of a number of entities. These include the capital, working capital, revenue, risk, responsibility, assets and authority. However this paper essentially deals with models that provide a basis for sharing of capital investment and revenue. Revenue sharing models have to be based upon the risk / return relationship principles of finance. Risks can be measured in terms of financial, business, social and administrative risks. Returns have to be in proportion of the risk faced by the PPP

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Foundations of E-government

partner. This paper suggests a number of revenue share models in running the PPP projects between the state government and the private enterprise. The revenue share model looks at the vendor, state government and the business as three different entities. The flow of capital, fixed and variable costs for running the business and revenue sharing through fixed and variable payoffs constitute the business models. Accordingly different business models are being postulated. Some of these are as shown below. The vendor is presented with one of these models to decide upon the values of capital, fixed and variable costs and revenue sharing through fixed and variable payoffs.

2. Model - 1
This model basically relies on the private partner’s ability to fund the project and run it independently of the public sector partner’s intervention. The public enterprise authority is vested with the private partner for a limited period of time. An effective Monitoring and evaluation framework is needed for implementing such a model. Invariably the business is run under strong business related service level agreements. These SLA are monitored by the government through an effective M&E framework. This model is particularly suitable where the capital investment is low and many private vendors can be attracted to invest in to the venture. E-Sewa kiosks run using this model. The model is pictorially depicted in Figure 1.

![Figure 1: Model 1](image1)

Projects like e-procurement may be quickly implemented and made operational using this model.

Risk Perception: While the vendor shares the entire financial risk of the venture, the government shares the risk of loss of administrative control leading to citizen dissatisfaction. However, given the current low satisfaction levels with government services amongst the citizens, it is expected that this model will lead to improvement in these levels rather than deterioration of service levels. Accordingly it is considered appropriate for the private vendor to have a larger share of the revenue in this model of PPP. Two variants of this model can be created by having just a fixed payoff by the vendor to the government or having just a variable pay off. These are as shown below. Where the revenues can be predicted with certainty, the fixed payoff variant will be useful. However when revenue figures are completely unpredictable Model 1b will be more useful. Model 1 shown above should be used when the revenue predictability is between the two extremes.

2.1 Model 1A: (Fixed Pay off variant)

![Figure 2: Fixed Pay off variant](image2)
2.2 Model 1B (Variable Payoff variant)

![Figure 3: Variable Payoff variant](image)

3. Model - 2
In this model the capital investment is done by the government and the business is run by the private partner. This model is specially useful where the government wishes to utilize the efficiency of the private sector in running important citizen services. However the capital costs are high enough for private enterprises to be in a position to invest into the project. The governments ability to invest high capital and the private vendors ability to run the business efficiently is combined to provide a best of breed solution. This revenue model is as shown in Figure 4.

![Figure 4: Revenue Model](image)

**Risk Perception:** The entire financial risk in this model is taken by the government. The government also incurs the administrative risk of project failure and subsequent loss of credibility amongst the citizens. Thus this model needs to be run under strong Service Level agreement. Government needs to exercise close control over the vendor in this model. Government also becomes the major beneficiary of the revenue generated through this model.

Large facilities like Hotels and hospitals may be run using this model. This model can also be used for running of large airports, rail stations and ports. Two variants of this model are as shown in the Figure 5 and Figure 6:

In the first variant the vendor is paid a variable amount in relation to the revenue generated. In the other model vendor gets a fix sum for running the facility against laid down SLAs. Invariably when revenue generation is not linked to the services provided by the private vendor, the fixed pay off model will be used. However when the services provided by the private vendor directly impact the revenue generation process, the variable pay off model should be used.

3.1 Model 2A

![Figure 5: Revenue Model (2A)](image)
3.2 Model 2B

![Figure 6: Revenue Model (2B)](image)

4. Model 3

This model is a true PPP model since it tries to divide the risk and return between the PPP partners equally. Both partners invest capital into the project. Returns are shared as per the original capital investment ratio as well as the risk perception of the partners. It is advisable for the project to be run by the private enterprise to draw upon its efficiency and past experience of running similar business. Projects requiring large capital like oil refining etc may fall under this category of PPP revenue models (Figure 7). Risk Perception: This model tries to equally distribute the risk and return amongst the PPP partners. Invariably the vendor will also have a large stake in the success of the project. Thus the model is likely to work with fair degree of autonomy to the vendor. Government may make initial investments and then accrue annual revenue for their investments.

![Figure 7: PPP Revenue Models](image)

Only a fixed pay off or only a variable pay off creates two separate alternatives of this model (Figure 8 and Figure 9).

4.1 Model 3A

![Figure 8: PPP Revenue Models (Only a fixed pay off)](image)

4.2 Model 3B

![Figure: 9 PPP Revenue Models (only a variable pay off)](image)
5. Concluding Remarks
The above models provide a basis for structuring PPP deals in an e-governance scenario. Various Equity and revenue models can be envisaged. The government and the private partner can either invest together or individually in to the project. Higher, the equity stake in the project, higher is the risk for the participant and hence higher should be the entity’s share of the over all revenue generated by the facility created under the project. Governments and private vendors can discuss the percentages of equity / fixed pay off / variable pay off to arrive at equitable distribution of wealth created under the project. This paper only touches the surface of different financial models perceived in structuring a PPP deal in an e-governance framework. Each of these models can be investigated further for risk return patterns and advantages gained to government and the private enterprise to arrive at well structured PPP contracts.

References
1. The paper has been developed through the authors own experience of working on several e-governance projects as a consultant to the World Bank.

About the Author
Pradeep Valsangkar is an Ex IAF officer of the engineering branch. He studied computer Science at IIT (Powai) completing his M.Tech in 1988. He also undertook defense studies completing his master’s program from “Defense Services Staff College”. He also completed his MBA in Finance from “Faculty of Management Studies” University of Delhi. After leaving the Air Force in 1998, Pradeep Valsangkar held the post of “Technical Head” of the Education Service Division of Tata Infotech and Head of the Business Development group at HCL Perot Systems. He currently heads “GCS Consulting Services Pvt. Ltd” as its MD & Chief Consultant. Mr. Pradeep Valsangkar has over 30 years of experience in the area of “technology.”