VALUE CO-CREATION IN VOCATIONAL EDUCATION: A SERVICE MODEL FRAMEWORK

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ABSTRACT

Authors have tried to develop framework for vocational educational institute through service dominant logic. Dynamic value co-creation is usually missed in Pakistani educational institutions. Authors have tried to develop a relationship among actors by interviewing them. A model is developed using service dominant logic approach. Principle, students and faculty are interviewed for developing framework. Interviews are conducted in vocation institution Green town Lahore. One can work on factors missed during interviews as educational ministry and donors are not interviewed.

KEYWORDS

Value Co-Creation, Service dominant logic, Vocational institution, theoretical framework & Educational Institution.

INTRODUCTION

Service systems are defined as, "dynamic value co-creation configuration of resources, including people, organizations, shared information (language, laws, measures, methods), and technology, all connected internally and externally to other service systems by value propositions" (Spohrer, Vargo, Caswell, & Maglio, 2008). Use of dynamic value co-creation configuration is rare in education sector. In vocational education this value co-creations concept is hardly studied. Importance of vocational training cannot be undermined as it is the fastest and economical way to get employable skills. Public sector in Pakistan is providing almost free vocational education to deserving youth who are interested to get vocational education. Vocational training in almost all institutes is provided without taking any input from students. There is no mechanism available to determine the quality of training and satisfaction of students. A service system in vocational education seems to have potential to address the issue. Trainees, who belongs to poor families, are getting training from one of the vocational training institute of leading training service provider in vocational education of Punjab province. Total 55 trainees were interviewed to know about their satisfaction with quality of training, 90% trainees were not happy with quality of training, behavior of instructional staff and overall learning environment. This situation provided us with the opportunity to understand the phenomena with lens of service dominant logic.

Research Gap: Service Dominant logic is now strengthening its root in education sector. Value co-creation in higher education (Dollinger, Lodge, & Coates, 2018) and service dominant logic in online business education (Beckman & Khare, 2018) are two studies give us some insight to use service dominant logic in education sector. Vocational education which is a combination of theory and practical work has much potential for value co-creation. This study is designed to explore the possibility of service system in vocational education.

Boundary of Service System: It is important to define boundary system. Vocational training institute is situated in green town area of Lahore city. It is providing vocational training in different trades but we are just focusing training in mechanical filed that covers two trades Auto Mechanic and Motorcycle Mechanic.

Value Proposition: We offer vocational training to make trainees competent (knowledge, skill & attitude) in the field of their own choice.

LITERATURE REVIEW

Value co-creation is integration of operand and operant resources of actors involved in process. However value is determined and ultimately created by customers. Since we are taking about education, so students are the beneficiaries. It is also important to note that customers are considered part of goods dominant logic. We will talk the concern parties or stakeholders as beneficiaries in service dominant logic (S-D logic) (Vargo & Lusch, 2008). Student role are shifting from passive conceptualization to active approach of knowledge development through contribution in education process. Students are co-creators.

Co creation is joint collaboration of producing new values. One has to be clear between co-producer and co-creation. Co-creation is interaction of customers and producers for changing consumption pattern of consumers through innovative products (Day et al., 2004).

Traditional approach of education tends to separate tends to separate students and faculty and takes students as customers. Knowledge is transmitted through lectures. Students are just receivers of knowledge. Institutions are producers of what customers are looking for. Consumers are students who are using products offered by institutions. Service marketing used to call producers as service producers while customers role are to utilize services only. Knowledge is produced, transmitted and shared by faculty and lecturers (Biggs, 1999; Carvalho & de Oliveira Mota, 2010).

However, modern approach is totally different from what traditional approach is all about. Students are considered partner in producing, generating and exchange of knowledge. It is because knowledge is available easily for everyone due to innovation in technology. Infact inductive learning approach is used to let students set their goals and future. Socratic approach is about learning of students and they are responsible of knowledge creation. Even education is dedicated to personalize level in modern era. Students are even called as co-creators of teaching approach, course design and curricula.

We have to explore how value is co-created and that is only possible after one has look upon fundamental premises and axioms of S-D logic. Co-creation takes place when learners and teachers interact with each other with the aim of achieving their objectives. Lecturers use classroom and latest digital tools like projectors to demonstrate students what knowledge they are capable of (Wawrzinek, Ellert, & Germelmann, 2017).

Quality environment for students creates better learning outcomes and improving their skills. Students will improve their thinking capabilities. Thus it will be easy to create value co-creation. Teaching ability is one of the tools used to improve value co creation process. Teacher can utilize students as co-teachers, co-producers and co-designers. Value co-creation can be seen by improving class room settings. Teacher uses to propose values to students. Faculty works as value facilitator. They are working as mentor and guider. Students use their skills and culture to accept value. Lecturer demographic and psychographics factors like age, dressing, personality and style can increase student interest towards accepting proposed value. Examination mode, student self-interest and marks are other external factors that will help students to accept proposed values. Student will provide useful feedback regarding teaching methodology and lecture delivered. So we can say that student is co-producer of lectures delivered. It can also been enhanced with respect to industrial point of view. Value created during teachers' and students' interaction must match with industrial requirement. Curriculum must be created keeping industrial requirement in mind. This can be seen by observing social media pages and websites along with latest trend in market. Industry is key stakeholder when it comes to value co-creation in education sector. It is also observed that value co-creation is not an easy task for any provider or beneficiaries. We can say that value co-creation is the interaction of all key shareholders in particular environment. Value co-creation can also be improved by utilizing latest technology in content creation. Technology has given a real boast for students to learn. Previously students are dependent upon teachers and learn according to what he or she decides to teach. With latest tools and technological advancement, students learning have improved a lot. Knowledge is produced and shared through awareness and conversation of ideas of people and society (Chandler & Lusch, 2015).

SERVICE DOMINANT LOGIC IN EDUCATION

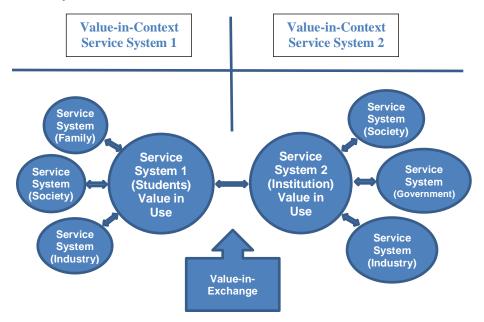
It is important to know what service dominant logic has role in improving education system but we have to define what service is all about. According to Vargo and Lusch (2008), service is defined as "the application of specialized competences (knowledge and skills) through deeds, process and performance for the benefit of another entity or the entity itself". Value co-creation is the outcome of S-D logic. We have to discuss and explain foundational premised (FPs). As we are talking about education process, so we have to know what service in education role. It is the transfer of knowledge and skills among students with objective of making students competent. Knowledge production and consumptions are inseparable. Before discussing FPs, we have to explain value framework of education in detail with respect to value configuration (Wawrzinek et al., 2017).

Knowledge is exchange among stakeholders and is fundamental basis of exchange. Students should enroll in an educational program for the knowledge they want to develop rather than degree and certificates they receive at the end of program. So one can say knowledge is the fundamental basis of exchanged (sometime as economic exchanged too) (Virani & Burnham, 2012).

Knowledge is the cause of value exchange creation and why course of study and service are applied knowledge. Education operand resources are the actors who are conveying knowledge. Students will benefit from these actors values and achieve higher order needs. These actors must improve quality of methods used in education. It is also important to know that uncertain world has created a very short time for any new type of knowledge to get strategic benefit. So, one has to be equipped with latest knowledge. Students can improve their knowledge by improving competencies and skills to keep themselves alive for future. Value network can be used to improve students' standards (Galvagno & Dalli, 2014).

Value configuration platforms should be provided by institutions or the concern organizations. Improving campus atmosphere and enrolling themselves in different programs along with class participation and acquiring skills and knowledge. One has to know value configuration. Value is configured through value proposition provided by the concern university. It is the collaboration of all the actors involved in network. Value is also created when students are interacting with other networks or social groups. In short, knowledge is created and exchanged among students through their own interaction. Value is also co-created not only through education but also from sports activities. Value is co-created from interaction of all concerned actors. Demonstrator experience knowledge and skills along with student participation in class will create value co-creation. Parents of students along with concern authority of education create value co-creation. Parents will let their children to select educational institute of their own choice. Concern authority will provide place for these students to enhance their knowledge and skills (Wawrzinek et al., 2017).

Value creation is dependent upon interest of actors involved during process. Value must be seen in context rather than value in use. Value proposition of one actor must integrate with one's own operant resources. Context can be evaluated in terms of perceptions and significance of actors whose values are different from others. We can create value in context through changing our tools while delivering lectures in halls or in small class rooms. One has to look for horizontal and vertical integration of resources. A subject may focus on how to solve problems while lecture is about knowledge sharing will create disharmony in value creation. A part from students, teachers and institutions many other key players have their own role. Ministry of education and training must bring their values in institute so that value co creation can take place (Vanclay, Esteves, Aucamp, & Franks, 2015).



Let us now explore FP of S-D Logic in detail. **Knowledge is exchange among stakeholders and is fundamental basis of exchange.** Students should enroll in an educational program for the knowledge they want to develop rather than degree and certificates they receive at the end of program. So one can say knowledge is the fundamental basis of exchanged (sometime as economic exchanged too).

Indirect Exchange masks the fundamental basis of exchange. Knowledge is difficult to be measured and appreciated however reward in shape of certificates and degrees are essential and proof of acquiring knowledge. Goods are distribution mechanism for service provision. Knowledge acquisition is dependent upon tangible and intangible elements. Goods are not an issue in service dominant logic as these goods are proof of acquiring knowledge. Operant resources are the fundamental source of strategic benefit. Values are created when operand and operant resources interact. Value creation is dependent upon operant resources while these values will be operated on operand resources. Operant resources in education system are knowledge, skills and competencies along with feeling of actors involved in process. Building and technological advancements infrastructures are part of operand resources. All economies are service economies. The relationships between actors are dependent upon knowledge creation and sharing. Students will give feed regarding knowledge shared by teachers and in response teachers will improve their knowledge depending upon students' feedback so we can say that knowledge is exchanged with knowledge. Customer is always a cocreator of value. Students' intention and need to get knowledge will create value in context. Students will ask questions and then integrates whole knowledge to update their present set of knowledge. The enterprise cannot deliver value, but only offer value propositions. Institute and teachers can only offered values. When values are accepted by students' value will then be created. Education is dependent upon needs of students not on education provider resources. Education is having relational and experiential

aspect as students are having relationship with teachers and other class mates. They are utilizing teachers experience to solve their complex issues so we can say that "A service-centered view is inherently customer—oriented and relational". Students along with teachers create values as both are offering values and thus we can say that all economic and social actors are resource integrators. Last but not least value is always uniquely and phenomenologically determined by beneficiaries. Students are basic beneficiaries of knowledge and they determine values depending upon their needs and intentions. A single system cannot fulfill needs of every student (He, Akaka, Lusch, & Vargo, 2017).

Knowledge co-production is possible only due to knowledge sharing. It is important to know that access to knowledge create value for beneficiaries (Gummesson, 2002). The ability for the organization to provide equal access to consumers may be contingent upon two factors. Coimbatore K Prahalad and Venkat Ramaswamy (2004a) explains the concept of right to access is dependent upon provider willingness to decentralized powers or somewhat leaving powers. It is also dependent upon organization ability to facilitate beneficiaries (Payne, Storbacka, & Frow, 2008).

Beneficiaries are one of the actors in value co-creation. Traditional concept of value destruction is taken over by value co-creation and they provide their feedback at each and every step of the concept (Coimbatore Krishna Prahalad & Venkat Ramaswamy, 2004). Co-production is one of the important concept of value co- creation as Vargo and Lusch (2008)explains that co-production is under provider control. It is necessary to know value co-production but we have to now focus on value co-creation. We have to find the impact of value created by provider and beneficiaries. How will beneficiaries get maximum benefits from value co-production?

Value in use is dependent upon the value propositions provided as per beneficiaries' convenience (Fisher & Smith, 2011; Vargo & Lusch, 2004). We have to look in how value in use concept can be used Vocational education. Since students know what type of education they are looking. They will not be able to evaluate or know value of the education system unless they get their graduation degree (van Vught & Westerheijden, 2010).

Students have their feelings towards their institution. They know what experience they need from their institute. Their learning capacity will improve (Carini, Kuh, & Klein, 2006). Relationship between students and institution will create a strong bond among them and other stakes holders will help to create a community (Coimbatore K Prahalad & Venkat Ramaswamy, 2004b; Zhao & Kuh, 2004).

Students experience and relationship with institution will help system to develop value co-creation. Quality education, students' satisfaction and skills will enhance through interaction with faculty and facilities provided by institutions. Value co-creation will enhance value and satisfaction among beneficiaries in our case students (Dong, Evans, & Zou, 2008; Ranjan & Read, 2016; Zwick, Bonsu, & Darmody, 2008). Graduate capabilities along with life-long learning and professional lives create value co-creation. Their thinking capabilities and analytical skills improvement will enhance values among students (Sumsion & Goodfellow, 2004).

AXIOMS OF SERVICE DOMINANT LOGIC

It is necessary to know that knowledge is very important for exchange. Students used to share their queries with teachers and teachers used to deliver their knowledge to students. Students if accept their knowledge will create value co-creation (Biggs, 1999). So we can say that knowledge is the fundamental exchange of knowledge (Vargo & Lusch, 2016). Knowledge is proposed by teachers and students will accept that knowledge by applying it in real life and by passing that particular subject. Institution will provide that space that will help students to gather that knowledge. Educational authority will revise course material so that knowledge can easily be grabbed and used in modern era (Carvalho & de Oliveira Mota, 2010). So we can say that Value is co-created by multiple actors, always including the beneficiary (Vargo & Lusch, 2016). Students bring their operand (Money and books) and operant resources (skills and market information) to accept knowledge. Teachers bring their knowledge and personality to inspire students. Institutions and institutions bring building and laboratories to equipped students with latest knowledge of industry. Authorities bring their powers to make sure that no deception has to be observed in educational sector (Helgesen, 2008). Hence we can say that All social and economic actors are resource integrators (Vargo & Lusch, 2016). Students are the one who are basically enjoying new skills and knowledge created by different actors. They will measure value ones they have passed their education and adjust in field. Positive word of mouth is created for institutions who are upgrading their education policy and courses according to field requirement (Könings, Bovill, & Woolner, 2017). Hence we can conclude that Value is always uniquely and phenomenologically determined by the beneficiary (Vargo & Lusch, 2016).

One of the most important facets of S-D logic is the co-creation of value. As is seen in the five axioms, three of those five are specifically tied to the co-creation of value, so even axiomatically, the importance of co-creation of value is primary. But given that value is co-created by students and professors and a host of other actors, how does this impact what a professor and a university does? Axiom 2 states that "value is co-created by multiple actors, always including the beneficiary" (Vargo & Lusch, 2017, p. 47). This requires engagement of some sort, and at some level by the beneficiary, or in our current context, the student.

In order for learning to be effective then, students need to *decide* to engage in the cocreation process, and the co-creation process needs to be amenable to student engagement. In order to help address this situation, Etgar (2008, p. 99) developed a five-stage process of co-creation: (1) development of antecedent conditions, (2) development of motivations which prompt consumers to engage in co-production, (3) calculation of the co-production cost-benefits, (4) activation when consumers become engaged in the actual performance of the co-producing activities, (5) generation of outputs and evaluation of the results of the process.

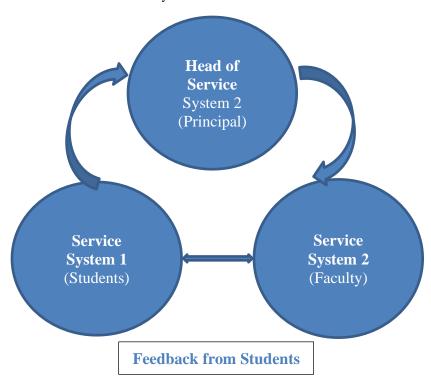
Thematic Analysis

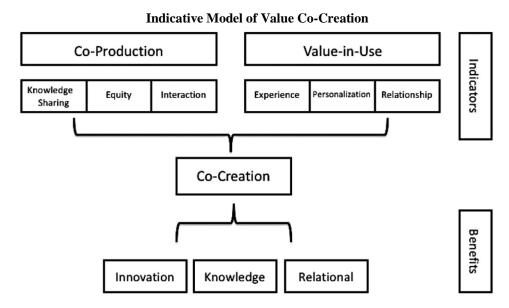
Codes	Themes	Review Themes
We provide free books, free uniforms and all teaching and learning material Rs. 500 / month as stipend We have learning center / library. own building and separate labs Tools / equipment is available in all labs Two instructional staff member in each trade, Admin & Accounts Officer, Admission & Placement Officer its own staff & teacher training institute My office is equipped properly with ICT	Operand Resources	
Online lesson plans are available for instructional staff We have qualified and skilled instructional staff Staff is trained on pedagogical skills and trade related skills upgrading curriculum on regular basis Linkage with industry Trainees Spend 36 hours per week in Institute for training (Time) Admission is offered after written test (to check ability to learn) I want to learn trade related skill (Desire to learn trade related skill) I want to learn how to dress up, communication, interpersonal skill, personality development, time management, stress management, how to deal customer, how to behave with colleagues, and boss, interview skills, how to prepare CV (interest in soft skills) Want start own business, want to get good job, want to support family, want to live good life (Desire to succeed)	Operant Resource	Resources
Head of the Institute is Principal	Principal	
Under umbrella of Punjab Vocational Training Council (PVTC)	Producer Provider Client Object	Entity
We are providing demand driven vocational training services to deserving, two instructional staff for each trade, admission and placement officer, admission and placement officer		
We are providing training to male and female trainees		
Trade related training, life skills training, entrepreneurial training to make competent (Knowledge, skill & attitude)		
We are providing training to male and female trainees, who have minimum education level defined against each trade, and have age between 15-35 years	Consumer / Customer / Client	Stake holders

Government of the Punjab set a unrealistic target of the training of 480,000 trainees	Government	
GIZ is working these days to reform TVET sector in	International	
Pakistan	Organization	
Industry provides jobs to our trained skilled workers	Industry	
Parents want their children to become successful (get job or start business).	Family	
Principal is leading the institute with two other officers Admin and Accounts officers & Admission and Placement Officer. Then we have two instructional staff members for each trade. Principal is reporting to Area Mangers and president district board of management. Area Manger reports to regional manager and regional manager reports to GM operations	Service Producer and Provider	
In public sector our competition is with Punjab TEVTA. However there are some private institutes providing vocational training with financial support of Punjab Skill Development Fund (PSDF) and National Vocational and Technical Training Commission (NAVTTC) but they are a few in number and also providing training in different trades	Competitor	
Training is provided to youth (male & female)	Customer	
Society also gets the benefit	Society	
have our own building, tools & equipment, permanent staff	Owned	Access
Online system	Shared access	Rights
Delivery of lecture by instructor in class room		
Practical work in practical labs	Value creation	
On Job training	interactions	
Job Posts		T., 4 4
Principal visits classes whenever finds time	Governance	Interaction
Study tours of trainees	Interactions	
Development of Skill, knowledge and Attitude of trainees	Competence	
Trainees are happy with the services provided by the	Trainee	
institute	Satisfaction	
TI CIZ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Job and start	
Use of Knowledge, skill and attitude	own work	
Satisfied trainee	Brand Image, Brand Loyalty, Publicity	Outcome
Instructional staff, Admin staff, trainees, institution, classes	Internal Network	
Vocational Training Institutes (VTIs), GIZ, NAVTTC	External Network	Networks

FINDINGS

Feedback is the most important element which is missing in the whole system. Whether students are learning the way teacher is teaching, whether teacher is dealing with all students fairly. To what extent teacher is utilizing operant resources of students (time, interest, intellectual ability. Whether teacher is using his operant resources (knowledge, skill and attitude) properly for value preposition. Principal who is the head of institute can play vital part in this regard. He can visit classes regularly to get direct feedback form students. He can design semi-structured questionnaire to get feedback from students. He can design different and practical test to judge the competence of students. Principal can discuss findings. Principal after getting feedback from students can discuss matter with instructional staff for better utilization and exchange of resources for value co-creation in a service system. It is shown in the model below:





ANTICIPATED BENEFITS FOR INSTITUTIONS AND STUDENTS

Value co-creation will build graduates capabilities, improve interactions and satisfaction of students. Value co-creation will enhance relationship between students and faculty members. It will help institutions in shape of student loyalty. It will help university image to improve. Moreover, as value co-creation is a process that encourages continuous and quality interactions between students and institutions (Coimbatore Krishna Prahalad & Venkat Ramaswamy, 2004). It is possible that these important institutional benefits may be amplified through the process of value co-creation. Student will refer their families or friends to reach institution to improve their skills and to get jobs after their degree (Helgesen, 2008).

Business is all about retaining customers so it is necessary for service provider to retain customers. Students loyalty towards institute will create strong brand image in the market and hence relationship marketing can be used a tool to promote university in society (Helgesen, 2008; Zwass, 2010).

Identification of institutions will help students to promote their skills at higher level. Institutions will create environment for students to let them feel free to enhance their skills. We can say that education institutes and actors will co-create values. Students as an actor will create values by providing feedback against proposed values by lecturers and institutions. Resources of students can be used in different activities of university and through different students bodies along e-word of mouth on social media (Könings et al., 2017; Varnham, Olliffe, Waite, & Cahill, 2016). Institutions will co-create values through teaching environment and learning space along with student capacity to learn different knowledge (Bovill, Cook-Sather, Felten, Millard, & Moore-Cherry, 2016; Healey, Flint, & Harrington, 2016).

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ANNEXURE

Data Transcribe

1. Would you like to discuss your service system?

We are providing demand driven vocational training services to deserving trainees in this Vocational Training Institute (VTI) Green Town, Lahore. Our institute is working under umbrella of Punjab Vocational Training Council (PVTC), Lahore. PVTC is an autonomous body that was formed in 1998. We are providing free vocational training to all trainees as well as give Rs. 500 / month as stipend to trainees. In this VTI Green Town we are providing training in numerous trades including Auto Mechanic, Auto Electrician, Motorcycle Mechanic, Machinist, Beautician, Industrial Garments Stitching, Hilal Butcher, AutoCad, Industrial Electrician, Clinical Assistant, Computer Operator, Computer Hardware Technician and E-commerce. Class strength for each trade is up to 35 trainees. We are providing training to male and female trainees, who have minimum education level defined against each trade, and have age between 15-35 years. Trainees Spend 36 hours per week in Institute for training.

2. What are the various service offerings within your service system?

We are providing vocational training, providing free books, free uniforms and all teaching and learning material. There is no admission fee and tuition fee in our institute. We are proving life skills training that also covers entrepreneurship training and career counseling. We also inform our pass out trainees about job opportunities in the existing market. We provide free 02 manuals to all trainees, one is related to life skills and other one is related to trade.

2.A. Who teaches life skills to trainees? Are they trained on life skills?

Life skills course is taught by the regular instructors. They are not properly trained on this manual as manual is simple and it can be easily taught. However I am being Principal is also taking a few classes whenever find time to teach life skills to trainees. Life skills course covers personal development topic, Pakistan studies topics, islamiat, general knowledge, functional English and math, career counseling and topics related to entrepreneurship.

3. Would you like to share the resources (physical / conceptual) found within your service system?

We have our own building and separate labs is allocated for all trades and then we have learning center / library. Offices are available to all officers including Principal, Admin &Accounts Officer and Admission and Placement officers. We do not have separate rooms for instructional staff as they have to spend full time with their trainees in their relevant labs. Tools / equipment is available in all labs. Two instructional staff members including Senior Instructor / Instructor and Lab Assistant for each trade are available. Staff is trained on pedagogical skills and trade related skills. Punjab Vocational Training Council has its own staff & teacher training institute that provided training to all staff members of VTIs. We have website and social media accounts to promote VTI. We have curriculum department at PVTC level that is upgrading curriculum on regular basis.

3.A. Being Principal do you visit classes to check quality of training.

Frankly speaking I do not find time to visit classes but I check the internal assessment record monthly basis regularly.

4. Describe dynamic aspects of your service system. In what ways does your service system evolve? What forces, entities, or features of your service system enable or constrain evolutionary change.

Our courses are demand driven courses. These courses are developed with feedback from industry through our curriculum department. We provide two month on job training to our trainee as mandatory feature. All our trainee spend two month at the end of course in relevant industry to get exposure of real environment. At district level we have district board of management that is consisted of members from private sector especially who are doing their business and preferably member of chamber of commerce of industry. This board is involved in administrative and financial matters as well as provide support for on job training and placement of trainees. However members of the district board are very busy person due to their business activities and hardly find time to take care of our matters properly. Government of the Punjab gave unrealistic target of the training of 480,000 trainees to PVTC for that we have to increase our capacity three time by reducing the course length and timing to half. Due to this step quality of training suffered.

4.a. Do you get any feedback from trainees or involve trainees are any level to design training activities or to improve delivery of training?

No. I do not think that trainees are of that level who can provide us any valuable feedback. Education level of the trainees are low like in some trades we induct under metric trainees.

4.b How do you come to know that trainees are satisfied with the services provided to them?

We provide free services to all trainees and also give them stipend. Almost over 90% trainees get through exam that shows that they are learning properly.

5. In what directions do you think your service system will go in the future? Do you see their service system growing and providing services to a greater number of people or organizations? If so, what plans are in place to reach this goal?

We are facing problem of funds shortage so expansion of the service system is not possible. However we will try to improve the current service system.

6. What policies, practices, or measures are in place to explore opportunities for innovative or transformative growth?

GIZ is working these days to reform TVET sector in Pakistan. There are many interventions introduction of Competency based training, capacity building of instructional staff, digitized monitoring and evaluation system and establishment of monitoring cells, establishment of proper career guidance and placement centers, training of principals etc.

7. Describe the organizational structure(s) that their service system works within.

Principal is leading the institute with two other officers Admin and Accounts officers & Admission and Placement Officer. Then we have two instructional staff members for each trade. Principal is reporting to Area Mangers and president district board of management. Area Manger reports to regional manager and regional manager reports to GM operations. Within institute instructional staff directly reports to Principal.

8. Describe stakeholders and discuss stakeholder perspectives in your service system.

Trainee get training in their relevant trades. Industry provides jobs to our trained skilled workers. Industry demands skilled worker who have trade related knowledge and expert in practical work. In addition they also ask for skilled worker who love their work, hardworking, honest and give respect to boss and colleagues. They need worker who are punctual and regular. However industry is underpaying our trainees that is why most the trainees leave jobs after some time. Focus of the government is quantity means how many trainees are trained by the institute? There is no support from government side for the placement of trainees. Parents want their children to become successful (get job or start business).

9. Discuss competition in the context of you organization. Can individuals opt for a different service provider or simply choose not to use your organization? How has competition altered your service model, if at all.

We are working under the umbrella of Punjab Vocational Training Center which is the largest VET provider of Pakistan. In public sector our competition is with Punjab TEVTA. However there are some private institutes providing vocational training with financial support of Punjab Skill Development Fund (PSDF) and National Vocational and Technical Training Commission (NAVTTC) but they are a few in number and also providing training in different trades.

10. Discuss any legal constraints of your service system.

We are public sector organization and such as there is not legal constraint

11. Are any material goods produced in the context of their service systems and if so, how do these material goods fit in to the exchange of services?

In some trades like Dress Making, & Industrial Garments stitching goods are produces, machinist trade also shape different parts that can be used. We do not produce goods for commercial purpose. We distribute these items among out trainees for their encouragement at cost basis.

12. Describe the key service processes and interactions in your service system.

Instructors interact with students in labs and class rooms. We have provided LCDs in class rooms to show video content to trainees. Instructors deliver lectures to students to cover theory and then they demonstrate practical work. We have allocated 80% time to practical work and 20% to theory work. Internet facility is also available to instructional staff. I also visit classes whenever find time. Web site of the

organization is present. Face book page of PVTC is also launched. We arrange factory visits to provide opportunities to trainees to interact with employers. On job training is another way that provides formal opportunity to trainees to interact with employer. Students can send email on our formal email address.

13. Discuss the forms of exchange that take place in those interactions.

Trainees show their interest in trades of their own choice. Institute offers admission to interested trainees as per available seats after admission test. Admission test is designed to confirm the interest of trainees and general ability to learn new skill. VTI provides training to trainees as per curriculum.

14. Describe what kinds of systems have been acquired or created to facilitate the exchange. Are they IT systems? Are there other kinds of systems?

We have IT system for communication with all departments and other institutes through email. My office is equipped properly with ICT. We have trainee profile software where we record the data of all trainees. This software facilitates us to keep the record of trainees. We record daily attendance of trainees in the system, examination department is also linked with the system and trainees who maintain 90% above attendance are eligible exam. We receive paper through email. Result is announced online and trainees can print their provisional certificate. PVTC has recently launched a system to keep record of the on job training and placement. Online lesson plans are available for instructional staff. Online different reports are available that help us in decision making.

14.a. Other than you mentioned above any online facility available to trainee like soft copies of relevant books etc.

There is no such facility available for trainees.

- 15. Consider other service systems that are connected to your service system, internally and externally. What values or benefits define these connections? How is this value judged? Are there costs or risks associated with these connections? We are connected with industry for on job training of trainees and placement of trainees. Curriculum department of PVTC is directly coordinating with industry for getting feedback on revision of curriculum. Instructors are also providing feedback to curriculum department on existing curricula every year. Through TVET reform support program GIZ is linked key stakeholders including, institutes, industry and different government divisions/departments.
- 16. Consider how value is judged in your service system and the possible frames of reference for judging that value. Consider in what other ways the people or organizations involved in your service system define value. In what ways is value co-created by more than one service system or entity.

17. Indicate which kinds of service interactions currently exist within your system

First thing is the satisfaction of trainees and if trainees are satisfied then we can say we are providing them value. In the same way if trainees are learning and performing well in examination we can say that we are producing some value for them. If trainees are punctual, regular, disciplined, working hard and learning new things, giving respect to teacher and other staff members then we can that it's a good value exchange. Industry is helping in defining the skills (Hard skills) required for workers and what type of other skills like communication, positive thinking, confidence, honesty, hardworking, stress management skills required (soft skills). Institutions try to develop these skills in trainees. Once these skills are developed, industry provide them jobs. Value is created for industry if we provide them skilled worker who have positive attitude and have enough knowledge about their relevant work. Government is providing funds to institute for training and institutes provide training. In this case for government value is defined in terms of number of pass outs. Parents send their young children to institute with the hope that they will get employable skills and institute provide them skills. Federal government sets target to provide jobs to the unemployed and provincial governments provides skill training to unemployed that help them to find job. Skilled trainees interact with each other to share their knowledge, experiences and sometimes learn skills from each other.