

Team Management Dynamics and Performance of Water Projects in Bomet County, Kenya

Geoffrey Kipngeno Rono, Dr. Muchelule Yusuf

Abstract—Water resources are key in the economy across all sectors such as energy generation, industry and tourism, agriculture and livestock development, and consumption both in the rural and urban. Water crisis has been a big threat towards world progress and to development. the performance of water projects in the developing countries has been low. Water remains crucial requirement for the survival of people. Provision of safe water for drinking and sanitation remains a bare minimum for any nation to its citizens. The Constitution of Kenya Article 43 calls for access to clean water for all citizen. The United Nations has classified as a chronically water scarce country with limited natural source of freshwater, with an annual supply of freshwater of about 647 cubic meters per capita which is below the 1,000 cubic meters threshold of water scarcity. For any government to be successful, performance of projects is inevitable. Decentralization of development projects aims to fix development of projects beyond the constraints of funding sources, infrastructure, community beliefs, stakeholders' participation, insecurity, and technology. For success of any project, team management is crucial. The main objective of the study was to investigate the influence of Team Management Dynamics and Performance of Water Projects in Bomet County, Kenya. Specifically, the study was operationalized: Project Team Design and Organizational resources, and their influence on performance of water projects in Bomet county. The study targeted 103 water projects where 211 respondents comprising of project team members and leaders, and other agencies related to the projects. A sample of 138 respondents was drawn from the population. The study used questionnaire as the main data collection tool. The study found that Team Management Dynamics correlated with performance of water projects in Bomet County. Further, the study found that Team Management explained 88.7% variation of performance of water projects in Bomet County. Specifically, the study found that Project Team Design and Organizational Resources all had significant positive correlation with performance of water projects in Bomet County. All the variables also had significant influence in performance of water projects in Bomet County. The study found Organizational resources had the highest influence on performance of water projects followed Project Team Design. The study thus, concluded that Team Management Dynamics significantly influenced performance of water projects. The study recommends embracing Team Management Dynamics in projects to improve on performance of projects.

Index Terms—Team Management Dynamics, Project Team Design, Organizational Resources, Water Projects.

I. INTRODUCTION

Kenya's economy is highly dependent on natural resources

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since its largely rural-based. Water resources are key in the economy across all sectors such as energy generation, industry and tourism, agriculture and livestock development, and consumption both in the rural and urban. The United Nations has classified as a chronically water scarce country with limited natural source of freshwater, with an annual supply of freshwater of about 647 cubic meters per capita which is below the 1,000 cubic meters threshold of water scarcity. The Constitution of Kenya Article 43 call for access to clean water for all citizen [1], and further the Kenya Vision 2030 activities aim at achieving universal access in water and sanitation services by 2030 [2].

Team management is the capability of an individual or organization to govern and supervise a group of people to complete a specific task. One of the cornerstones of the management system is risk management. The risk management and disaster recovery planning procedures team has become an asset that impacts the organization [3]. A team is a collection of individuals that collaborate to accomplish shared goals and objectives for the benefit of service recipients and organizations in order to provide high-quality service. The individuals you employ may develop a strong sense of direction, practical plans and ideas, a powerful feeling of identity with and on the team, and strong strategic values that are customer-focused through team building and event planning. Nothing significant is completed as employees make tiny moves toward completing crucial action items [4].

Team dynamics are those negative and positive forces that are found within the group. It is a system of psychological processes and behaviors within a team. For a winning team there are 7 characteristics that are essential. They include: a shared purpose; openness and trust; the will to correct mistakes; inclusion and diversity; sense of belongingness and interdependence; consensus in decision making; and participative leadership. Group dynamics can be understood as how team member's distinct roles and behaviors impact other group members and the group as a whole. Team dynamics are therefore the unconscious, psychological factors that influence the direction of a team's behavior and performance [5].

A. Water Projects in Bomet County

Bomet County Government has a population of 875,689 and covers an area of 1, 630 km² and is located in the former Rift Valley province of Kenya. Just like many other counties in Kenya, Bomet county has a huge demand for water [6]. The CGB aims at improving water and sanitation as in line with the Kenya Vision 2030 and the UN Sustainable Development Goal Six (SDG-6). The water supply schemes that are

managed by Bomet Water and Sewage Company (BOMWSCO) include: Sotik, Bomet, Longisa, Kamureito, Ndanai, Itare, Sigor, Yaganek, and Olbutyo. The main water sources include Itare, Chemosit, Amalo, Sisei, Kipsonoi, Kiptiget, Nyongores, and Mara. The water supplies in Bomet are more pumping-based schemes and thus the operation and maintenance costs are too high making the schemes not sustainable [2].

According to African Rural and Urban Development Consortium report of 2017, the Bomet Water Sanitation and Hygiene (WASH) was implemented in between 2014 to 2017 in Bomet central and Chepalungu sub-counties. It was noted that funds from devolved governments and the political responsibility were not sufficient to ensure service delivery since there was lack of technical capacity in the county. However, through an exemplary partnership between CGB and Kenya Red Cross Society (KRCS) a project which is viewed to be exemplary was delivered. There was mutual trust and transparency in the partnership. The project aimed at improving health through better access to safe and water supply, basic sanitation and hygiene. The key impact indicator was prevalence of diarrhea among children under 5 years [7].

The county government of Bomet explored various means of providing solution for the demand of the high precious commodity through construction of water pans, drilling of boreholes and many others. Some of the completed water projects include: Kaptebeswet Water Pan that is in Merigi Ward that was completed in 2021 and is open for use, the Kshs 60 million joint water plan project between Bomet and Kericho counties and the Kericho Water and Sanitation Company (Kewasco). The Itare water supply scheme was constructed in 1986 by the Ministry of Water and Irrigation to serve Bureti and Sotik constituencies in Kericho and Bomet counties respectively. In the joint project each county was to contribute Kshs 20 million for enhancement of the water project [8]. In Chepalungu sub-county, Chebunyo ward, Labotiet borehole water project was initiated to serve residents and traders in cheboiyo, kelichek, Labotiet trading center, Chemisimgut villages and environs. Further, Chepnyaliliet and Kigusgong water pans were also set for expansion, desilting and other civil works [6].

B. Statement of the Problem

The water Act of 2002 aimed at implementing various reforms in the water sector in order to ensure there is efficiency and improvement in provision of water services in the urban rural areas of the country. The budget for water development projects has been growing each fiscal year in an attempt by the government to ensure the citizen have access to water services [9]. Water coverage in Kenya is 53% in regions served by Water Service Providers. Sewerage coverage is now at 16%. This contrasts with the Vision 2030 ambition of 100% coverage, making this development goal a considerable challenge for the government. According to Kenya's National Water Master Plan for 2014, KES 1,765 billion is required for urgent restoration and medium-term extension of piped water systems in order to meet the 2030 targets. This amounts to over 78% of Kenya's yearly expenditure budget of KES 2.246 trillion. While enhanced water supply and sanitation services

are understandably high on the government's priority list, public sector financial resources are inadequate for meeting this demand, even with donor assistance.

In Kenya, there is only 61% coverage for water and 29% for sanitation thus, the society is affected and more so women and girls who have to walk for long distances to water points and are thus exposed to threats and violence [7]. The national government is committed to improve water problems through an increased budget allocation each fiscal year. Further coming with initiatives that will solve the problem such building of dams. The CGB is also commitment to improve access to adequate and reliable water for domestic and livestock use, several water projects were initiated across the county such water pan projects, boreholes, and other water projects. Despite all that, the problem still exists. According to [7] It was noted that devolved funds and the political responsibility are not sufficient to ensure service delivery since there is lack of technical capacity in the county. However, an exemplary partnership between CGB and KRCS delivered a project through mutual trust and transparency in the partnership. Further, some of the challenges related to the project included: funds delays, lack of priority by the CGB, frequent transfers of project trained public health officers, community resistance, and lack of commitment of county officers [7].

C. Objectives of the Study

The general objective of the study was to investigate the influence of Team Management Dynamics and Performance of Water Projects in Bomet County, Kenya.

The study was guided by the following specific objectives:

- i. To assess the influence of Project Team Design and Performance of Water Projects in Bomet County, Kenya.
- ii. To determine the influence of organizational resources on Performance of Water Projects in Bomet County, Kenya.

II. LITERATURE REVIEW

The study was guided by the Resource Based View Theory. Resource Based Theory (RBT) was first put forward by E. Penrose in 1980s as a model on effective management of a firm's resources [10]. It was later proposed by Jay Barney in the 90s as a dominant paradigm in strategic management. It provides a framework to highlight as well as predict the fundamentals of organizations performance and competitive advantage [11]. A firm's competitive advantage is based mainly on the usage of a combination of the most essential capabilities as well as the resources both the tangible and the intangible ones which are controlled by the firm. RBT theoretically predicts intangible resources as important factors for success of a project. Intangible resources are financial, physical, human, intellectual, organizational reputational and technological resources.

[12] hold that this theory helps in describing the influence of human resource on businesses and how they benefit the shareholders. It is indicated that through project team management there is production of the value for money which is created through return on investment. The theory also helps in guiding future project team management as well as business strategies and data for formation of policies aimed at improving productive of the human resource in organizations.

The human capital theory will be employed to examine the influence of team design, and team recruitment on project performance. From organization perspective provision of team training and education results to productivity, performance and innovation which in turn leads to an improvement in project performance. The delivery of projects in devolved governments within budget and schedule depends on the project teams in terms their skills, experience, capability knowledge and level of education [12].

A. Conceptual Framework

The study was guided by the following conceptual framework.

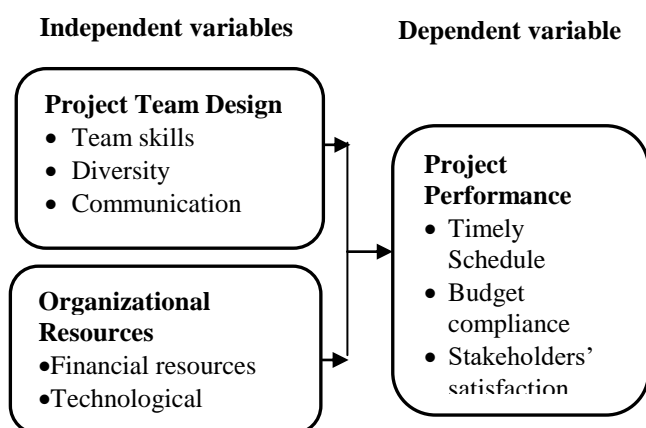


Fig I: Conceptual Framework

B. Project Team Design

Project Team Design is the ability to conduct project activities successfully or efficiently by considering factors such as team skills, competence diversity and leadership [13]. Team skills and competence refer to the ability to conduct project activities successfully or efficiently. Team skills and competence such as listening, problem solving, support, conflict management and feedback skills have a significant role on project performance [13]. It is essential for group workers to be able to communicate both verbally and through use of body languages in a professional manner. Through effective and efficient communication, one is able to express his or her ideas in a better way, carefully listen to others not necessarily with an aim to reply, express their feelings without a threatening tone, understand other people's feelings on the basis of their body language or what they say and have a reflection of the past interactions and the appropriate way things could have been done [14]. Important skills in a project include problem solving skills, listening and feedback skills.

Team project management can be interpreted in the context of virtual space, classical structure of the organization, project agility, interorganizational networks and others. Organization boundaries define the internal environment and in this case an organization becomes an environment of the project implementation and this is the essence of the classical approach where the project team location is described in the organizational structure [15]. Virtualization has been adopted by many organizations in in this evolving global world in order to reduce cost, maximize funds, and also recruit field experts beyond location barriers. The virtual teams are made

of people of cross-cultures but have the ability to do the job efficiently [16].

In collaborative projects where team members are from functional department such as finance, marketing, customer service and others, mean that the project members operate under dual authority system i.e., reporting to a line manager as well as the project manager. In this instance the project manager needs to ensure there are effective communication channels that are well addressed in the communication management plan [17]. To manage a cross culture teams, good and effective communication is required in addition to understanding of the various cultures in the group, clear definition of goals, roles and boundaries, acknowledgement of individual skills, and the willingness to create a bond with the various team members [16].

B. Organizational Resources

Organizational Resources are the tangible and intangible assets that support improvements of practices, support programs to ensure service delivery. They include adequate funding, technology, equipment and facilities, staffing, and informational resources [18]. Perceived team support is considered the extent at which the team perceives that the organization provides or offers tools to perform tasks or duties. It is usually measured at the team level and may include the use of a management system, resources, and training. Team needs organizational support in seven categories: information systems, teamwork training, rewards and recognition, group design, management support, integration, and performance measure [19].

Tangible resources which include financial and physical assets of the organizations include current and fixed assets. The fixed assets include equipment, tools, land, buildings, and machinery while the current assets include financial and other current assets [20]. Financial resources are considered to be critical for financing strategic organizational resources as well as expanding the business activities based on the strategic objectives. Availability of financial resources ensures sustainability of long-term investment and thus, leads to success. Organization should prioritize allocation of resources in order to obtain maximum returns and will in turn ensure there is improved performance. Funds are important for staff preparation based on their duties and desires. Projects that yield outstanding returns need to be supported through funding [21].

Technology is an important assumption in the context of project management due to the technology enabled work environment and tools are used for collaboration and communication and even deployment of project management practices. Co-located project teams use technology for the aforementioned purposes. Though it is difficult to relate the project performance with the importance of technology, technology plays a crucial role in supporting the project manager and in effectively and efficiently managing of projects. The occurrence of misalignment between the technology management and project management can lead to situations of project failure. Thus, it is crucial to realign and evaluate the fit between technology management and project management in terms of needs, goals, performance requirements, and capability investments. Technology is

relevant in project-based organization since management by technology is concerned with demonstration that best results are due to skills, technology availability, and experience through the project life cycle. Technological changes induce skill man power to be able to handle changes and thus, being conversant with technological changes is necessary [22].

III. EMPIRICAL REVIEW

i. Project Team Design and Project Performance

[23] studied the determinants of NGO project performance. The study also examined the influence of project team commitment on performance of NGO projects as one of the objectives. The research employed descriptive research design. The study targeted 304 respondents comprising of senior managers, field officers, branch managers, and accountants. The study revealed that project team commitment significantly influences project performance of NGOs projects in Kenya [23]. [24] researched on the influence of team attitude and behavior on information system project success in US. The study deployed descriptive survey design; the study targeted different firms in US. The success of IT projects was greatly determined by commitment and quality teamwork. The direct and indirect influence of goal commitment on project success shows the need for teamwork attitude to complete an information system project successfully [24].

ii. Organizational Resources and Project Performance

[25] examined the 'influence of Technological assets on organizational performance through absorptive capacity, organizational innovation and internal labor flexibility'. The study aimed at analyzing the influence of technological assets on absorptive capacity. A total of 160 European technology companies were sampled. The results indicated that the support technology, improvement of technological skills, and having distinct technological competencies ensures improvement of the organizational performance since they have positive influence on the processes of realized and potential abortion capacity [25].

[19] studied the effects of team enablers and team cohesion on project team success. The study specifically focused on the effect of organizational support and team autonomy on project team success and team cohesion dimensions. A total of 110 project team comprising of 343 team members from multinational financial institutions in Turkey were targeted. Project team was the unit of analysis. The study established that organizational support had a significant related to the project team cohesion and effectiveness.

IV. RESEARCH METHODOLOGY

The study used mixed methods, which included descriptive research design and explanatory research design. This study design was the most suitable as the research strived to analyze the relationship between project team management, organizational resources and project performance.

A. Target Population

The target population was 103 water projects (comprising of water schemes, water pan, boreholes, springs etc.) as

mentioned in the in Bomet county Integrated development plan 2018-2022. The unit of observation was 206 project members and their team leaders in Bomet county, Bomet Water company limited (1), Water Services Regulatory Board (WASREB) (1), KRCS (1), Water Service Trust Fund (WSTF) (1), and State department of water (1) [6]. Thus, the unit of observation was 211 respondents.

Slovin's Formula was used in the current research to calculate the sample size where 138 respondents were sampled. A semi-structured questionnaire was used in collecting primary data. Both descriptive and inferential statistics were adopted for the study by the use of Statistical Package for Social Sciences (SPSS) version 25.

V. RESEARCH FINDINGS AND DISCUSSIONS

A total of 138 questionnaires were administered to respondents in Bomet County. A total of 111 questionnaires were returned. Thus, the response rate was 82.6% which was excellent and adequate for analysis and drawing conclusions [26], [27].

i. Project Team Design and Performance of Water Projects

The first objective of the study was to assess the influence of Project Team Design and Performance of Water Projects in Bomet County, Kenya. The average Project Team Design (3.49) and Std dev (1.373) slightly indicated to some extent the Project Team Design in Team Management Dynamics influenced on the performance of water projects in Bomet County. Table I below shows the statistics.

Table I: Project Team Design

| Project Team Design Indicators | Mean | Std Dev |
|--|-------------|--------------|
| The organization structure influences the structure of the project team e.g., functional departmental, matrix etc. | 3.72 | 1.410 |
| The design of the project team influences their performance consequently the performance of the project | 3.53 | 1.445 |
| The roles and responsibilities of each project team member are clearly defined in the project organization structure | 3.56 | 1.432 |
| The project team went through some training on what is expected of them on the different projects | 3.64 | 1.373 |
| Project Team comprised of all the key stakeholders | 3.57 | 1.360 |
| There is top management support for the project team | 3.30 | 1.487 |
| The project team comprises of multicultural team members. | 3.12 | 1.248 |
| There is well establish communication plan to ensure project team members report, communicate, and provide feedback on the project | 3.48 | 1.230 |
| <i>Average Project Team Design</i> | <i>3.49</i> | <i>1.373</i> |

The study found that the organization structure influences

the structure of the project team ($M = 3.72$, Std dev = 1.410). To add on that, the design of the project team also influences their performance consequently the performance of the project ($M = 3.53$, Std dev = 1.445). The roles and responsibilities of each project team member are clearly defined in the project organization structure ($M = 3.56$, Std dev = 1.445). The project team has gone through some training on what is expected of them on the different projects ($M = 3.64$, Std dev = 1.373). The Project Team also comprise of all the key stakeholders ($M = 3.57$, Std dev = 1.360). However, the study didn't clearly indicate whether the top management supported the project team ($M = 3.30$, Std dev = 1.487). In addition, it wasn't clear whether the project team comprised of multicultural team members ($M = 3.12$, Std dev = 1.487). The study also slightly established that there was a well-established communication plan to ensure project team members report, communicate, and provide feedback on the project ($M = 3.48$, Std dev = 1.230).

ii. Organizational Resources and Performance of Water Projects

The second objective of the study was to determine the influence of organizational resources on Performance of Water Projects in Bomet County, Kenya. The average Organizational Resources (3.50) and Std dev (1.324) clearly indicated Organizational Resources in Team Management Dynamics influenced performance of water projects in Bomet County. Table II below shows the statistics.

Table II: Organizational Resources

| Organizational Indicators | Resources | Mean | Std Dev |
|---|---------------------------------|-------------|--------------|
| The organization environment is favorable to work on the project | | 3.64 | 1.416 |
| The organization is very supportive in providing resources to ensured success of the project. | | 3.80 | 1.332 |
| The county has provided physical resources needed for the project | | 3.70 | 1.316 |
| Physical resources such as land, buildings etc. are adequate and sufficient for completion of the project | | 3.28 | 1.339 |
| The county has provided adequate financial resources for the completion of the project. | | 3.45 | 1.347 |
| Funds are released on time to ensure there a smooth project implementation process. | | 3.28 | 1.290 |
| The county has embraced the use of technology in managing the project | | 3.53 | 1.348 |
| Technology such as information system is used for collaboration between the project team members. | | 3.32 | 1.206 |
| <i>Average</i> | <i>Organizational Resources</i> | <i>3.50</i> | <i>1.324</i> |

The study found that county environment was favorable to work on the project ($M = 3.64$, Std dev = 1.416). The county was also found to be very supportive in providing resources to ensured success of the project ($M = 3.80$, Std dev = 1.332). The county provided physical resources needed for the project ($M = 3.70$, Std dev = 1.316). However, the study didn't clearly indicate whether the physical resources such as land, buildings etc. were adequate and sufficient for completion of the project ($M = 3.28$, Std dev = 1.339). The study found that the county slightly provided adequate financial resources for the completion of the project ($M = 3.45$, Std dev = 1.347). It was clearly on whether the funds were released on time to ensure a smooth project implementation process ($M = 3.28$, Std dev = 1.290). the study also found the county embraced the use of technology in managing the project ($M = 3.53$, Std dev = 1.348) however, it wasn't clear whether the technology was used for collaboration between the project team members ($M = 3.32$, Std dev = 1.206).

iii. Status of Performance of Water Projects

The general objective of the study is to investigate the influence of Team Management Dynamics and Performance of Water Projects in Bomet County, Kenya. The average performance of water projects ($M = 3.36$) in Bomet County didn't clearly indicate the status of performance of water projects in Bomet County i.e., the extent to which Team Management Dynamics may have influenced performance of water projects in Bomet County. Table III below shows the statistics.

Table III: Performance of Water Projects

| Water Projects Performance Indicators | Mean | Std Dev |
|--|-------------|--------------|
| The project team dynamics have ensured positive performance of the projects | 3.50 | 1.130 |
| There was good coordination between the project stakeholders and the project team on the project status and performance, | 3.23 | 1.345 |
| The water projects implemented as per schedule. | 3.24 | 1.239 |
| The water projects were completed on time | 3.32 | 1.419 |
| The water projects were implemented within their budgets. | 3.43 | 1.380 |
| Project team management ensured compliance to the project budget. | 3.22 | 1.319 |
| The stakeholders were satisfied with the quality and standards of the project. | 3.34 | 1.372 |
| The stakeholders felt the project were successful implemented | 3.62 | .706 |
| <i>Average Performance of water projects</i> | <i>3.36</i> | <i>1.239</i> |

The study found that the project team dynamics have ensured positive performance of the projects ($M = 3.50$, Std dev = 1.430). The study also found that the stakeholders believed that the project were successful implemented ($M = 3.62$, Std dev = .706). However, the study couldn't establish whether there was good coordination between the project stakeholders and the project team on the project status and

performance ($M = 3.23$, Std dev = 1.345). It wasn't clear also on whether the water projects were implemented as per schedule ($M = 3.24$, Std dev = 1.239); completed on time ($M = 3.32$, Std dev = 1.419); or even implemented within their budget ($M = 3.43$ Std dev = 1.380). There was no evidence to indicate on whether Project team management ensured compliance to the project budget. ($M = 3.22$, Std dev = 1.319). Finally, the study could not clearly establish on whether the stakeholders were satisfied with the quality and standards of the project ($M = 3.34$, Std dev = 1.372).

VI. CORRELATION ANALYSIS

Correlation analysis was done to establish the association between the predictor variables and the dependent variable.

Table IV: Correlation Matrix

| | | PWP | Project Team Design | Organizational Resources |
|-------------------------------|---------------------|-----|---------------------|--------------------------|
| Performance of Water Projects | Pearson Correlation | 1 | .819** | .336** |
| | Sig. (2-tailed) | | .000 | .001 |
| | N | 111 | 111 | 111 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table IV above shows Project Team Design (PTD) has a strong positive and significant correlation with performance of water projects in Bomet County ($r = .819$, $P\text{-value} = 0.000$). The positive correlation depicts a direct relationship where an increase in Project Team Design will lead to an increase in Performance of water projects (PWP) in Bomet County. Organizational Resources (OR) has a weak positive and significant relationship with Performance of water projects ($r = 0.336$, $P\text{-value} = 0.001$). The variable also has a direct relationship with Performance of water projects in Bomet County.

VII. REGRESSION ANALYSIS

Regression analysis was done to identify the value of the dependent variable when the independent variables change.

Table V: Coefficients for Regression Analysis

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | .665 | 0.402 | | 1.653 | 0.001 |
| 1 PTD | 0.797 | 0.11 | 0.683 | 7.245 | 0.000 |
| OR | 0.936 | 0.214 | 0.811 | 4.379 | 0.001 |

a. Dependent Variable: Performance of Water Projects

Project Team Design ($B = 0.797$, $Beta = 0.683$, $P\text{-value} = 0.007 < 0.05$). Project Team Design has a significant influence on performance of Water Projects in Bomet County ($P\text{-value} = 0.007 < 0.05$). In this study, it has the second highest influence on project performance ($Beta = 0.683$). It has a

0.683 influence on performance or rather 68.3%. In our study model it has coefficient of 0.797. Organizational Resources ($B = 0.963$, $Beta = 0.811$, $P\text{-value} = 0.017 < 0.05$). Organizational Resources has a significant influence on project performance ($P\text{-value} = 0.017 < 0.05$). In this study, it has the second highest influence on project performance ($Beta = 0.811$) and a 0.811 influence on performance or rather 81.1%. In our study model it has coefficient of 0.963. Thus, the final model was fitted as follows:

$$PWP = 0.665 + 0.797PTD + 0.936 OR \dots\dots\dots(i)$$

VIII. CONCLUSIONS

The study found Team Management Dynamics to have a significant correlation and also to influence performance on water projects in Bomet county. The study therefore concludes that Team Management dynamics significantly correlates with performance of water projects in Bomet County. The study also concludes that Team Management dynamics significantly influences performance of water projects in Bomet County.

Project Team Design is significantly correlated with performance of water projects in Bomet County. Project Team Design has a positive significant influence on performance of water projects in Bomet County. The Variable has the second highest influence on performance of water projects in Bomet county. Project Team Design is the ability to conduct project activities successfully or efficiently by considering factors such as team skills, competence diversity and leadership [13]. The findings of this study also confirm the findings of [4] who found significant influence and relationship between team diversity and project performance of IT projects. The study also is supported by [28] who found a strong relationship between the quality of the project team and the projects implemented by the organization in assessment of the ICT on project management team performance in cooperative projects in Tanzania.

Finally, Organizational Resources is significantly correlated with performance of water projects in Bomet County. Organizational Resources has a positive significant influence on performance of water projects in Bomet County. The variable highly influences performance of water projects in Bomet county. Organizational Resources are the tangible and intangible assets that support improvements of practices, support programs to ensure service delivery. They include adequate funding, technology, equipment and facilities, staffing, and informational resources [18]. The findings also are supported by [19] who found organizational support to be significantly related to the project team effectiveness and cohesion in multinational financial institutions in Turkey.

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REFERENCES

- [1] Government of Kenya. (2010). The Constitution of Kenya. Nairobi: Government printer.
- [2] National Water Conversation & Pipeline Corporation. (2017). Proposed Bosto Dam project, Bomet county. Nairobi: Safe Environment Consultancy.
- [3] Lee, S. (2018). Influence of Resources on Project Performance in Kenya. Retrieved from https://getd.libs.uga.edu/pdfs/lee_soo-young_200905_phd.pdf
- [4] Mata, M. N., Khan, F. H., Martins, J. M., Rita, J. X., & Dantas, R. M. (2021). Team diversity and project performance: Role of trust and absorptive capacity in IT industry. *Academy of Strategic Management Journal*, 20(2), 1-20.
- [5] How to Manage and Improve Team Dynamics. Retrieved from everhour.com: <https://everhour.com/blog/team-dynamics/>
- [6] CGB. (2022, January). Water supply and sanitation project. Retrieved from bomet.go.ke: <https://bomet.go.ke/bomet-residents-to-benefit-from-the-new-bomet-mulot-longisa-water-supply-and-sanitation-project/latest-news/>
- [7] ARUDCO. (2017). Bomet Water, Sanitation and Hygiene project. African Rural and Urban Development Consortium.
- [8] KEWASCO. (2019). Current Projects. Retrieved January 2023, from kewasco.co.ke: <https://www.kewasco.co.ke/projects.php>
- [9] Eliab, M. T., & Kisimbii, J. (2020). Determinants of Performance of Water Projects in Urban Center in Kenya: A Case of Mji Wa Kale Sub-Location in Mombasa County. *Journal of Entrepreneurship and Project Management*, 5(2), 23-45.
- [10] Penrose, E. (2009). The theory of growth of the firm (4th ed.). Oxford University Press.
- [11] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120
- [12] Chan, J., Ko, A., & Yeung, M. (2018). A relational perspective on pure project performance: Network centrality and cinematic achievements in the Hong Kong film industry. *Management Research Review*, 41(6), 753-772.
- [13] ScottYoung, M., & Samson, A. (2018). Team Management and Success of Projects. *Operational Management Journal*, 26(6), 749-766.
- [14] Afroze, G., & Khan, R. (2017). Investigating impact of effective communication practices and its impact on project performance of international development projects. *International Journal*, 23, 21-56.
- [15] Pachura, A. H. (2018). What matters in project team management? *Polish Journal of management studies*, 17(2), 211-223.
- [16] Imakwuchu, O., & Billy, I. (2018). Cross-Cultural Team Management. *The Business and Management Review*, 9(3), 575 -581.
- [17] Newton, P. (2015). Managing a project team. Free-management-eBooks. Retrieved from www.free-managemetn-ebooks.com
- [18] Albrecht, S., Breidahl, E., & Marty, A. (2018). Organizational resources, organizational engagement climate, and employee engagement. *Career Development International*, 23(1), 67-85.
- [19] Özer M., & Karabulut, A. (2019). The effects of team enablers and team cohesion on project team success. *International Journal of Commerce and Finance*, 5(1), 102-120.
- [20] Ongeti, W. J., & Machuki, V. N. (2018). Organizational Resources and Performance of. *European Scientific Journal*, 14(34). doi:10.19044/esj.2018.v14n34p91
- [21] Maina, D. K., & Njagi, E. (2019). Influence of organizational resources on implementation of strategic plans in private primary schools in Kirinyaga County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(8), 58-76. Retrieved from http://www.iajournals.org/articles/iajhrba_v3_i8_58_57.pdf
- [22] Mudany, J. O., Kemei, D., Awuor, E., & Ogutu, M. (2021). Moderating role of technology on the relationship between leadership and organizational performance. *African Journal of emerging issues*, 3(9), 70-86.
- [23] Njeri, D. N., & Were, S. (2019). Determinants of project performance in NGOs in Kenya: A case of Hand in Hand eastern Africa. *International Journal of Project Management*, 1(4), 61-79.
- [24] Xu, X., & He, X. (2018). Effect of team behavior and attitude on success of project. *international journal of project management*, 8(4), 41-52.
- [25] García-Sánchez, E., García-Morales, V. J., & Martín-Rojas, R. (2018). Influence of Technological Assets on Organizational Performance through Absorptive Capacity, Organizational Innovation and Internal Labor Flexibility. *Sustainability*, 10(770), 1-25. doi:10.3390/su10030770
- [26] Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. Los Angeles, Calif: SAGE. .
- [27] Russell, R. (2013). *Social research method: qualitative and quantitative approaches*. Los Angeles: SAGE Publications.
- [28] Mmbughu, A. E. (2015). Assessing the influence of ICT on project management team performance: A case of Tanzania federation of cooperative projects Dar es Salam. University of Tanzania, Dar es Salam.