

DESIGNING INTEGRATED PERFORMANCE MANAGEMENT SYSTEMS (IPMS) FOR FLEXIBLE ORGANIZATION DESIGN CONCEPT IN THE TELECOMMUNICATION COMPANY DIGITAL DIVISION

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Abstract

In the digital era, technology and innovation have become the new engines for many corporations to improve their business operations and deliver better customer experience. Telkom Group, as a National State-Owned Enterprise in Telecommunication, considered this momentum to transform their organization to become more agile for any digital adoption to serve their customer better. As stated in the vision to be the king of digital in the region (Asia-Pacific), Telkom obliges to move faster and compete with another telecommunication company in providing high-speed connectivity, creatively offer various digital product/service for both enterprise and retail consumer to achieve higher revenue growth. Therefore, Telkom started to transform their organization and introduce new strategic-business-unit (SBU) creation as digital product factory called 'Digital Division' (DD). As a publicly listed company, public investors expect PT. Telkom to maintain cash flow and continuously improve the financial growth of the annual profitability. On the other hand, as a State-Owned Enterprise (SOE) company, Telkom not only expected to grow financially but also invested to meet the unpredicted Indonesia government needs for both digital products/services development and telecommunication infrastructure deployment which could be a trade-off against annual financial performance. Ideally, to measure all stakeholders' needs achievement, Telkom is implementing the Balanced Scorecard (BSC) framework and designing DD as a pilot for agile & flexible organization in facing the high uncertainty in the digital business. Unfortunately, the BSC framework is only implemented fairly in corporate level and the performance measurement of each subunit in DD organization is harmonized/generalized (the final score is equalized). It indicates that Key Performance Indicator (KPI) from the head of division is not only cascaded & aligned improperly, but also potentially affect demotivation for most DD employees. Hence, to solve the business issue, Integrated Performance Management System (IPMS) framework introduced to define a better performance management system which aligns from corporate to divisional level. Our methodology is designing the performance management system (PMS) of Telkom starting with the iteration of vision-mission, core value, define the key metrics then cascading and aligning into each of sub-unit in DD using Integrated Performance Management System (IPMS) framework. In the result of the PMS design, the paper shows the possibility of non-financial indicator in business result perspective of PT. Telkom. Otherwise, the indicators are fully cascaded to follow the flexible organization concept in DD organization.

Keywords: Flexible Organization, Integrated Performance Management System, Telecommunication, Digital, Key Performance Indicator.

1. Background Formulation

The digital era is giving real influence, marked by the emergence of many innovations conducted by startups or enterprises to produce a variety of quality digital product solutions with the best customer experience (Telecom, 2018). One of the key success to deliver better customer experience is by keeping the focus on the continuous quality process improvement (Nader 2019). The continuous quality process improvement will be achieved through an agile organization, more innovative people, and improved technology. Those required better performance measurement systems to ensure people feel motivated to deliver based on their best capabilities to improve internal process and contribute to achieving organization result.

PT. Telkom Indonesia (Telkom) which is a parent of Telkom Group is a large national State-Owned Enterprise (SOE) in the telecommunication industry and is the biggest contributor to government revenue with a dividend amount of Rp16.23 Trillion in 2018 (BUMN 2019). As a big corporation, Telkom realized that the digital innovation momentum changed the business competitions landscape. It's not only other telecommunication company as their competitors, but also the global startup as Over The Top operator (OTT) which more agile to innovate and deliver more digital products and services and penetrate faster to Indonesia user. Therefore, Telkom takes this momentum and challenge to transform their organization become digital telecommunication company to be more flexible and agile for any digital adoptions to serve their customers better than impacting on their financial performance.

The digital telecommunication company is the future direction of Telkom which aligns with their current vision to be the King of Digital in the region (Asia-Pacific). Telkom obliges to move faster, compete with other global telecommunication company in providing high-speed connectivity, creatively offer various digital products/services for all Telkom Group customer segment to achieve higher revenue growth by increasing digital business revenue portion to replace the legacy revenue which has a declining phase in the product life cycle. Therefore, Telkom started to transform their organization and introduce new strategic-business-unit (SBU) creation as digital product factory called 'Digital Division' (DD).

Digital Division (DD) is a strategic-business-unit which under of Telkom Digital directorate. DD has a key role in digital product development, technology research, and big data analytics to deliver digital product portfolios, including digital enablement strategy whether digitalization or digitization and introduce the new ways of working (agile).

Agile (Flexible Organization)

An agile (flexible) organization is a term applied to organizations which are quick as a response to changes in the marketplace or environment. The agile organization concept is very suitable for companies who implement customer oriented business and required to adapt to rapid changes in industry. Agile terminology often associated with project management and also 'ways of working' in technology startup to support digital innovation.

For digital innovation, Telkom as a large firm, need to learn and start "thinking small" like small companies to get out from legacy inertia. Therefore, through the Digital Amoeba program which was then supported by new Digital HC policy and the DD definitive organization legality by Human Capital Department (HCD) in 2018, DD was created to be an agile organization Telkom to deliver digital innovation and solution within Telkom group.

In an agile organization matrix structure, there are two types of reporting lines: a capability line and a value-creation line. The tribe is a collection of squads within the business area, it's like an incubator for the mini startup. A chapter is a group or team members with the same capability,

or secondary home, it's like people who do similar work capability (designer, developer, or testing). While, a squad is an independent group which the members are built from different chapters, as a primary home, it's basically mini startup.

A highly agile organization uses advanced processes, tools, and training which enable successful reactions to the emergence of new competitors, rapid advancements in technology and sudden shifts in overall market conditions. They commonly thrive in non-hierarchical organizations without a single point of control.

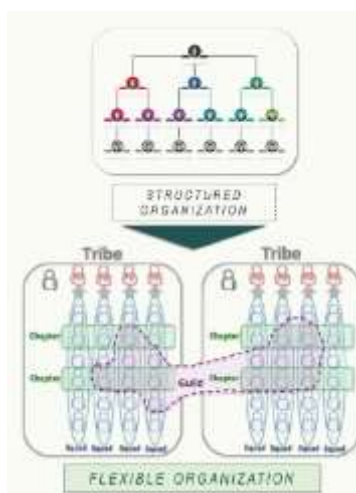


Figure 1: Flexible Organization Structure

2. Statement of Problem

As a public company, investors have become the main stakeholder in the organization beside other stakeholders: suppliers, customers, and government. Because Telkom is a SOE and public company, the government becomes the major investor for Telkom. Therefore, Telkom needs to ensure their health of their financial performance. The financial health indicator could be measured from the growth of the profitability variable which consist of revenue, EBITDA, and net income. To transform and become a digital telecommunication company is a part of Telkom strategy to encourage digital business performance. Digital business revenue growth expected to replace legacy revenue which have declining trend. Ideally, the digital business revenue portion growth in total revenue is increased more than the decreasing of legacy product revenue, so that the company could present the healthy financial performance from year to year to the investors.

However, the consolidated revenue performance is not matched with desired expectations. Telkom consolidated revenue is expected to have double digit growth (more than 10%) in the end of 2018, but in reality its just grow less than 2% or around 1.93% precisely. This growth is also the lowest growth of the last 5 years (see Figure 2).

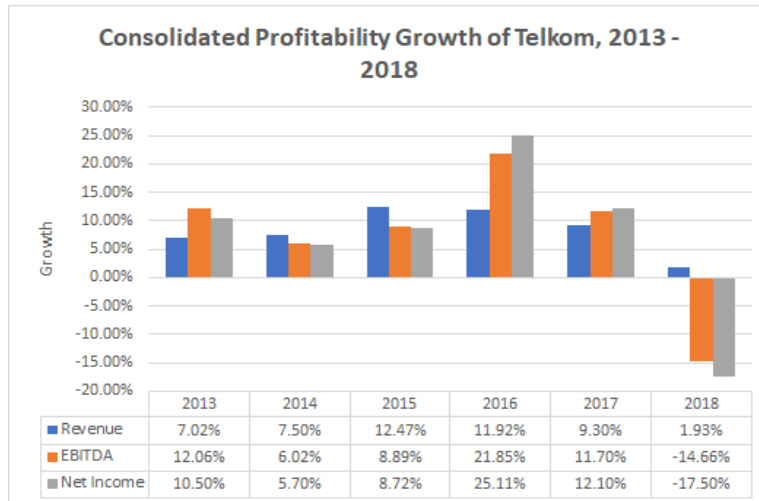


Figure 2: Consolidated Profitability Growth of Telkom from 2013 to 2018

Even though the revenue is growing slightly, it couldn't maintain the high increase of operating and capital expense, so that EBITDA and net income is crushed. It could be concluded that first, the increasing of digital business revenue can not resist the leakage of legacy product revenue. Secondly, the low return is not worth it with the high of the capital and operating expense. It indicates by the profitability ratio of Return on Invested Capital (ROIC) which is lower than the last 5 year. ROIC determines the efficiency of the total capital invested.

Beside the financial aspect, as an SOE company, Telkom not only expected to grow financially, but also invested to meet the unpredicted Indonesia government social mission in terms of supporting Indonesia digital economic growth for both digital ecosystem development and telecommunication infrastructure deployment which could be a trade-off against annual financial performance. On the other hand, current Telkom performance system can not fulfill the non-financial aspect related with investor in business result perspective.

Currently, Telkom implement Balanced Scorecard (BSC) as a framework to manage the corporate performance management and align the business-unit performance to achieve corporate business result. Ideally by implementing the performance framework, corporate is expected to trace the business indicators for both financial and operational until personal level to align with company business result, so that the company could make a business decision for the future. However, in the 2018 period, the BSC framework which implemented in each subunit in DD organization not working properly indicated by the performance of each subunit is harmonized/generalized (the final score is equalized).

Therefore, as a big SOE company, Telkom faced with the interrelated business result problems. The performance of DD organization which expected to perform their agility and flexibility to deliver quality in digital product & service couldn't measured properly based on Telkom existing performance management system, Balance Scorecard. The inaccuracies measurement of performance of DD organization as a main engine to the digital business revenue contribution growth, in conjunction with the slightly growth of consolidated revenue and decrease growth on net income in 2018 period. On the other hand, it maintains the government satisfaction as becoming one of not only financial but also non-financial business result objective as a SOE company.

3. Methodology

Based-on the statement of problem, the authors are determined to design new corporate performance management system as a solution to solve the problems above. By assessing the alternative performance management system frameworks, authors decide Integrated Performance Management System (IPMS) framework as a solution to design the performance management system.

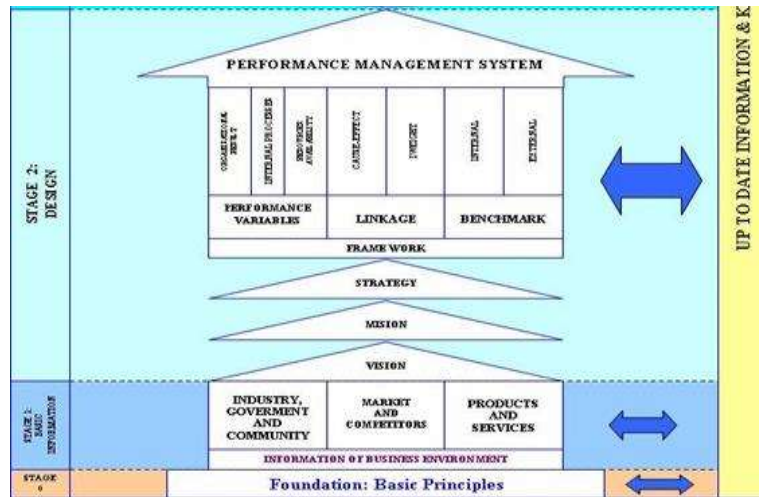


Figure 3: Design stage in IPMS framework

According to Figure 3, Integrated Performance Management System (IPMS) requires full picture-analysis from high level (vision, mission, corporate strategy, and strategic objective) to IPMS framework (organizational result, internal process, and resources-capabilities) as key success criteria then cascaded into relevant key performance indicators (KPI) including the calculation methodology.

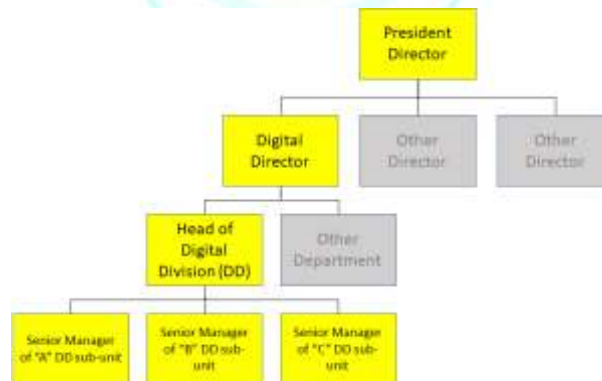


Figure 4: KPI Cascading Scope

The defined performance variable and key performance indicators (KPI) of the President Director of Telkom which representing the whole Telkom's performance then cascaded and aligned into the Digital Director's KPI accordance with digital business strategy and his responsibilities. Next, the KPI of the Digital Director cascade again relate with the digital service operation responsibilities in the leader of Digital Division. And last, all of the DD leader's KPIs are cascade to all of DD sub-units to represent the agile organization implementation measurement (see Figure 4). The authors proposed three cascaded KPI samples: Senior Manager of A" DD sub-unit as Chapter Lead (leading a group of people with same capability),

Senior Manager of B” DD sub-unit as Tribe Lead (leading a collection of squads within the business area to collaborate with Customer Facing Unit department) , and Senior Manager of C” DD sub-unit as unit responsible for digital ecosystem development in DD.

4. Analysis and Findings

Table 1 shows proposed performance variables and KPIs of Telkom’s President Director as a representative of the whole company performance. By implementing IPMS, authors could insert the major investor satisfaction index indicator in non-financial aspect as a business result perspective beside financial oriented aspect. The major investor satisfaction index is the proposed indicator to measure the level of investor satisfaction by using survey method. It is not available (N/A) in the existing Telkom’s balance scorecard. Therefore by IPMS, all activities in SBU which relate with fulfilment government aspiration could be aligned into the corporate level indicator.

Customer Experience (CX) variable is available in Telkom existing performance system, but it’s not measured in specific KPI. So that, the authors proposed the new rule of thumbs KPI to measure this variable: Customer Experience Maturity Index. The CX maturity index is a measurement of customer experience maturity for an enterprise by experienced assessor. Although there is a cost that must be prepared for assessment activity, the result will be worth for Telkom which visioned to be digital telco instead of only by NPS score measurement.

Considering Telkom’s mission to lead digital innovation and globalization, it is important for Telkom to measure the innovation success rate by percentage the digital innovation which make a positive impact to the digital business revenue. Target set 10% by referencing to the innovation project was failed around 60% to 90%.



Table 1: Proposed Performance Variables and KPI of Telkom's President Director using IPMS Framework

Variables	Indicators (KPI)	Target	References	2019 Result
Business Result				
Financial				
Profitability	(Rp) Revenue Consolidated	Double digit growth	Rule of thumbs	Available
Profitability	(Rp) EBITDA Consolidated	Double digit growth	Rule of thumbs	Available
Profitability	(Rp) Net Income Consolidated	Double digit growth	Rule of thumbs	Available
Digital Business Growth	Percentage (%) of Digital Business Revenue Portion from Total Revenue Consolidated	80%*	Internal Company	Available
Market Position	(Rank) Market Capitalization	Top 10 in APAC	Internal Company	Available
Non-Financial				
Investor Satisfaction Index	Major Investor Satisfaction Index	100%*	Wibisono	N/A
Customer Acquisition	(Ratio) Cost of Customer Acquisition (CAC)		Wibisono	Available
Customer Profitability	(Ratio) Average Revenue per User (ARPU per segment)	Rp	Best Practice	Available
Customer Experience	Customer Experience (CX) Maturity Index		Rule of thumbs	N/A
	Net Promoter Score (NPS)	75%*	Best Practice	Available
Internal Business Process				
Innovation				
Innovation Success Rate	Percentage (%) of digital innovation which makes a positive impact to the digital revenue	> 10%	Wibisono	N/A
Operation Process				
Account Receivables collectibility	The amount (Rp) of receivables obtained	100%	Internal Company	Available
Lean KPI	% Implementation of Lean KPI for each Directorate or Subsidiaries	100%	Internal Company	Available
	Percentage (%) of SOA Compliance	100%	Internal Company	Available
The Execution of Strategic Initiatives	Percentage (%) of the Strategic Initiatives achieved	100%	Internal Company; Wibisono	Available
Synergy	Synergy	100%	Internal Company	Available
Marketing				
Market Share	% of Market Share of Fixed portfolio product	100%	Wibisono	N/A

	% of Market Share of Mobile portfolio product	100%	Wibisono	N/A
	% of Market Share of Network Infrastructure	100%	Wibisono	N/A
	% of Market Share of Wholesale & International portfolio product	100%	Wibisono	N/A
	% of Market Share of ICT Platform as Enterprise Digital portfolio product	100%	Wibisono	N/A
	% of Market Share of Enabler Platform as Enterprise Digital portfolio product	100%	Wibisono	N/A
	% of Market Share of Digital Life & Smart Platform portfolio product	100%	Wibisono	N/A
After-sales				
Resolved Customer Complaint Handling	Percentage (%) of resolved customer complaint handling under SLA	100%	Wibisono	N/A
Resource Availability				
Human Resource				
Employee Engagement Index	Percentage (%) of employee who engaged to be committed and have high motivated	100%	Internal Company	Available
Technology Resource				
Agile Organization	Percentage (%) of agile organization concept implementation	100%	Best Practice	N/A
Organizational Resource				
Digital Capabilities Readiness	Digital Capabilities Readiness	100%	Internal Company	Available
Leadership Effectiveness	Leadership Effectiveness Index		Wibisono	N/A

**dummy data*

The resolved customer complaint variable indicated by percentage of resolved customer complaint handling under Service Level Assurance (SLA) become important after-sales aspect which have direct impact on customer experience. The experience is the relationship between the provider of the goods and services and the customer (Seligman 2012). After-sales care and follow up is a part stage in customer journey.

IPMS allows the corporate to measure the technology resource aspect as resource availability perspective. In addition to hardware, technology resource also intended to manage software and management system implemented by the company (Wibisono, 2012). The agile organization concept is a part of the implementation of the advance contextual method which relate with the technology resource definition. Therefore, the authors set the agile organization as a measurement variable by calculate the percentage of agile organization concept implementation as a KPI.

Table 2 shows the cascaded performance variables and KPIs from the President Director to Digital Director. The showed cascaded KPIs is only for the KPI which is not available in the existing Telkom's performance system.

Table 2: Cascaded Performance Variables and KPI to Telkom Digital Director and Head of Digital Division (proposed KPIs)

Variables	KPIs		
	President Director	Digital Director	Head of Digital Division
Investor Satisfaction Index	Major Investor Satisfaction Index	Major Investor Satisfaction Index Target Achievement	% achievement of digital product development from government aspirations
Customer Experience	Customer Experience (CX) Maturity Index	Customer Experience (CX) Maturity Index	Customer Experience (CX) Maturity Index
Innovation Success Rate	Percentage (%) of digital innovation which makes a positive impact to the digital revenue	Number of new selected digital product concepts	Number of selected Ideas from Digital Division
		Percentage (%) of Market Validated Products from Digital Innovation framework	Percentage (%) of Market Validated Products from Digital Innovation framework
Market Share	% of Market Share of Fixed portfolio product	% of Market Share of ICT Platform as Enterprise Digital portfolio product	% of Market Share of ICT Platform as Enterprise Digital portfolio product
	% of Market Share of Mobile portfolio product	% of Market Share of Enabler Platform as Enterprise Digital portfolio product	% of Market Share of Enabler Platform as Enterprise Digital portfolio product
	% of Market Share of Network Infrastructure portfolio product	% of Market Share of Digital Life & Smart Platform portfolio product	% of Market Share of Digital Life & Smart Platform portfolio product
	% of Market Share of Wholesale & International portfolio product		
	% of Market Share of ICT Platform as Enterprise Digital portfolio product		
	% of Market Share of Enabler Platform as Enterprise Digital portfolio product		
	% of Market Share of Digital Life & Smart Platform portfolio product		

Resolved Customer Complaint Handling	Percentage of resolved customer complaint handling under SLA	Resolved complaint handling under SLA for Digital Product Portfolio	Resolved complaint handling under SLA for Digital Product Portfolio
Agile Organization	Percentage (%) of agile organization concept implementation	Percentage (%) of agile methodology implementation	Number of Project worked by Agile Team
Leadership Effectiveness	Leadership Effectiveness Index	Leadership Effectiveness Index in Digital directorate	Leadership Effectiveness Index in Digital Division

As part of KPI cascading, there are three cascaded KPI samples for three functional unit (sub-unit) types under DD as representative of flexible organization concept. Chapter Lead, as person responsible for team who have the same technical capabilities, such as Senior Manager (SM) Designer Management, SM Developer Management, SM Data Scientist Management; Tribe Lead who manage collection of squads (mini-startup), such as General Manager (GM) Enterprise & Wholesale Tribe Management, GM Personal & Consumer Tribe Management, and GM Business & Government Tribe Management; and Digital Ecosystem Lead such as SM Open Innovation Management, Group of Digital Pillars, and SM Platform Big Data. Those three have different resource capabilities, service offering/internal process measurement, and expected outcomes as contribution for business result. As a new organization which segregate capabilities and internal process, there are some new proposed KPIs to make performance management system measured fairly to keep each of sub-unit highly motivated and get right performance evaluation.

For Chapter Lead, the authors create a proposed KPI sample for SM Designer Management. Keyword of performance measurement system for technical Team Lead is 'measured by level of expertise and its contribution to innovation development and digital business scalability.

Table 3: Cascaded Performance Variables and KPI to each Sub-units under Digital Division

Variables	Head of Digital Division	Senior Manager of "Tribe A" Sub-Unit	Senior Manager of "Chapter B" Sub-Unit	Senior Manager of "Ecosystem C" Sub-Unit
Investor Satisfaction Index	% achievement of digital product development from government aspirations	Percentage (%) of digital product quality achievement in accordance with business aspect aspiration	Percentage (%) of digital product quality achievement in accordance with technical aspect aspiration	Percentage (%) of digital product adoption achievement in accordance with ecosystem aspect aspiration
Customer Experience	Customer Experience (CX) Maturity Index	NPS Score of digital product	Customer Experience (CX) Maturity Index	Customer Experience (CX) Maturity Index
Innovation Success Rate	Number of selected Ideas from Digital Division	Number of Idea submission	Number of Idea submission	Number of Idea submission
	Percentage (%) of Market Validated Products from	Number of market validated digital product incubation	Percentage (%) of shared service	Percentage (%) of Market validated digital product in

	Digital Innovation framework	relate with Tribe "A"	achievement	the innovation squads
		Percentage (%) of digital innovation implemented as initiative for CFU	Number of Design Use Case developed as idea to Proof of Concept (POC) implementation	
Market Share	% of Market Share of ICT Platform as Enterprise Digital portfolio product target achievement	% Pre Sales and Go-to-Market Service successfully agreed, implemented, and launch in Enterprise CFU product		
	% of Market Share of Enabler Platform as Enterprise Digital portfolio product target achievement			
	% of Market Share of Digital Life & Smart Platform portfolio product target achievement	% Pre Sales and Go-to-Market Service successfully agreed, implemented, and launch in relate CFU product		
Resolved Customer Complaint Handling	Resolved complaint handling under SLA for Digital Product Portfolio			
Agile Organization	Number of Project worked by Agile Team	Number of Digital Capabilities training/discussion conducted related Tribe "A" including training effectiveness (topic/capabilities relevancy, attendance, training output implementation)	Number of Digital Capabilities training/discussion conducted related Chapter B product including training effectiveness (topic/capabilities relevancy, attendance, training output implementation)	Percentage (%) of agile project methodology implementation (including its involvement)
Leadership Effectiveness	Leadership Effectiveness Index in Digital Division	Leadership Effectiveness Index in Tribe "A"	Leadership Effectiveness Index in Chapter "B"	Leadership Effectiveness Index in "Managing Squad"

For Tribe Lead, the authors create a proposed KPI sample for GM Enterprise and Wholesale Tribe Management . Keyword of performance measurement system for Tribe Lead is 'measured

by capability to define, propose, and prepare digital product go-to-market strategy together with CFU, including its monitoring and being digital knowledgeable person to offer digital product/feature to CFU.

For Digital Ecosystem Lead, the authors create a proposed KPI sample for SM Platform Big Date. The main responsibility of Digital Ecosystem Lead is develop good ecosystem for both Tribe/Chapter Lead to collaborate in internal DD or with CFU. Keyword of performance measurement system. Keywords of performance measurement system for Digital Ecosystem Lead are mainly on Internal Process (service offering) as functional support for internal digital team and Telkom.

Conclusion

In the digital era, performance management system plays a crucial role as part of organization transformation to flexible organization (tribe-chapter), because people are expected to keep their pace with fast technology development and new encouragement for talent to learn, grow, and contribute is required to make sure everyone is highly motivated to deliver based on capabilities. Telkom is a big company which implement flexible organization in Digital Division, and Balanced Scorecard as their current performance management system is not designed as a proper performance management system from Management to Senior/General Managers because performance cumulative score is generalized.

Integrated Performance Management System (IPMS) introduced to design new performance management system from vision-mission-strategy iteration to KPI cascading. There are several new KPIs proposed for non-financial indicator (Major Investor Satisfaction Index) in Business Result considering Telkom status as National SME, and additional KPIs in Internal Process and Capabilities. There are three types of KPI cascading to division for Tribe, Chapter, and Digital Ecosystem Lead. For Digital Division, financial indicator is not only main business result, but non-financial such as Major Investor satisfaction index added into new performance management system. Internal Process and Resource Capabilities become more important to measure service offering quantity and quality and also innovation success rate. For capabilities, agile methodology and training effectiveness is obligatory to measure as KPI. At the end, all elements in IPMS are critical as a chain to ensure Digital Division is not only Digital Innovation Research and Development (R&D team), but have great ecosystem to learn as expert (chapter) and work together to deliver innovation as use case implementation and value added for existing product (tribe).

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