

SUMMARY

Product Development Design for Heart Centre Unit Establishment With Feasibility Study Analysis for Facing Up Business Competition at Premier Surabaya Hospital

According to the 2013 Basic Health Research (Riskesdas), East Java Province ranks on the first position for patients with heart failure, and second in coronary heart disease in Indonesia. This is not balanced by the number of hospitals that have a complete integrated cardiac service with a focus on service and competitive advantage in the field of heart. Dr. Soetomo teaching hospital is the only General Hospital with Integrated Heart Services in East Java Province. Also in this era of increasingly fierce competition, hospitals need to focus on their competitive advantage. A hospital that has no competitive advantage will be left behind by other hospitals. The lack of hospitals that have comprehensive and integrated cardiac services with a focus on services and competitive advantages in the field of heart is an opportunity for the development of hospital products in this case the establishment of the Heart Center Unit in East Java Province. With that in mind, Premier Surabaya Hospital will develop a product (Product Development) that is an establishment of the Heart Center Unit as a strategy to face business competition.

A thorough analysis is needed to carry out the establishment of product development of the Heart Center Unit at Premier Surabaya Hospital on all matters related by conducting a feasibility study. This research collaborates between product development theory with applied science of feasibility studies. The product development theory used is the product development theory (Product Development) from Philip Kotler & Kevin L. Keller on his book Marketing Management 14th Edition. Whereas the hospital feasibility study uses the literature review from Permenkes No. 56 of 2014 concerning Hospital Classification and Licensing.

This research is observational research with a form of product development design by conducting a feasibility study. This research is descriptive, because there is no treatment on the sample, the research design is cross sectional. The final results of the study are recommendations for the level of eligibility and grand design of the Heart Center Unit at Premier Surabaya Hospital. In this study a Health Need and Demand survey was conducted, as well as an Ability to Pay and Willingness to Pay survey of cardiovascular health services in the city of Surabaya and external customers (patients) at Premier Surabaya Hospital. The population in the Surabaya City community survey was 2,266,847 people, using the Slovin formula, so the sample needed to survey the Surabaya City community was 400 respondents. The calculation of the total sample of inpatient survey patients with cardiovascular disease in Premier Surabaya Hospital using 2018 inpatient data was 150 respondents.

Product concept development is the third stage of product development. The concept of developing the Heart Center Unit at the Premier Surabaya Hospital

is taken from the concept of the Harapan Kita Heart and Blood Vessel Hospital (RSJPDHK) service product, the Comprehensive Cardiac Center Certification Program from Joint Commission International and the Cardiovascular Center of Excellence Accreditation which is a program of the American Heart Association (AHA) and the American College of Cardiology.

Several analyzes were conducted in the research of the Heart Center Unit at the Premier Surabaya Hospital in accordance with the rules for the preparation of a feasibility study based on Permenkes No. 56 of 2014. A feasibility analysis of the service needs of the Heart Center Unit, a feasibility analysis of land and building needs, facilities and infrastructure, equipment, and human resources for the Heart Center Unit; a feasibility analysis of the funding capability of the Heart Center Unit. The analysis of the feasibility study resulted in a recommendation that the establishment of the Heart Center Unit at the Premier Surabaya Hospital is worth. In the financial analysis, the NPV results are (+) Rp 82.591.497.560,03 and IRR is 46.18%, with payback period for 17 months.

After obtaining the results of a worth recommendation for the establishment of the Heart Center Unit, the next stage of product development is to compile the Grand Design Unit of the Heart Center of the Premier Surabaya Hospital. The Heart Center Unit's grand design was produced from an analysis of the Feasibility study and the results of Premier Surabaya Hospital management Focus Group Discussion (FGD). The Heart Center Unit's Grand Design includes: the organizational structure, services flow, products, land and building design (plan), the design of facilities and infrastructure, the design of the equipment and the design of the number of HR and HR qualification Unit Heart Center Hospital Premier Surabaya.

Conclusion: The results of the Feasibility Study show that the establishment of the Heart Center Unit from various aspects is feasible. The Heart Center Unit's grand design compiled from various analyzes and the results of Focus Group Discussions (FGD) with the management of Premier Surabaya Hospital is displayed in the Grand Design Document for the Establishment of the Heart Center Unit for the Premier Surabaya Hospital.

RINGKASAN

Rancangan *Product Development* Pendirian Unit *Heart Centre* dengan Analisis *Feasibility Study* untuk Menghadapi Persaingan Bisnis di Rumah Sakit Premier Surabaya

Menurut Riset Kesehatan Dasar (Riskesdas) tahun 2013, Provinsi Jawa Timur berada pada rentang peringkat pertama untuk pasien dengan penyakit gagal jantung, serta peringkat kedua untuk penyakit jantung koroner di Indonesia. Hal ini ternyata belum diimbangi dengan jumlah rumah sakit yang memiliki Pelayanan Jantung Terpadu yang lengkap dengan fokus pelayanan dan keunggulan kompetitif di bidang jantung. RSUP dr. Soetomo adalah satu-satunya Rumah Sakit Umum dengan Pelayanan Jantung Terpadu di Provinsi Jawa Timur. Selain itu di era persaingan yang semakin ketat ini, rumah sakit perlu memusatkan perhatian pada keunggulan kompetitifnya. Sebuah rumah sakit yang tidak memiliki keunggulan kompetitif, maka rumah sakit tersebut akan tertinggal dengan rumah sakit lainnya. Masih minimnya rumah sakit yang memiliki pelayanan bidang jantung secara komprehensif dan terpadu dengan fokus pelayanan dan keunggulan kompetitif di bidang jantung, adalah peluang untuk pengembangan produk rumah sakit dalam hal ini pendirian Unit *Heart Centre* di Provinsi Jawa Timur. Dengan melihat hal tersebut diatas, RS Premier Surabaya akan melakukan pengembangan produk (*Product Development*) pendirian Unit *Heart Centre* sebagai strategi menghadapi persaingan bisnis.

Untuk melakukan pengembangan produk (*Product Development*) pendirian Unit *Heart Centre* di RS Premier Surabaya, diperlukan analisis yang menyeluruh terhadap seluruh hal yang terkait, dengan melakukan studi kelayakan atau yang disebut dengan *Feasibility Study*. Penelitian ini mengkolaborasikan antara teori pengembangan produk (*Product Development*) dengan ilmu terapan studi kelayakan (*Feasibility Study*). Teori pengembangan produk yang digunakan adalah teori pengembangan produk (*Product Development*) dari Philip Kotler & Kevin L. Keller dalam bukunya *Marketing Management 14th Edition*. Sedangkan kaidah studi kelayakan (*Feasibility Study*) rumah sakit, menggunakan tinjauan pustaka dari Permenkes No 56 Tahun 2014 tentang Klasifikasi dan Perizinan Rumah Sakit.

Jenis penelitian ini adalah penelitian observasional, dengan bentuk rancangan pengembangan produk (*Product development*) dengan melakukan studi kelayakan (*Feasibility study*). Penelitian ini bersifat deskriptif, karena tidak ada perlakuan pada sampel, dengan rancang bangun penelitian adalah *cross sectional*. Hasil akhir dari penelitian adalah rekomendasi tingkat kelayakan serta *grand design* dari Unit *Heart Centre* di RS Premier Surabaya. Pada penelitian ini dilakukan survei *Health Need and Demand*, serta survei *Ability to Pay* dan *Willingness to Pay* terhadap pelayanan kesehatan kardiovaskular pada masyarakat Kota Surabaya dan pelanggan eksternal (pasien) di RS Premier Surabaya. Populasi pada survei masyarakat Kota Surabaya ini adalah sebesar 2.266.847 orang, dengan memakai rumus Slovin, maka sampel yang dibutuhkan untuk survei pada masyarakat Kota Surabaya adalah sebesar 400 responden. Perhitungan

jumlah sampel survei pasien rawat inap dengan penyakit kardiovaskular di RS Premier Surabaya memakai data pasien rawat inap tahun 2018 adalah sebesar 150 responden.

Pengembangan konsep produk adalah tahapan pengembangan produk (*Product development*) yang ketiga. Konsep pengembangan Unit *Heart Centre* di RS Premier Surabaya diambil dari konsep produk layanan Rumah Sakit Jantung dan Pembuluh Darah Harapan Kita (RSJPDHK), *Comprehensive Cardiac Center Certification Program* dari JCI, serta *Cardiovascular Center of Excellence Accrediation* yang merupakan program dari *American Heart Association* (AHA) dan *American College of Cardiology*.

Pada penelitian Unit *Heart Centre* di RS Premier Surabaya ini dilakukan beberapa analisis sesuai dengan kaidah penyusunan studi kelayakan pada Permenkes No. 56 Tahun 2014, sebagai berikut: analisis kelayakan kebutuhan pelayanan Unit *Heart Centre*; analisis kelayakan kebutuhan lahan dan bangunan, sarana dan prasarana, peralatan, dan sumber daya manusia (SDM) Unit *Heart Centre*; analisis kelayakan kemampuan pendanaan/pembiayaan Unit *Heart Centre*. Dari analisis studi kelayakan (*Feasibility study*) menghasilkan rekomendasi bahwa pendirian Unit *Heart Centre* di RS Premier Surabaya adalah layak. Pada analisis finansial didapatkan hasil NPV adalah sebesar (+) Rp 82.591.497.560,03 dan nilai IRR sebesar 46,18%, dengan *payback period* 17 bulan.

Setelah didapatkan hasil rekomendasi layak untuk pendirian Unit *Heart Centre*, maka tahap dari pengembangan produk (*Product development*) selanjutnya adalah menyusun *Grand design* Unit *Heart Centre* RS Premier Surabaya. *Grand design* Unit *Heart Centre* ini dihasilkan dari analisis *Feasibility study* serta hasil *Focus Group Discussion* (FGD). *Grand design* Unit *Heart Centre* ini meliputi: struktur organisasi, alur pelayanan, produk dan tarif layanan, rancangan lahan dan bangunan (denah), rancangan sarana dan prasarana, rancangan peralatan, rancangan jumlah dan kualifikasi SDM Unit *Heart Centre* RS Premier Surabaya.

Kesimpulan: Hasil analisis studi kelayakan (*Feasibility study*) menunjukkan pendirian Unit *Heart Centre* dari berbagai aspek adalah layak. *Grand design* Unit *Heart Centre* yang disusun dari berbagai analisis dan hasil *Focus Group Discussion* (FGD) dengan manajemen RS Premier Surabaya ditampilkan dalam Dokumen *Grand Design* Pendirian Unit *Heart Centre* RS Premier Surabaya.

ABSTRACT

**Product Development Design for Heart Centre Unit Establishment
With Feasibility Study Analysis for Facing Up Business Competition
at Premier Surabaya Hospital**

Premier Surabaya Hospital will develop a product (Product Development) establishment of the Heart Centre Unit to compensate for the increasing number of patients with cardiovascular disease and also as a strategy to face business competition. This research collaborates between product development theory with applied science of feasibility studies. The purpose of this study is to develop a product development design for the establishment of the Heart Center Unit at Premier Surabaya Hospital by conducting a Feasibility study as a strategy to face business competition.

This research is observational research with a form of product development design by conducting a feasibility study. This research is descriptive because there is no treatment on the sample, the research design is cross sectional. A survey of Health Need and Demand was conducted as well as a survey of Ability to Pay and Willingness to Pay on cardiovascular health services in Surabaya and external customers (patients) at Premier Surabaya Hospital.

Analysis of the Feasibility study from the aspects of the service needs of the Heart Center Unit, aspects of building land requirements, facilities and infrastructure, equipment, and human resources of the Heart Center Unit, as well as aspects of the funding / funding capability for the establishment of the Heart Center Unit resulted in recommendations that the establishment of the Heart Unit Center at Premier Surabaya Hospital is feasible. In the financial analysis, the NPV results are (+) Rp 82.591.497.560,03 and IRR is 46.18%, with payback period for 17 months.

After obtaining the results of the worth recommendation for the establishment of a Heart Centre Unit, the next stage of product development is to compile the Grand Design Unit of the Heart Centre of the Premier Surabaya Hospital which includes: organizational structure, service products, land and building design, facility and infrastructure design, equipment design, design the number of HR and HR qualifications in the Heart Center Unit of Premier Surabaya Hospital. Marketing strategy is also an important thing to do to be able to increase the number of patients who receive care at the Heart Center Unit at Premier Surabaya Hospital.

Conclusion: The results of the Feasibility Study show that the establishment of the Heart Center Unit from various aspects is feasible. The Heart Center Unit's grand design compiled from various analyzes and the results of Focus Group Discussions (FGD) with the management of Premier Surabaya Hospital is displayed in the Grand Design Document for the Establishment of the Heart Center Unit for the Premier Surabaya Hospital.

Keywords: Product development, Heart Centre Unit, Feasibility study.

ABSTRAK

**Rancangan *Product Development* Pendirian Unit *Heart Centre*
dengan Analisis *Feasibility Study* untuk Menghadapi Persaingan Bisnis
di Rumah Sakit Premier Surabaya**

RS Premier Surabaya akan melakukan pengembangan produk (*Product Development*) pendirian Unit *Heart Centre* untuk mengimbangi semakin tingginya jumlah pasien dengan penyakit kardiovaskular dan juga sebagai strategi menghadapi persaingan bisnis. Tujuan dari penelitian ini untuk menyusun rancangan pengembangan produk (*Product Development*) pendirian Unit *Heart Centre* di RS Premier Surabaya dengan melakukan analisis studi kelayakan (*Feasibility study*) sebagai strategi menghadapi persaingan bisnis.

Jenis penelitian ini adalah penelitian observasional *product development* dengan studi kelayakan (*Feasibility study*). Penelitian ini bersifat deskriptif, karena tidak ada perlakuan pada sampel, dengan rancang bangun penelitian adalah *cross sectional*. Pada penelitian ini dilakukan pula survei *Health Need and Demand*, serta survei *Ability to Pay* dan *Willingness to Pay* terhadap pelayanan kesehatan kardiovaskular pada masyarakat Kota Surabaya dan pelanggan eksternal (pasien) di RS Premier Surabaya.

Analisis studi kelayakan (*Feasibility study*) dari aspek kebutuhan pelayanan Unit *Heart Centre*, aspek kebutuhan lahan bangunan, sarana dan prasarana, peralatan, dan sumber daya manusia Unit *Heart Centre*, serta aspek kemampuan pendanaan/pembiayaan pendirian Unit *Heart Centre* menghasilkan rekomendasi bahwa pendirian Unit *Heart Centre* di RS Premier Surabaya adalah layak. Pada analisis finansial didapatkan hasil NPV sebesar (+) Rp 82.591.497.560,03 dan nilai IRR sebesar 46,18%, dengan *payback period* 17 bulan.

Setelah didapatkan hasil rekomendasi layak untuk pendirian Unit *Heart Centre*, maka tahap dari pengembangan produk (*product development*) selanjutnya adalah menyusun *grand design* Unit *Heart Centre* RS Premier Surabaya yang meliputi: struktur organisasi, alur pelayanan, produk dan tarif layanan, rancangan lahan dan bangunan, rancangan sarana dan prasarana, rancangan peralatan, rancangan jumlah dan kualifikasi SDM di Unit *Heart Centre* RS Premier Surabaya.

Kesimpulan: Hasil analisis studi kelayakan (*Feasibility study*) menunjukkan pendirian Unit *Heart Centre* dari berbagai aspek adalah layak. *Grand design* Unit *Heart Centre* yang disusun dari berbagai analisis dan hasil *Focus Group Discussion* (FGD) dengan manajemen RS Premier Surabaya ditampilkan dalam Dokumen *Grand Design* Pendirian Unit *Heart Centre* RS Premier Surabaya.

Kata kunci: Product development, Unit Heart Centre, Feasibility study.