

論文 / 著書情報  
Article / Book Information

Title	How can IR Support the Management of Japanese National Universities on the Mid-Term Plan Related to Globalization?
Authors	Tetsuya Oishi, Eiichi Takata, Noriko Kuwano, Takahiro Seki, Masao Mori, Masashi Sekiguchi
Citation	Proceedings of The 17th Annual SEAAIR Conference, pp. 303-309
Pub. date	2017, 9

## How can IR Support the Management of Japanese National Universities on the Mid-Term Plan Related to Globalization?

Tetsuya Oishi<sup>1</sup>, Eiichi Takata<sup>2</sup>, Noriko Kuwano<sup>3</sup>, Takahiro Seki<sup>4</sup>, Masao Mori<sup>5</sup>, and Masashi Sekiguchi<sup>6</sup>

<sup>1</sup>*Tokyo Institute of Technology, Japan (oishi@irds.titech.ac.jp)*

<sup>2</sup>*Kobe University, Japan (etakata@people.kobe-u.ac.jp)*

<sup>3</sup>*Kyushu University, Japan (kuwano@ir.kyushu-u.ac.jp)*

<sup>4</sup>*Niigata University, Japan (tseki@adm.niigata-u.ac.jp)*

<sup>5</sup>*Tokyo Institute of Technology, Japan (mori@irds.titech.ac.jp)*

<sup>6</sup>*Kyushu University, Japan (masashis@law.kyushu-u.ac.jp)*

### Abstract

Japanese national universities should promote their globalization plans. However, there are some unsuitable management plans. While institutional research (IR for short) is expected to help in drawing mid-term plans up, there are no methods to contribute it by IR at present. The mid-term plans are drawn up by Japanese national university corporation in order to achieve their mid-term objectives. 56 mid-term plans are related to globalization among the plans drawn up by the universities adopted in Top Global University Project in Japan. We will analyze these plans based on formally and virtually criteria. Some plans don't have essential elements: inputs, activities, outputs, and outcomes. For these plans, IR can show some processes based on data in order to draw mid-term plans up based on logic model. IR can also show data which can indicate present conditions for inputs, can realize objectives for activities and outputs, and can predict future conditions for outcomes. On the other hand, there are plans which have no or unsuitable numeric targets. The plans with no numeric targets are basically unsuitable for plans of action. The other plans with unsuitable numeric targets may be unachievable. As a result, such university will suffer a loss. IR should provide the executive with numeric data which can show present and future circumstances. Especially, it is very important to maintain the systems for sharing inter-university data in order to collect the data outside the university and compare one another. In this research, we will not only clarify the problems of the management plans but also study how IR can support these plans concretely.

### Keywords

Institutional Research, Japanese National University, Mid-Term Plan, Globalization

### 1. Introduction

In recent years, Japanese national universities have to promote their globalization plans to correspond to the world that is developing the internationalization rapidly. In the severe situation of management resources, these universities should draw up appropriate plans of action and accomplish them efficiently and effectively. However, there are several inappropriate plans among the management plans drawn up by Japanese national universities.

IR is expected to support the management decisions which are based on various data. Unfortunately, for the present, no ways to support them by IR are established in Japan. We will not only clarify the problems with the management plans drawn up by Japanese national universities but also study the ways to supports the plans which have something problematic.

### 2. Methodology

In this paper, we promoted our study by observing following methods.

The 17th Annual SEAIR Conference 6 – 8 September 2017 PSB Academy, Singapore

## 2-1. Analysis of Problems of Mid-term Plans

### 2-1-1. Targets

In Japan, 11 national universities were adopted as the Top Global University by The Ministry of Education of Japan. We analyzed 56 mid-term plans (Mid-term Plan, 2015) which were drawn up by these 11 universities. These mid-term plans were also related to globalization.

The mid-term plans are drawn up by Japanese national university corporation in order to achieve their mid-term objectives in 6 years. All Japanese national universities have to achieve the mid-term objectives which they drew up. These objectives are concerned with business operations. These mid-term plans have to be evaluated every 6 years. If these plans are not achieved, the university may suffer disadvantage because the result of the evaluation are reflected on its budget.

### 2-1-2. Viewpoints

#### 2-1-2-1. Components of Plans

We confirm whether all mid-term plans have essential components. There are some ways to establish components of logic models. We divide all mid-term plans into (1) *inputs*, (2) *activities*, (3) *outputs*, and (4) *outcomes* based on (Sakano, 2012). The difference between outputs and outcomes is not defined clearly. In this paper, we follow the definition described in (Sakano, 2012). He explained as follows: “Outcomes mean the goals which are set what and how the targets will change. Activities provides various services for the targets to occur such changes. There are many cases that outputs are the targets who were provided the services as a result of activities.” We give a plan “Improvement of English ability by increasing of class subjects” as an example. In this plan, increasing of class subjects is the activity, the number of students attending these classes is the output, and improvement of English ability is the outcome.

#### 2-1-2-2. Appropriateness of Contents of Components

Next, we confirm whether the contents of the components are appropriate substantially. Especially, *the numeric targets are important to achieve the plans efficiently and effectively*. So, we confirm whether the numeric targets exist.

Table 1: Situation of Each Component Based on Logic Model

		value	rate
Number of mid-term plans related to globalization		56	100.0%(56/56)
(1) Inputs	Number of mid-term plans with Inputs	0	0.0%(0/56)
	(Including numeric targets)	-	-
(2) Activities	Number of mid-term plans with Activities	54	96.4%(54/56)
	(Including numeric targets)	10	18.5%(10/54)
(3) Outputs	Number of mid-term plans with Outputs	4	7.1%(4/56)
	(Including numeric targets)	4	100.0%(4/4)
(4) Outcomes	Number of mid-term plans with Outcomes	22	39.3%(22/56)
	(Including numeric targets)	17	77.3%(17/22)

## 2-2. Way of Support Problems of Mid-term Plans by IR

We study the ways to support the problems of the mid-term plans, which are clarified in Section 2-1, by IR.

### **3. Analysis of Problems of Mid-term Plans**

In Table 1, we show how the mid-term plans, which are related to globalization, contains the components based on the logic model. In the following parts, we analyze each component.

#### **3-1. Inputs**

##### **3-1-1. Situation**

There were no mid-term plans which contains input components. The inputs show the resources invested for putting the plans into practice. Then we have to understand, analyze, and allocate these resources for carrying out the plans effectively and efficiently.

Especially, the mid-term plans, which are related to globalization, influence not only the resources to own university but also domestic and foreign situations. It is very important to understand and analyze the data of own university, other domestic universities, and foreign universities, but it is also very difficult. What there are no mid-term plans which contains input components means that various data are not understood and not analyzed in all universities.

Needless to say, it is not necessary to describe all the inputs in detail in the statement of mid-term plans. However, the policy of university resource allocation is unknown for the outside in the situation that there are no inputs in the mid-term plans. Moreover, a shared awareness is lacking. From the point of view of an accountability for the world, it is very problematic though the universities are taken notice by the world.

#### **3-2. Activities**

##### **3-2-1. Situation**

Activities are appeared in 54 mid-term plans which is 96.4% of 56 mid-term plans. The mid-term plan is a plan for action. Then, it is necessary of establishing the activities “which provide various services for the targets to occur such changes”.

There are a few mid-term plans which are not appeared activities. For example, there is a mid-term plan “we increase the faculty who had schooling and researching history abroad up to x % of all faculty so as to respond the development of globalization”. This plan is inappropriate as a plan of action because it does not become a specific guide for activities.

##### **3-2-2. Appropriateness of Numeric Targets**

There are 10 mid-term plans which have numeric targets. This is 18.5% of 54 mid-term plans which activities are appeared. If the mid-term plans with impossible numeric targets were drawn up, these plans will be evaluated as “not achieved” and disadvantaged. Therefore, many mid-term plans seem to have no numeric targets.

For example, there are the mid-term plans with numeric targets for course establishment and overseas bases establishment. The examples of the former are “we expand the rate of international course establishment to 75 %”, “we have 500 classes using foreign languages”, and “we expand the rate of classes using English to 54.0% until 2021”. The examples of the latter are “we establish more than 7 foreign offices as the bases of our university until 2021”, “we establish more than 5 new global station”, and “we establish more than 20 alumni associations for foreign students”. These mid-term plans are achievable in own university and not related to foreign countries or foreign universities though these plans are related to globalization. Therefore, it is not clear whether these plans enable to achieve final outcomes. Such mid-term plans were drawn up because it seemed difficult to analyze the data from the other universities or the other countries.

### **3-3. Outputs**

#### **3-3-1. Situation**

Outputs are appeared in 4 mid-term plans which is 7.1% of 56 mid-term plans. Outputs are “the targets who were provided the services as a result of activities”. It should be easy to appear the outputs in the mid-term plans because the outputs are the effects of activities. However, the number of mid-term plans with outputs were small because the process which is based on logic mode was seemed not to be recognized enough.

#### **3-3-2. Appropriateness of Numeric Targets**

All 4 mid-term plans which outputs are appeared have numeric targets. For example, there are the mid-term plans with numeric targets for the conclusion of academic exchange agreement and the student attending classes. The examples of the former are “we conclude the campus-in-campus agreements with 10 partner universities until 2021”, “we conclude the whole university agreements with more than 80 foreign universities”, and “we conclude 120 academic exchange agreements”. The example of the former is “we make 5 students take the course every year”.

### **3-4. Outcomes**

#### **3-4-1. Situation**

Outcomes are appeared in 22 mid-term plans which is 39.3% of 56 mid-term plans. Outcomes mean “the goals which are set what and how the targets will change”. They are real purposes of mid-term plans. The Ministry of Education of Japan demands all universities to include numeric targets into mid-term plans. Also, when public offering of Top Global University Project in Japan, the application documents had to include numeric targets.

#### **3-4-2. Appropriateness of Numeric Targets**

##### **3-4-2-1. Situation of Appropriateness of Numeric Targets**

There are 17 mid-term plans which have numeric targets. This is 77.3% of 22 mid-term plans which outcomes are appeared.

For example, there are the mid-term plans with numeric targets for increasing foreign faculty, students from overseas, and students studying abroad. The examples of the former are “we increase the foreign faculty up to about 400” and “we increase faculty who are from foreign countries or have schooling and researching history abroad up to 47 %”. The examples of the latter are “we make the number of students from overseas more than 2,200 every year”, “we make the rate of the students from overseas for graduate students up to 22.0% until 2021”, and “we make the number of students who had studied abroad more than 1,250”. Moreover, for the abilities of students and staffs, there are “we increase the rate of the students who gains about 750 points of TOEIC to 15%” and “we add the staffs corresponding to 30% of the staff who gains about 800 points of TOEIC to the present staffs”, and for research results, there is “we increase the rate of the papers created by international coauthors to 10%”.

##### **3-4-2-2. Study of Appropriateness of Numeric Targets**

The numeric targets are appeared in several mid-term plans as mentioned above. It is doubtful whether these numeric targets are appropriate or not considering that outcomes are not only important but also influenced by the other countries and universities greatly. If the numeric targets are incorrect, the mid-term plans including these numeric targets are inappropriate as plans of action. Moreover, if the mid-term plans with impossible numeric targets were drawn up, these plans will be evaluated as “not achieved” and disadvantaged.

We confirmed the appropriateness of the numeric targets. We compare 2 mid-term plans which has characteristic numeric targets. The first one is “we add the staffs corresponding to 30% of the staff who gains about 800 points of TOEIC to the present staffs” and the second one is “we make the rate of the students from overseas up to more than 16.0%”.

The first mid-term plan uses the term “add the staffs corresponding to 30% to the present staffs”. If the number of “the staffs who gains about 800 points of TOEIC” is 100, the mid-term plan will be achieved when the number will become 130. Even if the number of such staffs is 200, it will be achieved when the number will become 260. Next, we consider the case that this mid-term plan is changed to “we increase the rate of the staffs who gains about 800 points of TOEIC to 30%”. We assume that the number of all staffs is 1,000. Even if “the staffs who gains about 800 points of TOEIC” is 100 or 200, the mid-term plan will be able to be achieved when the number of such staffs will be over 300. This mid-term plan can be achieved by the efforts of the university staffs. In other words, this mid-term plan is an achievable goal with a concrete numeric target.

The second mid-term plan uses the term “make the rate up to more than 16.0%”. The target number becomes 160 if the base number is 1,000. In the same way, the target number becomes 1,600 if the base number is 10,000. In other words, the greater the base number is, the more difficult to achieve the mid-term plan. The number of students who will be admitted will be adjusted in order to achieve the mid-term plan. It means that the mid-term plan will not be achieved by the efforts of the students. While the total number of the overseas students who belong to Japanese national universities which are adopted as Top Global University Project Type A is 17,462 on 2013, the same number on 2023 will become 31,977 (SGU, 2014). Moreover, the total number of the whole overseas students who are undergraduates, graduate students, and junior college students is 108,906 on 2013 (Overseas Student, 2017). Even if the overseas students will be increased by the effect of “a plan for 300,000 exchange students” (300,000 Exchange Student, 2008) by the Ministry of Education of Japan, it will be difficult to achieve the numeric targets at all universities. Even if these numeric targets will be achieved at all universities, we worry about a decline of quality of overseas students.

There are the mid-term plans which will be achieved by the efforts of the constituent members, and the mid-term plan which will be effected by base number. Especially, the second mid-term plan is very difficult to achieve because overseas students are related to other universities.

In the universities which are adopted as Top Global University Project, as prioritizing the adoption of large-scale competitive funding, the mid-term plans had inappropriate numeric targets because the present data were not surveyed or the achievability of the numeric targets were not considered. In the strict finances in each university, competitive funding is very important. However, universities have to do educational and research activities. Globalization is necessary but we should consider the effect to whole organization.

#### **4. Ways to Support Problems of Mid-term Plans by IR**

We should show the process based on the logic model from putting the plan into practice to achievement of goal by clarifying various data and support executives to import appropriate elements to mid-term plans. In following parts, we show the concrete ways of each element.

##### **4-1. Inputs**

Almost all inputs were not appeared in mid-term plans. As understanding, analyzing, and allocation of resources were not adequate, we should show the executives the data related to management assets in order to draw mid-term plan.

Especially, the mid-term plans related to globalization need the data not only inside each university but also outside them, and it is difficult to collect these data. If we can establish an inter-university consortium to collect and share various data, we can analyze inter-university data and support the



executives based on the analyzed data.

#### 4-2. Activities

There were a few mid-term plans with activities and they were able to be conducted themselves. For the mid-term plans including activities without numeric targets, we can show a correct achievability by various data. Moreover, we should prepare the data which shows the situation of the other universities and the other countries in order to draw up mid-term plans including activities considering the other universities and the other countries.

#### 4-3. Outputs

For the mid-term plan including outputs, we can show what kind of activities produce what kind of outputs and finally lead to what kind of outcomes by using data. In other words, we can make the executives recognize the process based on the logic model.

#### 4-4. Outcomes

For the mid-term plans including outcomes, we can provide the data related to achievability and future estimate. Especially, if the political decisions are required, we should introduce the process and involve in it. Then, we can support the executives to decide politically considering the effect to whole institutional activities about globalization.

### 5. Conclusion

Mid-term plans are essence of Japanese national universities' management. However, some mid-term plans are drawn up without adequate data as evidences, others are drawn up by taking priority politically. Japanese IR supports to educational activities but there are few examples which support management activities such as drawing mid-term plans up. Then, we need to study how to support drawing mid-term plans by IR in order to prevent the mid-term plans from being inappropriate. In our paper, we surveyed the mid-term plans related to globalization by taking notice of inputs, activities, outputs, and outcomes which were based on logic model. Moreover, we studied the way of support the executives by IR. We can help to support to draw the mid-term plans by using various data. That is to say, these data can clarify the goals of four elements of logic model and it will be easy that the mid-term plans with clear goals will be judged whether they will be achieved or not. The role of IR is to provide appropriate data to draw up the mid-term plans. We should keep appropriateness of "management plan" as considering political decisions.

### References

Mid-term Plan. (2015). *Mid-term objectives and mid-term plans at each national university in 2015*. Retrieved from [http://www.mext.go.jp/a\\_menu/koutou/houjin/1356357.htm](http://www.mext.go.jp/a_menu/koutou/houjin/1356357.htm)

Sakano, Tatsuro. (2012). Viewpoint and method for evaluating plan. In Hattori, Eiji., Kudo, Asahi., Ninomiya, Shinji. & Ishikawa, Izumi. (Eds.), *Handbook for drawing up social educational plan* (pp.6-23). National Institute for Educational Policy Research, Japan.

SGU. (2014). *Top Global University Project*. Retrieved from [https://www.jsps.go.jp/j-sgu/h26\\_kekka\\_saitaku.html](https://www.jsps.go.jp/j-sgu/h26_kekka_saitaku.html)

Overseas Student. (2017). *Survey of overseas student*. Retrieved from [http://www.jasso.go.jp/about/statistics/intl\\_student\\_e/](http://www.jasso.go.jp/about/statistics/intl_student_e/)

300,000 Exchange Student. (2008). *A Plan For 300,000 Exchange Students*. Retrieved from

[http://www.mext.go.jp/b\\_menu/houdou/20/07/08080109.htm](http://www.mext.go.jp/b_menu/houdou/20/07/08080109.htm)

### **Acknowledgement**

This work was supported by JSPS KAKENHI Grant Number 15K04305.