Hit-Univ. ICS

本田DNA: 挑战独创商品开发 ~本质的思考

Honda DNA : Challenge to Innovative Product Development

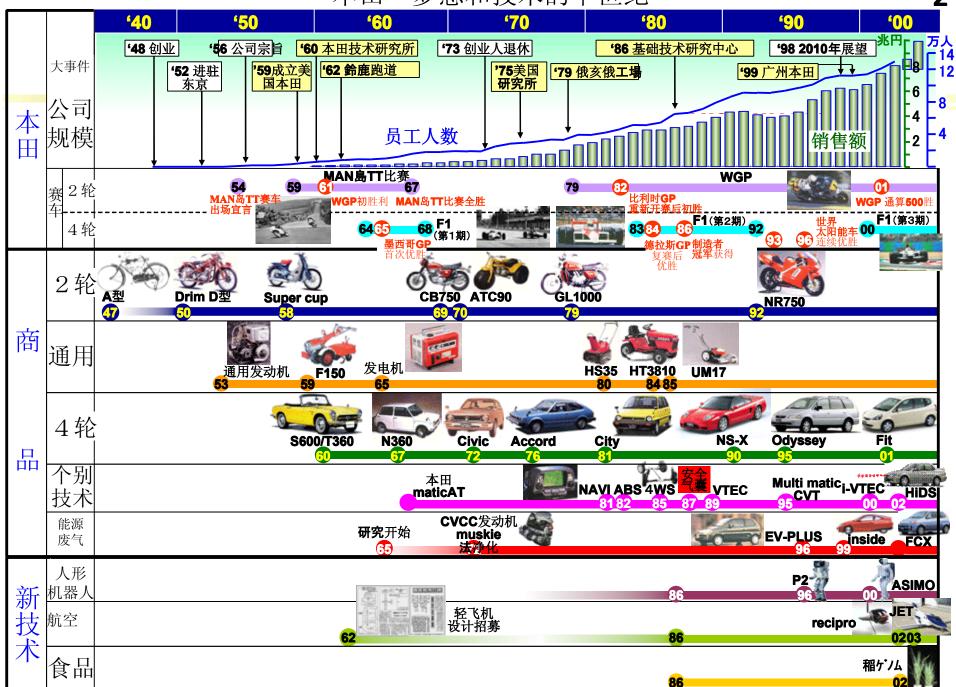
~ Recommendation of Essential Deliberation



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Dec, 2009 东风本田发动机有限公司



I. Honda Way 本田方式

2 Founders 两位创业人

Hit-Univ. ICS

Mr. Honda President 本田宗一郎 社长



Mr. Fujisawa Executive VP

藤沢武夫副社长

Action (Technology) without philosophy is a lethal weapon; philosophy without action (technology) is worthless.

Soichiro Honda

没有理念·哲学的行动(技术)很危险, 没有行动(技术)的理念毫无价值。本田宗一郎

I. Honda Way 本田方式

1. Honda Culture本田文化

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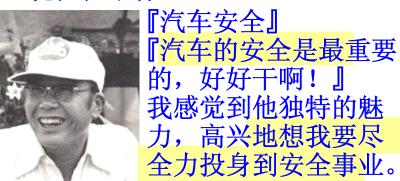
- 1 Positive, Energetic
- · '71, joined Honda R&D

Assigned to the Safety Research Div.
Uninteresting work and unintelligent associates almost made me quit Honda.

① 积极,精力充

河1年进入本田技术研究所 设计跑车,却被调到安全研究室, 尽是普通人, 无聊的工作,几乎 想要辞职。

- · Encountered Mr. Honda and was inspired (brain washed) 2 weeks later, I met Mr. Honda, "Good Morning!" He hit me on my shoulder, "What's your name and what are you doing right now?" I answered, "Car safety division." He said, "Safety is the most important factor of a motor vehicle. Do your best!!" He had an "Aura." I decided to devote myself to safety research from the bottom of my heart. Mr. Honda
 - •遇到本田宗一郎<u>→洗脑</u> 进入公司2周后的一天,老头子 从对面走过来,我说了声"早上好" 他重重的拍着我的肩膀说"喂,你 现在在干什么?"



Challenge, Creation & Innovation

本田文化

挑战•创造•创新的文化

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2 Honda's "custom"

② 本田的惯例

Deliberation of Essence

深思本质

4 A00?

A00?

What's your opinion?

❷你怎么认为?

Say it simply.

●简单说是什么?

Freshmen were so confused.

新人非常困惑!

本田文化

深思本质

~Careful Consideration of Essence

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Basic Requirement Objective, Dream



A00 = 基本要件·目的·梦想

•Reference 出典 US Military Mission Command 美军作战命令书

Basic Requirement A01~09 Condition A1~99 Specification



A00 目的 A01~09条件 A1~99 规格·详细

- •Always requested to explain A00.
- I visited Prototype Shop with drawing Mr. M said, "What are A00?"
- •I told him, ①Mechanical Improvement **2**Cost Down **3Weight Down**
- •He complained, "Those are not A00. What do you want to accomplish through 123 are A00!"
- He distinguish Objectives & Means.
- Stupid CEO say, "Profit is our Goal."

- •在本田经常听到A00
- •某天我拿着图纸来到试作科,
- •M问『A00是什么?』
- •我回答『①提高机械性能②降低成本 ③减轻重量』
- •『那不是**A00**。 通过①②③想要
- •达到的目的才是A00吧!』
- •M很好的理解了目的和手段
- ·愚蠢的CEO说『我们公司的目的
- •是收益!』→ 糊涂透顶

本田文化

本质的深思

~Careful Consideration of Essence

Hit-Univ. IC

Mr. Honda said,

- •R&D is not to research technology, but to research people.
- →Researching Customer's mind, Engineer should find out Future Values for them, and accomplish those using technologies.

To make Values is Objective, and Technology is just means.

- "The essential goal of corporation is to make new values for the people and give them joy."
 Everybody agrees.
- "Can you say 3 Major Values of J people in 10 to 20 years ahead ?"
 →Nobody could answer.

Right Direction comes from Essential Goal of Corporation.

本田宗一郎 语录

- •研究所不是研究技术的地方,
- •而是研究人的地方。
- →研究客户的心理,寻找所追求的未来 价值,这是最重要的工作。然后通过手 段技术使之得以实现。

创造价值才是目的, 技术只是手段。

- •即『企业的本质是创造新价值,让世人愉悦!』大家都会赞同这个说法。
- •请说出日本人追求的未来**10-20**年的主要未来价值→还没有人能够回答。

只有思考了企业的本质目的,才能找到正确的方向。!

2 Honda's "custom"

本田的惯例



"What's your opinion?"

- •Always requested even when asking a question. Ex.
- Original, unique thought is appreciated, only which is acquired by direct experience.
- Knowledge obtained at school or from books is looked down as secondhand, & "You are just parroting other person's idea!"
- One without personal thought can not be creative.

- •马上被人问到自己的看法, 不回答的话便无法提问。
- •征求独特意见
- 如果是在学校学到的或是 从书上看到的,马上就会被 人指责说你只是模仿别人 如果是自己的亲身体验,OK
- •没有自己想法的人
- •没有创造力

Careful thought thru direct experience

Prof. Nonaka; "Knowledge can be acquired only through high" •一桥大:野中教授 quality direct experience which gives a great influence on your view of life."

自己体验考虑

『好的知识改变人生观, 但它只 能从高质量的亲身体验获得』

2 Honda's "custom"

本田的惯例

Ex.

"Say it simply."

 Should explain simply according to TPO.

Mr. Honda said, "If you can not explain simply to a non-professional, you do not understand it essentially."

Essential, Conceptua

③ "简单说呢?

•不能简单的表达复杂的事情也会被鄙视。本田宗一郎语录 "如果不能对外行进行简单易懂的说明。说明你自己还没要明

Uit IInin ICS

的说明,说明你自己还没弄明 白。**"**

|本质的・概念

Knowledge 知识层次

Policy, Philosophy 政策·哲学 Strategy, Concept 战略·观念 Operation, Tactics 作战·战术

Information 信息 Fact,Data 表象·资料 Prof. Nonaka; "Who speaks facts & info only should not be promoted beyond Asst. Mgr."

• 一桥大: 野中教授 『不要让光会对现象滔滔不 绝的人任系长以上的职务』

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Question: Please answer simply! (5 sec)

请用一句话回答!(5秒)

- ① What is your goal of your life? 你的人生目标是什么?
- ② Why your organization should exist? 你们公司(组织)的存在理由是什么?

6Y-gaya

⑥畅所欲言 (深思熟虑)

Equal status discussion

Essential (pure) discussion
Why Honda should exist?
days & nights discussion

1st day: Hot argument

2nd day: Understanding others

3rd day: Get tired of logic.

Everyone becomes creative & conceptual.

品质

 Y-gaya is not tradeoff of antimony, but create new concept which gives better total solution.

•You can be White-Belt (Beginner) after ~20 times of Y-gaya. Then you become MC aiming Black-Belt (Meister) after ~40 times. ■■■■ Hit-Univ. ICS •无身分高低的平等议论

•本质(未成熟)议论

本田的存在意义?

·<u>3天3夜的讨论</u>

Cost

价格

第一天:议论白热化•喧闹

第二天:理解他人的意见

第三天:疲惫于符合逻辑讨论

转向创新的有新意的

•所谓畅所欲言并非是对正反意见的妥协调整,而是双方进行整体改善的创新

·畅所欲言20次后成为白带(初学者)。 然后,向成为黑带的领导者努力(~40次)

2. History of Airbag

安全气囊的历史



Difficulty of future prediction

预测将来的难度

Hit-Univ. ICS

- Safety div. = Cat stepping-over "Fish"
- Join laughable project, Airbag.

T/N/Big3 quit the development of airbag.

- '82 Became 3rd LPL. Members down 12 \rightarrow 4.
- Big fight with a Director Shimojima

He said, "Let's quit this project!" 10 times. I said, "It is necessary and important" 10 times. --- 1 hour long argument. Finally he said, "If you dare to say so, you must introduce this to the market!" **Director tested my passion & will ?

Got Award of 'Top 2'useless projects:

--- Mr. Senzaki's Radar Brake System &

--- Mr. Kobayashi's Airbag

Age 39 in '84. Mr. Senzaki transferred to Suzuka Factory (Age 40: Unwritten law of Retirement) "1 more year for me"

- 无聊的6研(安全研究所)
- •自己也发笑的Airbag立案、T·N •Big3中止Airbag开发。
- '82年 LPL就任、12人→4人

『这个项目停止吧!』

『不行,这是必要的!』×10次

1小时的激烈斗争。

『要是这样的话,一定要成功推

向市场!』→增加1人

*试探热情,干劲?

被选为两大最没用课题

- *雷达制动的先崎
- *安全气囊的小林

'84年(39岁)先崎先生调动到鈴鹿 工場。(40岁退休制度的谣传)

『我还有最后一年了!』

•Now, both Tech. in mass production •20年后的今天,两个课题都实现了量产



Experts can not predict future



Expert不能预测未来

2. History of Airbag R

安全气囊的历史

• '86 Tough fight with AH-CEO Amemiya "American never purchase Airbag, so that # US pre fleet test is not necessary." Director Shimojima said: "Do you want to quit? It is the end, if you give up!" •2nd negotiation: "You, again! American execs also are concerned about airbag." •3rd negotiation: Never give up, and strongly insist with passion. Amemiya said, "You win, but ask Pres. of R&D to write a promise not to disturb customer." Test 100 cars/Accord, 1 year in U.S.(7M\$) •'87 1st installed in Acura Legend. **Suddenly customer demand increased** rapidly in US. Legend sells very well. •<u>I met Mr. Amemiya</u> @ AH and he said, "Let's install Airbag 100 % on next Acura Integra!" I wanted to choke him, but I could only ignore him.

He had a broad mind to allow me to test. (Never happen other than Honda!)

2 Toughness of Challenge

挑战的难度

·'86年与AH高层雨宮先生的斗

『美国人绝对不买Airbag,所以 US跑道测试没有必要。』

•研究所下岛董事冷静地说 『如果放弃什么都完了!』

·<u>第二次谈判</u>、『又来了! 美国人的董事也反对!』

•<u>第三次</u>:绝不放弃的决心。

•雨宫『好,我明白了!但研究所 所长必须承诺决不会给顾客带来 麻烦!』

麻烦!』
•Accord 100台, 1年·美国道路
测试实施。(费用:7亿日元)
•87年上市后、装有安全气囊的
车销量直线上升。本田名列前
茅。AH走廊上遇见雨宫先生、『这
次的讴歌全部安装气囊吧!』我

→<u>高层有允许下级去挑战的度量</u> (在其他公司是不可能的)

2. History of Airbag R

安全气囊的历史



③ Happiness of Achievement

成功的喜悦

Hit-Univ. ICS

•<u>'87 Sep. Airbag installed on "Legend".</u> Had nightmare about airbag failure.

• '87 Dec. 10th, 1st Car crash happened.

Saved with no injury, the customer purchased Legend again.

→I was so excited by the news that I could feel where blood vessel is.

I met the customer. He said "Are you the developer?" and shook my hands firmly.

Mr. Kitazume 北爪先生

·**'87年9月** 安装在里程机型上 成功推向市场的喜悦,故障的噩梦

•87年12月10日第一次事故!

- •客户没有受伤,再次购买里程!
- →我全身热血沸腾 与激动的北爪先生见面 『你就是开发者呀!』 他紧握我的手。



在此感谢、 技术专家**冥** 利

3. Fruits of Airbag R₁ Seek for Ultra-high Reliability

安全气囊的成果

追求高可靠性的成果

1 Traceability

Inflator

 Put barcode on every airbag part to record exact data of each airbag car instead of lot control. (Disrepute for cost of \$600,000)

•'90 Nov. Defect on inflator

•12 inflators on Honda cars in Japan. We knew the customer's name instantly, replaced 6 cars on that day, and finished totally in a week, costs \$8,000. Without traceability, we should check 50,000 cars, and it estimated \$10M.

 Mr. Yamada, MD in charge of Q called, "Hey Sam, we got 10M\$. It is not total sale but profit. You can drink the difference, \$9M, 992 thousand."

气体发生器

Hit-Univ. ICS ① 追溯(追溯可能性) 以前只是批次管理

现在在主要零件上贴上条形码 记录每一台车安装的零件。(费用6000万日元→很不受欢

•'90年11月 气体发生器缺陷

•国内本田车•对象12台。 顾客名字、当天更换6台、一周内 全部更换完毕。(费用80万日元) •若没有追溯管理对象台数5万台。 预计费用约10亿日元。

•品质•山田常务打来称赞的电话。 『小林、我们赚了10亿日元!』 『这可不是销售额、是纯利润阿! 你可以把9亿9920万日元的差价

喝掉!』

3. Fruits of Airbag R Victory of Customer-oriented 16 Philosophy→World STD P. Airbag

安全气囊的成果

为客户考虑的哲学→世界标准的副驾驶位气囊

2 Honda philosophy beat B.com

- •The issue of Passenger airbag is, "Standing Child"
- B.com adopted Low mount.
 - →Same instrumental panel "die"
 - → Serious injury to standing child
- •World No.1 safety authority, B.com-Prof. Doctor R. said, "Do not spoil the technology because of stupid person. Children must be sat on rear seat, which is common sense in Europe."
- •Survey at Ebina rest area of Tomei Hwy on weekend.
- → Most of children were standing.



We should save people, even stupid.

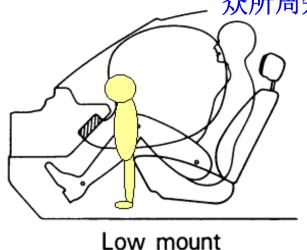
②<u>优胜于B公司的本田哲学</u>

- ·副驾驶位Airbag的课题 "站立的小孩"
- •B公司采用通过去掉杂物箱盖安 装低位气囊。

Hit-Univ. ICS

- →不用变更仪表盘的模具
- →可能导致孩子死伤
- ·世界第一的安全权威·B公司 Prof. Doctor R.氏、

『没有必要为愚蠢的人作技术修改,孩子应该坐在后座是在欧洲 众所周知的常识』



周末、东名·海老 名高速公路出入口 调查→很多小孩是 站在副驾驶位的。

我们应该拯救那些愚蠢的人!

P Victory of Customer-oriented 3. Fruits of Airbag Philosophy-World STD P. Airbag

安全气囊的成果

为客户考虑的哲学→世界标准副驾驶位气囊

Hit-Univ. ICS

- Adopted Top-dash mount does not cause serious injury.
- Enormous protest from D div.
- →New inst. panel die costs 4M\$
- →Ugly inst. panel surface
- →Upper weight causes more vibration
- →Why different from world No.1 B.com?
- We carry out Top-dash mount.
 - •'90 Nov. Honda Passenger airbag on the market
 - •'92 Jan. Detroit Auto Show:
 - All companies adopted
 - Top-dash mount. Even B.com
 - ·I called Honda R&D, Japan,
 - "Everyone copied our concept. What about
 - patent ?" "Forgot to submit."
 - **Honda set the standard** saving children every year.

- •从仪表盘上部打开、
- •开发部门为首强烈抗议 →仪表盘新模具**4**亿日元
 - →表面不好看

 - →重物在上面增加振动 →何苦要跟世界第一的B公
- 司不一样呢?
- •坚决实行顶部打开式气囊
 - •'90年11月 副驾位

17

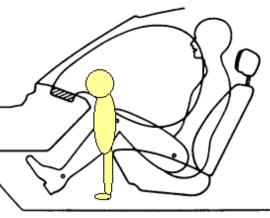


<mark>车展上所有</mark>公司采用Top Dash、包括

B公司。打电话给日本、『我的专利呢?』

『忘了吧!』

本田成为世界标 准,每年拯救无



Top-dash mount

4. Wisdom from Airbag R_{从安全气囊得到的启示}

1) If 9 out of 10 people agree with your idea, it's too late to R.

If 9 people disagree, it might be a diamond.

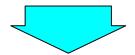
- Creation does not come from logical discussion, majority decision or consensus.
- If a young person proposes a crazy idea seriously 3 times, you should let him / her do so.

Hit-Univ. ICS

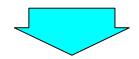
①10个人中9个人赞成的话 Too late 没有研究的意义

相反9个人反对的技术有可能成为将来的钻石。

- •从多数人的决议,协议,逻辑是产生不了创新的。
- •如果年轻人对那些大胆疯狂的想法认真地提案三遍的话, 鼓励他去做吧,这样的度量很 重要。



•One person should decide Go or No go of Innovative Plan, Research or Action!



•创新的计划•研究•是否实施由一个人来决定。不能由大家商议决定!

4. Wisdom from Airbag R安全气囊得到的启示

- 2 A self-initiated concept is essential for supporting long-term research.
 - Research is attacked with objections. Easy to waver unless you have Sound Direction & Goal.
 - Concept by yourself, not from imitation or quotation.
 - The Creator feels loneliness. The strength of your spirit & philosophy can support you.

Hit-Univ. ICS

- ②支持长期研究不可欠缺 的是自己的梦想和理念
- •反对多、目标和方向不确 定、很容易动摇
- •不是模仿剽窃,而是属于 •Can set D & G, if you could create 自己的有目标的技术想法• 理念。
 - •研究者•创造者是孤独的 推动力是自己的"意志"、 以及支持其的强烈理念。

The price of being a sheep is bored The price of being a wolf is loneline.

羊(模仿)的代价是无聊 狼(创造者)的代价是孤独





4. Wisdom from Airbag R安全气囊得到的启示

© Continuation is Power.

- Continuation is the only way to success.
- Never Give up is the key.
- Although Never- give-up is not so easy at work.

- •无论如何<u>Never Give Up</u>。
- 绝对不放弃是成功的关键。 •但是、所谓"不放弃"在工

作中不是那么简单的事情。

Roly-poly



百折不挠

5. Honda Culture ? (1)

所谓本田文化?

Hit-Univ. ICS

- Equality No Acad. Career
- ·Min. Rule
- Positive
- ·Y-gaya
- ·A00
- Own Thought
- · Conceptual · Absolute Value
- Extra-high Target

Max.

Freedom

Hot Argument

Philosophy Essential Spirit

- 自身想法•意志
- 绝对价值追求
- 高目标

最大 自由度

热烈讨论

哲学 本质的 高志向



5. Honda Culture ? (3)

所谓本田文化?

Hit-Univ. ICS

•Prof. Daisho of Waseda Univ., after researching Honda culture, described Honda in 2 words.

•早大•大圣教授、

•研究本田文化后、用2句话来表达本田



"Passion & Chaos"

The opposite of P&C is "Cool & Well-organized": something that is good for operation (not creation).

"热情和混乱"

与此相反是、"冷静和井然" 事业有成、 创新不足。

Passion & Chaos is the mother of Innovation.

热情和混乱是创新之母

2. Innovation MGMT Adverse effects of MBA

MBA的危害

Hit-Univ. ICS

To meet Stupid Stockholder's request, that is \$-oriented & near-sighted, CEO (MBA) try to increase profit in their term.

Less creativity & Less employee spirits

Take away Motivation
The Source of Motivation ?

Nobleness: Noble Dream

Human is naturally noble.

- Contribution to People in the world!
- Preserve "Blue Sky" for our children!

Mr. Honda talks Dreams, Stupid CEO talks Greed. •对付笨股东(追求短期利益)

CEO (MBA)瞄准任期中利益

的上升=\$的•近视眼

损害创造力、 员工意<mark>志低落</mark>



高尚:高尚的梦想•希望

人类本来就是高尚的

- •为全世界人民作贡献吧!
- •为我们的子孙后代留下一片蓝天!
- •本田宗一郎述说梦想、
- •愚蠢的经营者述说欲望。

4. Honda Innovation MGMT

- (1) Essence (2) Wisdom
- 本田•革新管理
- ① 本质 ② 智慧

Hit-Univ. ICS

Wonders of Honda

- ·Unintelligent associates
- Small resources (MMF) Why successful?



High efficiency as a result

- Essential : No big mistakes Min. control: Big motivation
- •Each thinks. Flexible deeply

- •大家都是普通人
- 少量资源(人•钱•物) 为什么能够成功?



从结果看: 高效率

- •较少的约束 :激情饱满
- •每个都深思熟虑弹性对应

Wisdom for motivation

- •Challenge to # 1 in the world ⋅ 挑战世界第一的目标!
 •Win the race at Man islan → ・在曼岛赛场上赢得比赛!

Ex:Genius Mr. Nakajima

有目标的智慧



4. Honda Innovation MGMT 本田·革新管理

(3) Passion

③ 热情

Hit-Univ. ICS

- No MGMT training, even Japan Honda.
- ·Honda does not consider to manage

the employee from the start.

Always to consider

how

本田非常排斥

to help & motivate rouse is irreverent and rude!

*管理•系统•组织

会掠夺人的干劲。

the emplo 管理人是粗鲁无礼的举措

Ex. A miracle @ assembly line... ^例 装配生产线上的惊愕...

·MGMT教育为0

•从来没有考虑过要去管理 人凌驾人。

•只考虑如何帮助如何提高 人的斗志。

The End

终

Thanks for attention! 感谢大家的聆听!



如何兴起挑战•独创•革新 27 的企业文化革命?



丰富的感受

Hit-Univ. ICS

- (1) Gemba Watching
 - High quality Direct Experience than Reading or Listening
- ② Y-gaya
 - Discussion of Essences with heterogeneous type of people

Future Value

- ③ Just Try
 - Never mind Failure
 - "Innovation with minimizing Failure" is impossible.
 - Failure experience is the most excellent teacher.

- ① 查看现场
 - •高品质的亲身体验 比读•听更有效
- ②畅所欲言的氛围
 - •与不同的人谈论本质



- ③ 尝试
 - •不惧怕失败坚持做
 - •没有失败的创新是无知 的妄想
 - •经历失败使人成长

巢鸭视察体现 Sugamo Gemba Watching



Salty Manju 盐大福(5個600円)



Fried Sweet Potato 煎炸芋头(100g 200円



Guide Book 旅行手册



Tokiwa Restaurant 食堂



Congested Shopping Blvd 繁荣的商业街



Katsudon 盖浇饭



Potato Salad 名产土豆沙拉



Clothes Store full of Aged Ladies 大婶们聚集的服装店

Hit-Univ. ICS

- •公司聚会 (一年一度) 本田技术研究所的高层经验者OB会
- •每年都会对10个左右奠定了销售额12兆日 元企业基础的前辈进行采访

『请问兴起创新最最重要的一样东西 是什么?』

•9成的人都会同样的回答

